



This document contains all of the Instant Challenge problems from the Spirit of Chicago web site as of September 1, 2003.



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1 - 10

Problem: The object of the activity is for all of the team members to get across the taped 20 foot "Toxic Swamp" using only the invisible "Magic Shoes".
The

following rules apply:

1. There is only one pair of shoes.
2. Both shoes may be worn by only one person at a time.
3. A person may only wear the shoes for one trip in one direction across the Toxic Swamp.
4. The Magic Shoes may not be "Tossed" across the Toxic Swamp to another team member.

Materials: 12" peice of string, paper punch, 1/2 gallon plastic milk container,
6 index cards, round ballon, scissors, 6" paper plate, 4 pencils, masking tape

Problem: You will have 3 minutes to discuss your solution, and 5 minutes to construct.

During the 5 minutes, you may not talk.

Construct a musical insturment that will play at least 2 different tones.

Additional tones will be worth 15 points each.

You will recieve up to 5 points for each item used from the supply list.

Materials: 6 identical cicular objects
(EX) buttons, bottle caps, pennies etc,

Problem: Visulization - form a circle by moving only two objects

Starting Position

0 0
0 0
0 0

Materials: Spaghetti (20) pieces, lump of clay, sticker tabs

Problem: Use these materials to create a picture.

You will have 5 minutes to do this.

After this you will have 2 minutes to respond to picture or tell a story about it.

EX. The team may create a farm.



CPS Practice Exercises

Materials: Piece of paper (8 1/2" X 11"), 4 playing cards, clothespin, piece of yarn, 2 batteries, small magnet (or any little object such as a button),

5" masking tape

Problem: You have 2 minutes to think and 5 to respond.

You have to build a little object that can carry the magnet (small object)

with touching the magnet.

You get points as to how many feet you can pull it.

Materials: A piece of PVC tubing (about 4' long), 12 balls (golf, tennis, ping pong), 20 wooden blocks, and 3 "targets" (the targets can be circles cut out of construction paper)

Problem: The team will arrange the targets and the blocks on the floor to make a track to guide the balls. The balls will then be rolled through the PVC tube, one at a time... in any order. The objective will be to amass as many balls as possible on the targets. Targets and balls can have various point values. Depending on the team, the tube can be held at any angle.

Materials: Blue poster board (ocean), 50 pom pom balls (boats), box of tooth picks(oars), Box of straws(sails).

Problem: Get as many ships safely across the ocean as possible. Team members may "row" using toothpicks or "sail" using straws to blow. Any shipwrecked boats must begin again.

Materials: 8 lifesavers, 10 pretzel sticks (butter braids), 10 large marshmallows, ramp, and 4 oreo cookies.

Problem: Construct a vehicle in 3 minutes. Test drive the vehicle down the ramp. Score if vehicle rolled more than 4 inches. Relax and eat your creation.

Materials: Ping-pong balls, 15 straws, 10 toothpicks, Wallpaper trough or some basin filled with water, 12 inches of masking tape, 2 sheets 8-1/2 x 11 paper, scissors (may not be part of objects).

Problem: You must build an object using the provided materials. This object must move across the basin of water propelled by air. The object will receive bonus points for transporting pin-pong balls. You receive 10 points for each lap across the basin. Each ping-pong ball that is



CPS Practice Exercises

on the object at the end of the time earns 7 points.
You have 5 minutes to design and build your object
and 2 minutes to propel your object.



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11 - 20

Materials: Pair of scissors, 5 paper clips P/team member. Piece of cardboard
22" square marked as diagram.

Problem: Use the cardboard to build structure.

Make the structure as tall as possible.

You may cut the cardboard any way you wish, but only on the existing lines.

Materials: Paper cups, string, various selected household items (paper clips, straw corks, etc)

Problem: Create a music group...then perform a tune.

Planning time: Five minutes.

Materials: 1-12' balloon, 2-8 oz. plastic glasses, 5 toothpicks, 10 minimarshmallows, 3 pennies, 2 fingers on one (either right or left)
Hand-

Ex. Thumb & pointer or pointer & small finger-any combination

Problem: Team has a total of 3 minutes to
construct or form an idea of how to hold the 2 glasses in the air.

The glasses may not be changed or mutilated in any way.

Scoring: Will be based on how far apart the glasses are held and how long they

can be held in the air without touching anything but the materials provided. Bonus points given for creativity of solution and for teamwork.

Materials: 5 magazines

Problem: Each team member will be given a magazine.

They will have three minutes to find and tear out pictures or phrases.

At the end of the 3 minutes they will have to explain how they are related to OM.

Materials: 2 rubber bands, 3 sheets 8 1/2" x 11 1/2" typing paper, 2 paper clips. 2 popsicle sticks, several postage labels with adhesive.

Problem: Teams get 1 minute to think and 3 minutes to
construct a paper airplane that will be thrown or propelled.

Points are awarded for creativity and for the distance they travelled. The plane must land within an area shaped like a 40 degrees pie slice.



CPS Practice Exercises

MATERIALS: 6 PAPER CUPS, 4 PAPERCLIPS, 1 RUBBERBAND,
1 POP CAN, A SMALL PIECE OF MATERIAL, 2 ENVELOPES
PROBLEM: BUILD A ROOM IN A HOUSE AND DESCRIBE IT

MATERIALS: ENVELOPES WITH- 5 RUBBER BANDS,
8 PAPER REINFORCEMENT RINGS, 8-1/2" X 11" PIECE OF PAPER,
5 DRINKING STRAWS, 4 TOOTHPICKS, 2 PAPER CLIPS,
10 SMALL STICKEY LABELS AND A PAIR OF SCISSORS.
THE ENVELOPE CAN BE USED IN THE SOLUTION
PROBLEM: THE AIM IS TO ASSEMBLE ITEMS
INTO THE LONGEST CONTINIOUS "ROPE" POSSIBLE,
STRECHING FROM PERSON A TO B TO C TO D.

MATERIALS: 3 STRAWS, 10 POPSICLE STICKS, 1 MARBLE,
3 STYROFOAM CUPS, A TURKEY BASTER, 7 MARSHMALLOWS,
10 INCH STRING, 2 PIECES OF CHALK, LARGE ALUMINIUM OR
PLASTIC WASH TUB, WATER
SETUP: FILL TUB WITH WATER, FLOAT 3 STYROFOAM CUPS
PROBLEM: CONSTRUCT SOMETHING TO TRANSPORT THE MARBLE ACROSS THE TUB OF
WATER.
YOUR TEAM WILL SCORE 5 POINTS FOR EVERY 2 INCHES YOUR
MARBLE MAKES IS TRANSPORTED.
WE WILL DEDUCT 2 POINTS EVERY TIME YOUR VEHICLE HITS A
STYROFOAM CUP.
YOU MAY USE ANY OF THE MATERIALS TO TRANSPORT THE MARBLE.
YOU MAY NOT TOUCH THE VEHICLE WHICH TRANSPORTS THE MARBLE.
YOU HAVE THREE MINUTES.

MATERIALS: 1 BALLON, 12 PAPER CLIPS,
1 SHEET CONSTRUCTION PAPER, 4 FOOT OF STRING, 1 STRAW,
1 PACKAGE OF TAPE, 1 EGG.
PROBLEM: THE TEAM WILL BUILD A STRUCTURE
TO TRANSPORT THE EGG From POINT A TO POINT B (3 FEET) WITHOUT TOUCHING
THE DEVICE AFTER IT LEAVES POINT A.
SCORING: 1-25 PTS - DISTINCE; 25 POINTS - NOT BREAKING EGG;
1-25 POINTS CREATIVITY OF DEVICE
(STRUCTURE AND PROPULSION);
1-25 POINTS - TEAMWORK

PROBLEM: TEAM MEMBERS MUST CREATE A MACHINE (POPCORN POPPER, VACUUM,
ETC.) ALL FIVE TEAMMATES
MUST FORM THE MACHINE.
ONLY MACHINE LIKE SOUNDS MAY BE USED.



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MATERIALS: A DECK OF CARDS, ROLL OF MASKING TAPE,
2' PIECE OF STRING, TOY TONKA TRUCK

PROBLEM: WITH THE CARDS AND TAPE,
MAKE A BRIDGE AT LEAST 1 FOOT IN LENGTH RISING TO AT LEAST 3 INCHES IN
HEIGHT,
UPON WHICH THE TOY TRUCK CAN BE PULLED WITH THE STRING,
CARRYING AS MANY CARDS AS POSSIBLE.
SCORING WILL BE DETERMINED BY THE NUMBER OF CARDS SUCCESSFULLY
CARRIED ACROSS THE BRIDGE WITHOUT COLLAPSING.

PROBLEM: LINE UP THE KIDS.
GIVE THEM A SET OF INSTRUCTIONS WHICH ARE AS FOLLOWS:
JOHN IS TALLER THAN MARY
MARY IS SHORTER THAN FRED
FRED IS TALLER THAN JOHN ETC.
THE STUDENTS PUT THEMSELVES IN ORDER WITHOUT TALKING.

MATERIALS: VARIOUS KINDS OF BEANS, TOOTHPICKS,
STRAWS, PIECES OF 8 X 10 CARDBOARD, A CUP, SHAVING CREAM,
GLUE OR OTHER ADHESIVE

PROBLEM: THIS IS A TWO-PART PROBLEM.
IN PART 1 YOU WILL BE GIVEN 5 MINUTES TO INDIVIDUALLY CREATE SOMETHING
FROM YOUR MATERIALS, EITHER THREE DIMENSIONAL OR AS A FLAT PICTURE.
IN PART 2 YOU WILL BE GIVEN THREE MINUTES TO INDIVIDUALLY
TELL A STORY ABOUT YOUR CREATION.

MATERIALS: ROCK, A BOX, STRING, CRAYONS

PROBLEM: DESIGN A PRODUCT AND
SELL IT TO THE JUDGES WITHOUT SPEAKING.

MATERIALS: STRAWS, EGGS

PROBLEM: EACH STUDENT HAS 14 STRAWS AND AN EGG.
THEY MUST BUILD A STRUCTURE THAT WILL HOLD THE EGG

MATERIALS: 20 TOOTHPICKS, 6" MASKING TAPE,
6 STRAWS AND A PAIR OF SCISSORS THAT ARE NOT PART OF THE SOLUTION

PROBLEM: BUILD A SELF-SUPPORTING STRUCTURE
USING ONLY THE MATERIALS GIVEN.
YOU WILL BE JUDGED WHEN YOU DECIDE TO STOP OR WHEN TIME EXPIRES.



CPS Practice Exercises

SCORING: 5 POINTS WILL BE GIVEN FOR EACH CENTIMETER OFF THE TABLE.



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31 - 40

Materials: 1 package of 3 X 5 index cards, 1 roll of scotch or masking tape

Problem: The team is to construct a structure using the cards and tape. Team members may not talk and each member may only use one hand.

The time limit is 3 minutes.

At times end, 1 pre-designated member will announce what the structure is or how it is used.

Materials: 20 pipe cleaners, 20 toothpicks, 20 marshmallows, 10 styrofoam cup.

Problem: To build a bridge using the materials given.

Scoring: 3 points for each inch of width
3 points for each inch of clearance from the table, measured from the middle of the structure.
1-10 points for team work
1 point for each item used

Materials: straws, toothpicks, masking tape, paper.

Problem: Build a bridge that a ping pong ball will roll on.

Materials: two thick books, one sheet of notebook paper, one small weight such as a salt shaker

Problem: Place the books about 3-4 inches apart.

Using the piece of paper only, create a bridge across the books that will hold the weight.

(You cannot place the paper between the pages of the book)

Materials: apple or piece of bread.

Problem: Using your teeth as sculpting tools, create an object, face, scene etc with your piece of food.

Scoring: Go around the group and make a comment on each piece.

Then allow each team member to comment on the other members creation.



CPS Practice Exercises

Materials: 40" x 50" rectangle, 50 popsicle sticks, drawing of an object such as truck using 1" line segments, then cut in half and put into clear document protectors with a backing

Problem: The team is given the popsicle sticks and told they must develop a non-verbal communication system, such that two of their members, chosen in advance, will each use the communication systems to get the remaining three team members to duplicate each half of the picture. The two signalers are separated and may not see each others' papers. The three "drawers" may only bring one stick at a time into the drawing area.

Scoring: Points are awarded for teamwork; creativity of the communication system; amount of sticks located approximatly in their correct position; coherence between the two halves; and after time expires having one of the three drawers correctly identify the intended figure verbally to the head judge. Generally, allow three minutes to develop their communication system, and allow approximentely four minutes or so to solve the problem.

Materials: box of "Tinker Toys"

Problem: You are to build a car with four wheels, two axles, and a frame.

Judged on how elaborate it is.

After that it is judged when it is dropped from one foot in to the air onto tile.

Each point together counts as one point added to how elaborate it was. One minute to discuss and one minute to build.

Materials: an apple, a pair of scissors, a pen, small car wheel, tweezers, paper clip, rubber glove, and a playing carrd

Problem: Players will each create an animal using a minimum of 2 objects and pass the objects to the next team member upon completion of their own animal.

Materials: Hammer, nails, ruler, papre clips, pencil, box of matches, stopwatch, ring, shoe, small paint brush, pop can, spool of thread, piece of tape, candle, magazine pictures, pen, buttens

Setup: Use some of the items to make a sign on the table.

Problem: Team has 2 minutes to memorize design.



CPS Practice Exercises

They may talk while memorizing. Items are put into a box with those not used.

Team must recreate the design within three minutes.

Problem: On the floor there will be a ten foot wide octagon. Placed around the octagon will be containers. Three members will be blindfolded.

The two remaining team members will give non-verbal communication signals

in order to place red, green, white, and blue ping-pong balls in the appropriate container.

Team members will have 3 minutes to plan the communication system.

5 minutes to complete the problem.



41 - 50

Materials: Taped circle, bucket of 50 golf balls.

Problem: On the floor there is a taped circle.

In the middle of the circle is a bucket full of 50 golf balls.

You may not touch the bucket, the tape, or step inside the circle.

Outside of the circle are two ropes.

Your problem is to pick up the bucket and remove it from inside the circle.

If the bucket remains inside the circle, you will receive 1 point for every ball left inside the bucket and 1 point for every inch the bucket has been moved, if the bucket is still standing and

0 points if the bucket has been knocked over.

If the bucket is still standing outside the circle when time has expired

you will receive three points for every ball inside the bucket and 20 points

for a standing bucket, and 0 for a non-standing bucket.

You have 1 minute to think and three to respond.

Materials: 10 straws, 4 mailing labels, 3 sheets of 8-1/2" x 11" paper, 10 marbles, 15 beans, clay, scissors and a ruler.

Set up: 2 chairs with backs to each other spaced 14" apart.

You may mark floor in case chairs slide during problem.

Problem: You will have 2 minutes to discuss and 8 minutes to solve the problem. You may not use the ruler or scissors as part of your structure.

The problem to construct a bridge between the two chair backs that will hold 4 marbles for 15 seconds (worth 25 points). Each additional marble

up to 10 total will be worth 10 points each. Teamwork will be worth 1-15 points. 100 points is the maximum amount that can be achieved. The

marbles

must be on the bridge itself, not on the chair(s).

Problem: 5 Team members must build a statue using their bodies. They are given 3 minutes to talk amongst themselves.

Then they will have 2 minutes to build the statue. All team members must be used

and touching each other. They may not talk during the time.

Problem: The team must, together, make a "human machine".

Each member must cause a chain reaction with the next member.

This machine must be able to carry out a definite process.

The team has 10 minutes to think and present their machine.

They must be able to explain their machine to the judges.



CPS Practice Exercises

Materials: Full sheets of newspaper print, six" strips of masking tape.

Problem: Each team member gets 3 sheets of paper and five strips of tape to create a new object that represents the ideals of OM.

The team has one minute to think and three minutes to work.

Materials: 1' masking tape, 6 sheets of paper, 1 paper towel tube, 10 straws, 2' yarn, 5 labels, and 1 marble.

Problem: The team has 5 minutes to build a structure on which a marble can travel down and be dropped into a container with various point values. The object is to make the structure as tall as possible.

The marble may not be simply dropped down a tube, it must roll on or touch the structure

at all times. The structure must be freestanding.

Scoring: 2 points per inch of height of building, point amount where marble lands, 1-10 points for teamwork.

Materials: 20 marshmallows, 2 paint cans, 1 envelope, 3 name tags, 10 toothpicks, 20 nails, 2' of string.

Problem: Construct a suspension bridge

4" off the ground. The bridge has to hold a butter dish in which nails will be placed after the bridge has stood for one minute. You will receive 2 points for each inch of the bridge's length and 3 points for each nail placed in the dish and held by the bridge.

There must be a three second interval between each nail deposited. You will be given

one minute to think and 4 minutes to build.

Problem: Three team members will each be assigned a number 1, 2, or 3. The remaining two members will be a conductor/guide and the

blindfolded "traveler". The numbered members will be placed on the triangle shaped

areas . The blindfolded member is to be guided to these members by non-verbal signals given by the conductor.

A card with numbers in this sequence: 2-1-3-1-3-2-1-2-1 repeat... is given to the conductor.

The card designates the order in which the traveler is to visit the numbered members

You will have 2 minutes to plan your solution and 2 minutes to perform.



CPS Practice Exercises

Scoring: 2 points for each successful visit - 1-15 points for creativity of solution,

Materials: The Following List Of Movies:

Aliens	The Wizard of Oz	Batman	Jurassic Park	Dumbo
Beethoven	Adams Family	Side Kick	Home Alone	Gone With the Wind
E.T.	Beauty and the Beast	Cinderella	Mighty Ducks	West Side Story
Jaws	Peter Pan	Wayne's World	Star Trek	Friday the 13th
Rocky	Hot Shots	Superman	Pinocchio	Karate Kid

Problem: Each team is shown the list of movies and they have 1 minute to look at it before returning it to the judges. The team has 2 minutes to discuss the problem and choose a giver of clues. The team will then have 3 minutes to guess all the movie titles as the giver acts out the titles with only body language and sounds, not talking. The giver can pass on a title 3 times.

Scoring: -5 to -10 points for giver talking
3 points for each title guessed, 25 points for guessing all 25 titles

Materials: Paper clip, 6" string, 12" ruler, 2 name tags, coat hanger

Problem: To move a paper cup with open side up down a 10 foot long and three foot wide lane made by masking tape. For every foot you move the cup down the lane using only the items given and not using your hands, the judge will place a bean in the cup. Each item can only be used to move the cup 3 feet. If the beans spill out the team must start over. If the team has to start over items can be used again. The team has 1 minute to think and 4 minutes to act. The team can move the cup back one foot to collect more beans and the team is given 5 points if they ask this question.

Scoring: Each bean is worth 1 point.
When the cup crosses the finish line they get 10 points



51 - 60

Materials: In a shoebox put everyday items such as paper, scissors, glue, tape, plastic ware, paper plates, clothespins, crayons, rubber bands, tissue paper

Problem: Each person creates one musical instrument

Scorig: 15 points for each instrument made. It must stay together while being played or points will be deducted.

1-10 points possible if song can be recognized (not sung with words)

1-10 points possible if a theme is followed

1-10 points possible if instruments are designed to enhance theme/song

1-10 points for team spirit

5 points for each instrument that is designed to be played in a

different manner than others

Materials: Envelope containing - 100 toopicks, 1 ounce of clay, a sheet of 8 1/2" x 11" paper, 12" piece of string, paper napkin, 1 peel-off packing label, 2" of masking tape, 4 plastic straws, 1 cup miniature marshmallows, blown out egg, and a pair of scissors that can not be part of the solution.

Problem: You must determine how to drop a blown out egg onto a tile floor from a distance of six feet in the air, without cracking or breaking the egg, using the materials given.

Scoring: Unbroken egg - 20 points
Slight crack - 15 points
Large crack - 5 points
Smashed - 1 point

You will have 5 minutes to construct and 1 minute to test.

Materials: 2 empty pop cans, 2- 8 1/2" x 11" pieces of paper, 2 unsharpened pencils, 8 popsicle sticks, 3 paper clips, 5 assorted rubber bands, 1- 12" piece of string, 2- 6" pieces of masking tape, 2 plastic spoons, 1 pair of scissors.

Problem: Using the materials, create a transportation device that will be used to transport a raw egg a distance of 3 feet.

The egg may be touched only when it is being placed in or on the transportation vehicle. Hands or feet may not be used to propel the vehicle while it is transporting the egg.



CPS Practice Exercises

Materials: Signaling Team - Soda can with pennies in it, 2 spoons, 1 pencil, 4" square bubble packing material
Building Team - 30" string, 1 rubber band, 1 adhesive mailing label, 6" masking tape, 2 thumb tacks, 15 paper clips, 1 business size envelope. Also needed are 2 blindfolds and 2 shoe boxes.

Problem: Part One - The team will have 4 minutes to decide a method of communication to accomplish Part Two. In Part Two, 2 blindfolded members will have 4 minutes to follow directions from the signaling team members to construct and complete the task. Team members may talk in Part One but not in Part Two.

Task: Given 2 shoe boxes set 2 feet apart and using the materials provided, connect the boxes in as many different ways as possible.

Scoring: 5 points for each different connection. Penalty points for talking (-3 for each offense). A connection will be counted as different when any material in the connection from box to box is different from preceding materials.

Materials: 10 straws, 20 paper clips, paper cup, 100 pennies

Problem: Build a structure out of straws and paper clips. Cup must be placed on the structure and pennies added to see how much weight structure will hold.

Materials:

Table One	Table Two
2 yellow right triangles	3 yellow right triangles
2 red right triangles	3 red right triangles
2 blue right triangles	2 blue right triangles
3 yellow circles	3 yellow squares
3 red circles	3 red squares
3 blue circles	3 blue squares

Problem: Part 1- Your team has 60 seconds to divide into two groups.

Part 2-

1. At the end of 60 seconds announce time. Direct group 1 to assemble behind Table 1 and group 2 behind Table 2.
2. NO verbal communication will be allowed during this part.
3. You will have three minutes to complete your task.
4. Group 1 will try to collect all squares at Table 1.
5. Group 2 will try to collect all circles at Table 2.
6. Each group will designate one carrier.



CPS Practice Exercises

7. Carriers may only carry a maximum of one piece in a hand during a trip.
8. Carriers may never make a trip between Tables empty-handed.
9. Only carriers may touch the pieces.
10. At the end of time, carriers must return to the table where they started (following the rules above, esp. #7 and #8).
11. Only _____ carriers may carry circles and only _____ carriers may carry squares.
12. Any carrier may carry a triangle.

Fill in the blanks in #11 with descriptive characteristics that would allow for the successful transfer of circles and squares.

Ex. Male, female or over 4' tall, under 4' tall.

Scoring: 10 points for each circle on Table 2

10 points for each original square on Table 1

50 points for each square made from 2 triangles

being placed next to each

other to form a square on Table 1.

-5 points for each question asked in part 2.

-25 points for verbal communication between

teammates.



61 - 70

MATERIALS: QUARTERS, DIMES, NICKELS, PENNIES,
 4 DIFFERENT COLORS OF CONSTRUCTION PAPER -
 COMMUNICATING ITEMS: PENCIL, RULER, SHEET OF 8 1/2"X11" PAPER, TIN
 CAN,
 2 MARBLES, METAL SPOON

PROBLEM: DEVISE A NON-VERBAL
 COMMUNICATION SYSTEM IN WHICH 2 COMMUNICATORS INSTRUCT
 3 WORKERS HOW MANY OF EACH COIN IS TO BE PLACED ON A GIVEN COLOR
 PAPER.

5 MINUTES TO THINK / PRACTICE AND 3 MINUTES TO PERFORM.

SCORING: SCORE IS THE VALUE OF THE COINS PLACED PLUS
 100 POINT BONUS IF PROBLEM IS COMPLETED PLUS
 1 POINT FOR EACH UNUSED SECOND UNDER 3 MINUTE LIMIT.

PENALTIES: TWICE THE VALUE OF EACH COIN
 OVER THE MAXIMUM ALLOWED FOR A GIVEN COIN ON A GIVEN
 COLOR. 25 POINT PENALTY FOR A COIN NOT COMPLETELY ON A PAPER
 100 POINT PENALTY FOR TALKING ONCE IN THE THREE MINUTE WORK PERIOD
 BEGINS

		RED	YELLOW	GREEN	ORANGE
PENNY	3	4	8		7
NICKEL	12	1	0		5
DIME	4	13	2		5
QUARTER	7	4	2		10

MATERIALS: ONE PIECE OF 11"X18" WHITE POSTER BOARD, RULER, COLORED
 MARKERS

PROBLEM: YOUR TEAM IS TO MAKE A GREETING CARD.

TAKING TURNS EACH MEMBER ADDS ON TO WHAT THE PREVIOUS TEAM
 MEMBER HAS DONE.

SCORING: 1 POINT FOR A COMMON ANSWER -
 3 POINTS FOR A CREATIVE RESPONSE -
 5 TOP DRAWINGS RECEIVE 15 POINTS EACH

SETUP: ARRANGE PLAYING CARDS IN ROWS
 SIX DOWN AND SIX ACROSS. LEAVE SPACES BETWEEN SOME CARDS.

PROBLEM: THE TEAM HAS TWO MINUTES TO
 ORGANIZE AND TO MEMEORIZE THE ORDER/SEQUENCE OF NUMBERS.
 AFTER TWO MINUTES THE CARDS ARE REMOVED FROM THE
 TABLE. THE TEAM MUST WRITE THE ORDER OF THE CARDS ON A GRID IN TWO
 MINUTES.

REPRODUCE THE PROPER SEQUENCE.

EX. 4 X 3 X X 2 X-BLANK
 7 5 4 8 9 A
 4 X X A K Q



CPS Practice Exercises

5 6 6 7 X 5
2 2 8 8 A 9
X X 7 A K Q

PROBLEM: MAKE A STRING OUT OF ONE PIECE OF 8-1/2 X 11 PAPER

POINTS: 2 POINT FOR EVERY INCH
5 POINT DEDUCTION FOR EVERY BREAK IN STRING
5 POINTS FOR TEAM WORK
YOU MAY NOT USE ANY CUTTING DEVICE

MATERIALS: 1 BOX OF SPAGHETTI, BEESWAX,
NAILS, 1 6" PIECE OF STRING, SMALL MARGARINE TUB (1/2 LB. SIZE),
6 MAILING LABELS

PROBLEM: BUILD A SRTUCTURE AS HIGH AS POSSIBLE USING THE ITEMS LISTED.
AFTER THE STRUCTURE IS BUILT, SUSPEND THE PLASTIC TUB FROM THE TUB
AND PUT AS MANY NAILS AS POSSIBLE IN THE TUB.

SCORING: GIVE 8 MINUTES, NO ADJUSTMENTS WILL BE ALLOWED TO
SOLUTION AFTER TIME HAS ELAPSED.
1 POINT FOR EACH INCH OF HEIGHT
2 POINTS FOR EACH NAIL HELD
1-10 POINTS FOR CREATIVITY OF THE DESIGN
1-15 POINTS FOR WORKING AS A TEAM

MATERIALS: 1 6" PIECE OF STRING, 1 PLASTIC STRAW,
1 MAILING LABEL, 1 PIPE CLEANER, 1 CORK, 1 CLOTHESPIN, 1 SPOON

SETUP: 10 BOTTLECAPS, 10 MARBLES,
1 12"X17" CONSTRUCTION PAPER IN A 3'X5' AREA,
PLACE 10 BOTTLE CAPS ALONG INSIDE EDGE OF ONE SIDE AND 10
MARBLES ALONG THE OTHER. PLACE 12"X17" PAPER IN THE CENTER.

PROBLEM: EACH TEAM MEMBER CHOOSES 1 ITEM FROM
THE MATERIALS LIST. NO ONE ELSE CAN USE THIS ITEM UNLESS
IN A COMINATION WITH ANOTHER TEAM MEMEBER AND THEIR ITEM.
USING ONLY MATERIALS PROVIDED, MOVE MARBLES AND BOTTLE CAPS ONTO PAPER,
SO MARBLES ARE INSIDE CAPS ON THE PAPER. TIME LIMIT 1 MINUTE FOR
THINKING AND 4 MINUTES FOR PREFORMING.

MATERIALS: 5 CUPS ON A TABLE, A BAG OF SKITTLES CANDY,
1 BLINDFOLD

PROBLEM: SET THE 5 CUPS ON A TABLE EACH CUP
REPRESENTS A COLOR OF THE SKITTLES. THE TEAM MUST BLINDFOLD
ONE MEMBER AND GIVE NON-VERBAL SIGNALS
TO DIRECT THAT TEAM MATE SO HE/SHE WILL PLACE A PIECE



CPS Practice Exercises

OF CANDY IN THE CORRECT CONTAINER RELYING TOTALLY ON DIRECTIONS FROM TEAM MATES.

WINNER IS DETERMINED BY THE TEAM WITH THE MOST CORRECT SKITTLES IN THE CORRESPONDING CUP. COLORS MUST MATCH.

MATERIALS: 2 SETS OF LEGOS (EQUAL NUMBERS) ONE SET IS MADE INTO STRUCTURE, A BIG BOX OR BLIND HIDES THE CREATION

PROBLEM: DEVISE A NONVERBAL COMMUNICATION

SYSTEM TO DUPLICATE BEHIND BLIND. THE TEAM IS TO DIVIDE

INTO TWO GROUPS: RECEIVER AND COMMUNICATORS. THEY

HAVE 3 MINUTES TO THINK AND DISCUSS, 2 MINUTES TO COMMUNICAT AND BUILD

MATERIALS: 12 TOOTHPICKS, PINGPONG BALL

PROBLEM: BUILD A STRUCTURE OUT OF 12 TOOTHPICKS TO HOLD A PING PONG BALL ABOVE A TABLE.

THE STRUCTURE HAS TO HOLD THE PING PONG BALL FOR 1&1/2 MINUTES

MATERIAL: 2 rubber bands, 2 paper clips, 2 finishing nails, 2 balloons, 2 Styrofoam cups, 2 toothpicks (tape, scissors, and wire cutters)

PROBLEM: Make a vehicle that moves down a track.

The vehicle's movement must be started by the movement of a golf ball and once started it must move without assistance.

The ball may be rolled, dropped, or bounced to start the vehicle's movement.

The ball may not be used as a vehicle or as part of a vehicle.

Your score is determined by how far the vehicle travels down the track. You will have 6 minutes to make your solution, practice and discuss the problem. Then you will have 3 minutes to compete for your score.



71 - 80

Name things that initiate growth and what it is that grows.

Ex.: The sun makes the flowers grow.

Time makes the heart grow fonder.

List alternative ways to get from the mall (other than a car) to home.

Create a good newspaper headline.

Ex.: "Cure for Cancer Found"

Name things you can catch but not keep.

Ex.: A cold, a frog, a lion, a seal, a ray of light

Name many uses for a shoe.

Name states.

Ex.: Michigan, Rhode Island, Florida

State of confusion, state of anger

solid, liquid, gas, statue, stationary

You start with a "box"-

You think of a word that begins with the last letter in box, then you use the last letter in the next word given, etc.

Ex.: Box-x-ray-yo-yo, etc.

Fill in the blanks: _____ + _____ = _____

Ex.: A book plus a worm equals a bookworm.

Imagine you were stranded on a deserted tropical island

and you find a magic lamp.

The genie offers you only one wish.

What would you wish and why?

DI stands for destination Imagination, a creative problem solving group.

Name other groups which could have the initials DI, and what the group

is for:

Ex.: Dig In, a group of restaurant owners

Darn It!, a group for frustrated people





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81 - 90

Talk to our about a "slinky" giving as many creative uses as possible.

*Ex. You go down stairs by yourself, you move between hands,
you look like spring in bed, this is an antenna for an alien,
a fishing pole for a whirlpole, a telescope*

What are the uses of bubble gum?

What are all the uses of umbrella?

If you could give an animal, person, or thing a "noise" name, what would it be?

Ex. Cow is moo-moo

Name as many "oxymorons" as you can. (two words next to each other that are opposite but make sense together)

Ex. Jumbo shrimp, icy hot

Name puns dealing with ocean and sea life.

Ex. Play me a "tuna"

Name as many ways you can to be unfair.

Name things with the word light in it or kinds of light.

Ex. Bright light, fog light

Name a famous person today and a quote they might be remebered for in the future.



CPS Practice Exercises

If you could travel in a time machine, what year would you go to and why?



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91 - 100

Name things that hang.

*Ex. Lights hang from ceilings, tails hang from kite,
monkeys hang from the trees*

Name any words or phrases that use or contain the letters "ice".

Ex. Ice man or icing

Name things that stick to other things, what they stick to, and the result.

Ex. Stamps stick to letters so the post office will deliver them

Name a person you would or would not like to be during the Revolutionary War era and why.

*Ex. Paul Revere (famous ride), George Washinton (commander and cheif),
Thomas Hickey (publicly hanged)*

Why did the chicken cross the road?

Name a career and who or what the career deals with.

Ex. Teachers touch the future.

Name all the things you can find in the ground.

*Forest fires are unfortunately all too common out west in hot,
dry months. Name as many things as you can that you might
observe in such a forest fire.*

Given a compound word,

*you will take the last word of that compound word
to begin a new compound word or phrase.*

*You must use a combination of creating compound words and
phrases-not just all compounds or all phrases*

Ex. Poundcake, cake walk, walkway, way to go, go to jail,



CPS Practice Exercises

*jailbird, bird on a wire, wireless, less is more, more for your money,
money machine, machine gun, gunpowder for Washington,
Washington D.C., seaside, Sideways Tales from Wayside School*

Name things to do when you're having a bad hair day.



101- # 110

SANTA CLAUSE PASSED OUT AND IT IS UP TO THE ELVES TO
SEND THE PRESENTS TO THE RIGHT KIDS.
PRETEND YOU ARE THE ELF-- WHAT WOULD YOU DO?

NAME THINGS THAT ARE ROUGH.

NAME AN ANIMAL AND A THING THAT THE ANIMAL COULD
USE THAT IT DOES NOT NORMALLY NEED.
Ex. Sunglasses for a mole.

NAME THINGS THAT BUBBLE.

NAME THINGS THAT GO UP OR USE THE WORD "UP" IN A SENTENCE.

YOUR SCHOOL PRINCIPAL IS COMING TO YOUR HOUSE
FOR DINNER. WHAT WILL YOU FEED HIM/HER?

IF YOU WERE BEING SENT TO ANOTHER PLANET AND
COULD TAKE ONE THING, WHAT WOULD IT BE?

IF YOU COULD BE INVISIBLE FOR ONE DAY, WHAT WOULD YOU DO?

NAME A STATE AND SOMETHING IT'S FAMOUS FOR.
Ex. Idaho, potato

NAME AN ANIMAL OR SPECIES AND WHY THEY
WANT TO MOVE TO NEW YORK CITY.
1 POINT FOR COMMON RESPONSES,
3 POINTS FOR CREATIVE,
5 POINTS IF IN RHYME.



111 - 120

DR. PHOENIX HAS JUST INVENTED A NEW ELIXIR THAT HAS
ENABLED YOUR DOG TO SPEAK.
IF YOUR LOVING BEST BUDDY COULD SUDDENLY TALK TO YOU,
WHAT WOULD HE SAY?

CHOOSE TWO WORDS AND PUT THEM TOGETHER TO
FORM A COMPOUND WORD.
THEN DESCRIBE OR EXPLAIN YOUR ANSWER.

*Ex. A cat named Bob is a Bobcat.
A bug that lives in a bed is a bedbug.*

NAME WAYS TO UNTHAW A BUCKET OF ICE.
NOTE: THAW MEANS TO FREEZE; UNTHAW MEANS TO UNFREEZE.

NAME 1-3 INITIALS AND WHAT THEY STAND FOR.
Ex. : O.M. stands for Odyssey of the Mind

THE LIGHTS HAVE JUST BEEN TURNED OUT.
THERE IS SOMETHING UNDER THE BED.
WHAT IS IT?

MAKE A FACE AND THEN A COMMENT TO GO WITH IT.
ex. Sour face - "I just love raw lemons"

WORDS OR PHRASES THAT USE THE WORD ROUND OR THAT ARE ROUND.
*ex. The world, a carousel, argument goes round and round, ground, ball,
etc.*

WORDS OR PHRASES THAT INCLUDE THE WORD NIGHT (KNIGHT) .
*ex. midnight, night of the living dead, knight in armour, nightrider,
etc.*



CPS Practice Exercises

NAME EXCUSES FOR NOT HAVING YOUR HOMEWORK FINISHED.



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121 - 130

Name a food, (2) The famous person this food could be associated with, and (3) Why?

Ex.: Apple, Snow White, she could kill the witch

Stones- Name as many kinds as you can.

List different uses for a mouse trap other than catching animals.

Name types of bowls.

Highways carry cars and trucks. Name things that carry other things and what they carry.

Name a kind of pet and give a reason that a parent wouldn't let you have it.

Name things that are gold.

*Ex. Common: necklace, sun, earrings
goldenrod, Whoppi Goldbreg*

Name things with bows.

present, hair, bowl, boa constrictor

You are Cinderella - Where are you going?

Name things needed in order to survive in an ice cave.



131 - 140

Name things that work upside down.

Name as many types of cans as possible.

Name ways you can attract wildlife in your backyard.

NAME SOMETHING THAT CAN BE PUT TOGETHER OR ATTACHED.

USE "TAIL" IN A PHRASE OR SENTENCE.

LIST AS MANY WORDS WHICH CONTAIN THE SYLLABLE "ANT" OR THE PLURAL FORM "ANTS".

Ex.: Nouns: plants, antipasto, antacid, Mylanta, elephant, Antarctica, antibodies, tyrants

Adjective or adverbs: tantalizing, enchanted, frantic, inconsider"ant", ignorant, or excell"ant"

NAME THINGS THAT CAN GROW AND WHAT THEY GROW INTO.

Ex.: A sapling grows into a tree.

SEASHELL: HOW MANY WAYS CAN YOU USE A SEASHELL?

PRISM: TALK TO OR ABOUT OR GIVE AS MANY USES AS YOU CAN FOR A PRISM

RAINBOW: HOW MANY WAYS CAN YOU MAKE A RAINBOW?



141 - 150

PIZZA: STICKY DOUGH, COVERED WITH SAUCY TOMATO SAUCE,
CHEESY CHEESE, AND PEPPERONI PENNIES.

BAKED OR UNBAKED.

I USE IT FOR _____ or to _____.

NAME A FAMOUS SPORTS FIGURE AND THE SPORT IN WHICH HE/SHE COMPETE.

LIST USES FOR A SIZE EIGHT MALE SHOE.

THE FIRST PERSON HAS TO THINK OF TWO WORDS THAT GO TOGETHER

ex. FIRE HYDRANT, DOG POUND, "MACK TRUCK"

THE NEXT PERSON HAS TO USE ONE WORD FROM THE FIRST PERSON'S

ANSWER TO FORM ANOTHER RESPONSE

ex. FIREMAN, DOG HOUSE, TRUCK STOP

NAME UNITS USED TO COUNT THINGS.

Ex. Reams of paper, head of cattle.

DINOSAURS HAVE COME OUT OF EXTINCTION,
AND YOU NO LONGER NEED THE DINO BONES THAT PREVIOUSLY
HAVE BEEN DUG UP.

WHAT DO YOU DO WITH THE EXCESS BONES?

HAVE A CONVERSATION WITH YOUR FINGER.

IT'S A TERRIBLE DAY WHEN _____

I START TO WORRY WHEN _____

NAME A MATERIAL AND WHAT THAT MATERIAL MAKES.

ex. Glass makes a window. Steel makes a car.



151 - 160

NAME THINGS THAT CAN BE THROWN AND THE TARGET
AT WHICH THEY ARE THROWN.

Give reasons a person would share his/her head.

Things that explode.

ex: Dynamite, a volcano, Dad when he gets mad, a car tire

Name things that "Flies"

*ex: Birds, insects, planes,
Saucer, swatter, glue gun after it burns me,*

The problem is to build off the last letter of the response given
before you.

The topic is carnival/ circus.

*ex: Start with the word "Carnival"; you could say lollipop.
You have to stay on topic.*

Name things you can do with one hand

Fill in the blanks in the following sentence:

"I looked in my closet and saw _____ (DOING)
."

ex: I looked in my closet and saw my shoes doing nothing.

I looked in my closet and saw Tonya Harding hitting Nancy Kerrigan.

Name as many days as you can (single word or phrase).

ex: Mother's Day, Daisy

Name things that have to do with spring or springs.

*ex: Spring flowers, spring time, spring fever
Spring ahead, fall back; spring board for diving.*

Begin with a compound word (*ex. stardust*).

Take turns going around the table using one part of the word
to form a new word or phrase.



161 - 170

We used a popcorn ball as a cork to plug a hole in the boat in our skit.

What are some other uses for a popcorn ball?

Uses for duct tape.

ex: Seal a duct.

Create a body panel for a 1980 Honda Civic.

Name people or things that repair and what they repair.

A company has millions of plastic vcr tape holders that can't be used. What could we use them as?

Name as many kinds of kings and queens as you can.

Imagine that you could program your dreams at night. What would you dream about? The first person must say: "I would dream about..." the story would then continue. You cannot pass. The story may not be started again.

Name things that crack and what cracks them.

Name things you would find in a secret garden and why they are there.

Change the name of a play, movie, television show, or song and tell why that change has been made. You may change as many words as necessary, as long as you do not lose the sense of the original title.

ex: The "Cat on a Hot Tin Roof" would become "Rat on a Hot Tin Roof" if a rat stepped on a hot tin roof.

Name things that only go one way.

ex: One-way street, river, rain

Gravity, Earth's rotation





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171 - 180

Imagine that you could program your dreams at night. What would you dream about?

The first person must say: "I would dream about..."

the story would then continue. You cannot pass.

The story may not be started again.

Name things that crack and what cracks them.

Name things you would find in a secret garden and why they are there.

Change the name of a play, movie, television show, or song and tell why that change has been made. You may change as many words as necessary, as long as you do not lose the sense of the original title.

ex: The "Cat on a Hot Tin Roof" would become "Rat on a Hot Tin Roof" if a rat stepped on a hot tin roof.

Name things that only go one way.

ex: One-way street, river, rain, Gravity, Earth's rotation

A name that starts and ends with vowels.

ex: Anna, Erie, Lake Erie

Name a kind of ant.

ex: Queen ant, red ant, U. S. Grant, Aunt Jemima, FANTastic

Name words that have numbers or parts that should sound like numbers in them.

ex: Tuesday, fortune, etc.



181 - 190

Name any uses for trees.

Who pushed Humpty Dumpty off the wall and why was it done?

Name things that creep.

Name kinds of paint, or things with the word paint in them.

Name things that have to do with medicine.

ex: Take two aspirin and call the doctor or Laughter is the best medicine.

Name as many ways to get up a flagpole as you can.

You are given a bottle of pop called Wacky Cola. Come up with a slogan for the product of Wacky Cola.

Go around the circle twice making up a story that begins with the line: "Once my dog ate a chocolate cake that I baked" and end with "But I still want to know - is that a daisy or a rose?" No one may pass and the lines must be ten words long, but no more than twenty-five words.



191 - 200

If the pop-top can had never been invented, what would the soda companies use?

Ex. Bottle, jar, flask, stein, coconut

Name as many products and warning label pairs as you can.

Matches and "close cover before striking" cars and "fasten seat belts"

Primitive man only understood three numbers:one, two, and three. Anything greater was simply "many".If our neanderthal friend were with us today, He would have understood the number in the book "The Three Musketeers" but to tell him the speed limit was "35" would not be a concept he could understand. Our world today is full of numbers. Name other things that tend to be associated with a number.

What colors your life. Creative points if color is mentioned in the answer.

Ex. If I "read" a good book

Name a many types of matches as you can in the given time.

Ex. Match book, match box, matchbox car, Matchmaker International

Name as many things as possible that are square and you eat them.

Ex. Piece of cake, lasagna Jolly Rancher, brownie

Name things that turn.

Ex. Earth, wheels, pages, stomach

Name things that go around.

Name something that is inside something that is inside something.

Ex. a yoke is inside that is inside the shell



CPS Practice Exercises

Name as many things as you can that can "count" with two successive numbers.

Ex. one-toothed animal

201 - 210

Using the alphabet in sequence state: name, type of creature or occupation,
likes and area of residence.

ex. My name is Alice. I am an alligator. I like acorns. I live in Alabama

(Next student would use the letter B.)

Name something that is a star or a word with "star" in it.

ex. Marylin Monroe, or starship.

On index cards write the names of six or more famous people. Place the cards

face up on the table. Each team member is to choose one of these famous people

each time he or she has a turn. The problem is: If you invited this famous person to dinner,
what would you serve?

ex. If I invited Princess Di, I would serve divorce papers.

If you could talk to any person now alive in the world today, who would you talk to and

what would you say?

ex. I'd ask Kramer who does his hair.

List things you find in your bedroom. As a thinking exercise, each team member must

repeat in the correct order all the answers that were given before their own.

ex. Socks, Dust Bunnies, etc.

Draw an object from 1995 and describe it as though you were a person living in 2245

who had just discovered it.



CPS Practice Exercises

A man walks into a store naked. Why?
ex. He is the Emperor.

Name as many ways as you can to end a phone conversation.
ex. Slam down the phone.

Knock on the table twice before answering. Name as many things as possible that you can do with twizzlers and whipped cream. "eat them" receives no credit.
ex. create Jackson Pollyck type artwork with them.

Name things that you should not say or do in a place of worship.
ex. Sleep.



211 - 220

You are going to work for the day and will have to pack your briefcase, what will you take?
ex. Aspirin

Name things that slide
ex. Minor infractions of the law

How are a cat and a refrigerator alike?
ex. They both hold milk

Thyme is a herb. Time is a measure of duration. Give words or phrases with time/thyme in them
ex. Perfect timing, Times Square

Name as many types of bags as possible
ex. Laundry bag, baguette cut diamonds

Name as many types of lines as possible
ex. Contour lines, family lines

Name as many different cakes or phrases with the word cake in them as possible
ex. Cake Walk

Name kinds of ants
ex. Red ant, Aunt Sue, Giant

Word Building: The first person says a one syllable word, the next person adds a syllable to make a new word and so on. Each word scores points equal to its number of syllables. When a person cannot build a longer word, he or she may begin a new series. The second syllable may change to build a longer sequence.
Ex. with, withhold, withholding
depot, deposit, depositing, depository



CPS Practice Exercises

221 - 230

Given two greeting cards, find as many uses as possible.

ex. *Build a roach motel*

If you were a ripe apple still hanging on a tree, what are some of the things you might say?

ex. *Hey, you with the white wig! Look out below!*

Give as many words or phrases that contain to, too, two, tu as possible.

ex. *Et tu Brutus?*

Name as many things as you can that can be found on an envelope

ex. *A tear*

Name things that are red and green

ex. *Christmas wrapping paper.*

Name something that takes time

ex. *Homework*

List ways to get from here to the moon

ex. *Read a book*

Name as many movie titles as you can that are prepositional phrases

ex. *On the Waterfront, From Russia with Love*



CPS Practice Exercises

231 - 240

Given two greeting cards, find as many uses as possible.
ex. *Build a roach hotel.*

If you were a ripe apple still hanging on a tree, what are some of the things you might say?
ex *Hey you with the white wig! Look out below!*

Give as many words or phrases that contain to, too, two, tu as possible
ex. *Et tu Brutus?*

Name as many things as you can that can be found on an envelope
ex. *A tear*

Name things which are red and green.
ex. *Christmas wrapping paper.*

Name something that takes time.
ex. *Homework.*

List ways to get from here to the moon.
ex. *Read a book*

Name as many movie titles as you can that are prepositional phrases.
ex. *On the Waterfront, From Russia with Love.*



241 - 250

Materials: In a shoebox put everyday items such as paper, scissors, glue, tape, plastic ware, paper plates, clothespins, crayons, rubber bands, tissue paper

Problem: Each person creates one musical instrument

Scorig: 15 points for each instrument made. It must stay together while being played or points will be deducted.

1-10 points possible if song can be recognized (not sung with words)

1-10 points possible if a theme is followed

1-10 points possible if instruments are designed to enhance theme/song

1-10 points for team spirit

5 points for each instrument that is designed to be played in a

different manner than others

Materials: Envelope containing - 100 toopicks, 1 ounce of clay, a sheet of 8 1/2" x 11" paper, 12" piece of string, paper napkin, 1 peel-off packing label, 2" of masking tape, 4 plastic straws, 1 cup miniature marshmallows, blown out egg, and a pair of scissors that can not be part of the solution.

Problem: You must determine how to drop a blown out egg onto a tile floor from a distance of six feet in the air, without cracking or breaking the egg, using the materials given.

Scoring: Unbroken egg - 20 points
Slight crack - 15 points
Large crack - 5 points
Smashed - 1 point

You will have 5 minutes to construct and 1 minute to test.

Materials: 2 empty pop cans, 2- 8 1/2" x 11" pieces of paper, 2 unsharpened pencils, 8 popsicle sticks, 3 paper clips, 5 assorted rubber bands, 1- 12" piece of string, 2- 6" pieces of masking tape, 2 plastic spoons, 1 pair of scissors.

Problem: Using the materials, create a transportation device that will be used to transport a raw egg a distance of 3 feet.

The egg may be touched only when it is being placed in or on the transportation vehicle. Hands or feet may not be used to propel the vehicle while it is transporting the egg.



CPS Practice Exercises

Materials: Signaling Team - Soda can with pennies in it, 2 spoons, 1 pencil, 4" square bubble packing material
Building Team - 30" string, 1 rubber band, 1 adhesive mailing label, 6" masking tape, 2 thumb tacks, 15 paper clips, 1 business size envelope. Also needed are 2 blindfolds and 2 shoe boxes.

Problem: Part One - The team will have 4 minutes to decide a method of communication to accomplish Part Two. In Part Two, 2 blindfolded members will have 4 minutes to follow directions from the signaling team members to construct and complete the task. Team members may talk in Part One but not in Part Two.

Task: Given 2 shoe boxes set 2 feet apart and using the materials provided, connect the boxes in as many different ways as possible.

Scoring: 5 points for each different connection. Penalty points for talking (-3 for each offense). A connection will be counted as different when any material in the connection from box to box is different from preceding materials.

Materials: 10 straws, 20 paper clips, paper cup, 100 pennies

Problem: Build a structure out of straws and paper clips. Cup must be placed on the structure and pennies added to see how much weight structure will hold.

Materials:

Table One	Table Two
2 yellow right triangles	3 yellow right triangles
2 red right triangles	3 red right triangles
2 blue right triangles	2 blue right triangles
3 yellow circles	3 yellow squares
3 red circles	3 red squares
3 blue circles	3 blue squares

Problem: Part 1- Your team has 60 seconds to divide into two groups.

Part 2-

1. At the end of 60 seconds announce time. Direct group 1 to assemble behind Table 1 and group 2 behind Table 2.
2. NO verbal communication will be allowed during this part.
3. You will have three minutes to complete your task.
4. Group 1 will try to collect all squares at Table 1.
5. Group 2 will try to collect all circles at Table 2.
6. Each group will designate one carrier.



CPS Practice Exercises

7. Carriers may only carry a maximum of one piece in a hand during a trip.
8. Carriers may never make a trip between Tables empty-handed.
9. Only carriers may touch the pieces.
10. At the end of time, carriers must return to the table where they started (following the rules above, esp. #7 and #8).
11. Only _____ carriers may carry circles and only _____ carriers may carry squares.
12. Any carrier may carry a triangle.

Fill in the blanks in #11 with descriptive characteristics that would allow for the successful transfer of circles and squares.

Ex. Male, female or over 4' tall, under 4' tall.

Scoring:

10 points for each circle on Table 2

10 points for each original square on Table 1

50 points for each square made from 2 triangles being placed next to each

other to form a square on Table 1.

-5 points for each question asked in part 2.

-25 points for verbal communication between teammates.



Name as many different rocks as you can.
ex. Granite or Rolling Stone.

Name types of pans.
ex. Bedpan.

If you were a stop sign, who would you stop, and why would you stop them?
ex. Stop terrorists from killing children. Stop friends from drinking and driving.

If someone were to tell you that you were going to be stranded on an island and you had a chance to take one thing with you, what would it be and why?
Ex. A genie that would grant any wish so that I would never be in need.

If you met God on the street what would you like to tell Him?
Ex. Thanks.

After feeling a lotion with granules in it, think of all the possible names for the lotion or names for the granules.
Ex. Facial Lotion with Cleaning Grains.

Name things you see while driving or riding in a car.
Ex. House, trees, road signs, dead deer, bad drivers.

Name things your cat might drag home.
Ex. The neighbor's chihuahua.

Name as many things as you can that save things and what they save.



CPS Practice Exercises

Ex. OMers and their coaches save everything.

If you were an inventor, what would you like to invent?

Ex. A foolproof decision-maker.

Name different and unusual things you could use a doughnut with a hole in the middle for.

Ex. Put it on your finger and eat around the edge



CPS Practice Exercises

261 - 270

Name an emotion and what made you feel that way.

ex. Frantically stressed. I am trying to answer a spontaneous problem.

Use the word cow in any expression or phrase.

ex. I'm a rhinestone cowboy.

Name as many things as possible that come from a field.

ex. Hay fever.

Name things that go bump in the night.

ex. Me as I fall down the dark stairs.

A group of objects will be placed on the table in front of you. Your problem is to take 2 or more objects and show and tell how they are used

together, related or remind you of something. You must use at least 2 objects

to receive a score . While you may not skip your turn, you can use one object

in your response without scoring so the next person may respond. You will receive

one point for each object used in your response. Highly creative or humorous

responses will receive a bonus of 2 points.

ex. The feather on the egg is a chicken sitting on an egg. The clothespin on

the cloth is a sock hanging out to dry.

List ways to cook a hot dog.

ex. Put it on the engine of a running car.

One person starts a story whose author changes every ten seconds. Each student

will speak for ten seconds then the story continues with the next student. Points given

for each ten second interval.



CPS Practice Exercises

(Blank) shuts (blank).

ex. A strike shuts down the plant.

Complete the following statement: "I am only a piece of wood, but..."

ex. ...someday I'll be a house.

List uses for a jar of ketchup.

ex. Attatch rocket boosters and launch it into space.



CPS Practice Exercises

271 - 280

Given an 8 1/2 x 11 sheet of paper tell "what it is." Before the paper is passed to the next team member a piece must be torn off. The paper may be folded or altered in any way, but there must always be enough for the next team member to make a new item.

Name things you can do with a single strand of hair.
ex. Thread or Dental Floss.

Name a famous person and the saying that made him or her famous.
ex. " Here's looking at you kid." Humphrey Bogart

Name things which have "lock" in them.
ex. Warlock.

Name as many things that you can that something goes through, and tell what is on the other side.
ex. If one goes through a tunnel, he or she sees the other side. If I go through a book, I get to the ending.

Name things that smell and what people think when they smell them.
ex. When I smell BenGay I think of grandma.

State as many words, phrases, or sentences that contain the word "scale."
ex. I hate practicing my scales!

Name as many cats as you can.
ex. Leopard, catwalk, Katarina Witt.



CPS Practice Exercises

Use the word hall/haul in as many unusual ways as you can.

ex Mom says that she is not going to haul all of our props down the hall for us again this year.

Name things that rock.

ex. Elvis.

Name things containing the word flip.

ex. I am wearing flip-flops to the beach.

Answer this questions in as many ways as possible: "What is behind the door,

and why is it there?"

ex. A game show host because the models got fired.

Using the letters from the phrase EARTH WORM, spell as many words as you can.

Four letters (or less) words receive 1 point, five letter words receive

2 points,

and six letter (or more) words receive 4 points.

ex. them

Name as many things as possible that an ant or an aunt does.

ex. Raid a picnic.

Everything on earth disappears except you, tigers and a light bulb that magically works without electricity. How would you react? How would you survive?

ex. I'd open a nighttime tiger exhibit.

Name things you can make from a tissue box.

ex. A hat.



CPS Practice Exercises

Name all the faces possible.
ex. The face of a cube.

Name all the coats that you can.
ex. Joseph's Amazing Technicolor Dreamcoat.



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CPS Practice Exercises

281 - 290

Answer this questions in as many ways as possible: "What is behind the door,
and why is it there"
ex. A game show host because the models got fired.

Using the letters from the phrase EARTH WORM, spell as many words as you
can.
2 points, and six letter (or more) words receive 4 points.
ex. them

Everything on earth disappears except you, tigers and a light bulb that
magically works without electricity. How would you react? How would you
survive?
ex. I'd open a nighttime tiger exhibit.

Name things you can make from a tissue box.
ex. A hat.

In the first go around, the members are asked to give
the name of a city beginning with a certain letter of the alphabet.
In round two, they give the name of a particular store or type of store
also
beginning with the assigned letter. In round three, they give the
name of a product from that store which also begins with the same
letter.
ex. Oakland, O'Neils, Overcoats.

Bugs Bunny is on the phone and will go on strike unless...
ex. He is allowed to join the actor's guild.

Name things that can be covered up, and what they can be covered with.
ex. Hurt feelings can be covered with an apology.

Given a starting sentence such as, "George Washington was the first



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CPS Practice Exercises

president," team members, in sequence, take the last word of the previous sentence to start a new sentence.

ex. ... *President*> *Presidential candidate Ollie North is a sure winner.*

Name as many different types of wheels that you can.

ex. *Car wheel, Wheel of Fortune.*

Describe a box of cereal in two words.

ex. *Hyperactivity Inducer.*



CPS Practice Exercises

291 - 300

Name as many kinds of keys as you can, and words that have the word key in them.

ex. Monkey.

Name things that you fill.

ex. Gas tank.

Given five dowel rods, what could you do with them?

Name things that open and the things that open them. ex. Education opens doors to opportunity.

Name things that do not mix.

ex. Oil and water.

Name as many uses for a 2 liter plastic soda bottle as you can. You may do anything to change its appearance.

ex. Make a hummingbird feeder.

What would you do with a pizza topped with 1001 flies?

ex. Set a trap for the Teenage Mutant Ninja Turtles.

List different uses for a baby buggy.

ex. A shopping cart.

How do you feel when you bite into a York Peppermint Patty?

ex. I feel like spitting it out!

Imagine that you are now an adult. In what ways has the world changed?



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CPS Practice Exercises

ex. The hole in the ozone layer has been repaired.



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301 - 310

If the president came to your party, what kind of food would you serve?
ex. *Big Macs.*

Name things that enlarge when something is added to it.
ex. *Air enlarges balloons.*

Name a place you would like to be and why.
ex. *In heaven so I can see grandma.*

Name things that require a strategy.
ex. *Asking your parents for a bigger allowance.*

A team member says a number. The next member adds one to that number, then says another number. The pattern continues.
ex. *"5", "6-9", "10-5", "6-12", etc.*

If pigs had wings, what would birds do?
ex. *Get out of the way.*

Name an original Olympic event, and who would participate.
ex. *Alligator water surfing - Crocodile Dundee*

Name different kinds of heroes, and why they are heroes.
ex. *Superman because he shows that real men do wear tights.*

If you were the Easter Bunny, what would you deliver to whom?
ex. *I would deliver a life size chocolate replica of the Washington Monument to myself.*

You are chasing Carmen SanDiego. What is her crime, and where is she?
ex. *She is posing as a spontaneous judge at an OM competition, and she is using a mind altering device to block creativity waves.*



CPS Practice Exercises

311 - 320

Name as many uses for a plastic Easter egg as you can.
ex. To keep knee high panty hose in.

You are a color or flavor in a package of lifesavers. What color or flavor would you be and why?
ex I would be pep-o-mint so that I could help rid the world of morning breath.

Name a use for bricks aside from as building materials.
ex. To scrape mud off shoes.

Given that your first word is HOUSE, you must make a word that begins with " H" or " E" . The next member must make a word that begins with the first or last letter of that word.
*ex. house > horoscope > epiphany **

You are making a time capsule. What would you put in it and why?
ex. A VCR and a videocassette of a typical day so that our lifestyle may be observed.

Name different kinds of acts.
ex. Magic act, reacts, actions.

Name as many "endangered" things as you can.
ex. Rotary telephones.

Forest fires are unfortunately all too common out west in hot, dry months. Name as many things as you can that might be observed in such a forest fire.
ex. Thumper and Bambi running for their lives.

Name things that you can change or cannot change. Members must alternate "can change" with "cannot change."
ex. You cannot change when a volcano will erupt. You can change how



CPS Practice Exercises

much you weigh. You cannot change the smell of a rose. You can change how strong you are.

Put a nickel in an opaque bag. The team is to respond as to what the coin would say if it was talking to you.
ex. Get me out of this bag! I belong at Monticello.



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CPS Practice Exercises

321 - 330

Name things that you find under water.
ex. The bathtub stopper.

Name ways you could reach the other side of the mountain.
ex. Tunnel through it.

Say things about the word "face" or use the word "face" in a phrase or a sentence.
ex. I can't face another spontaneous competition.

Name parts of a car and describe how they can be used.
ex. Steering wheel may be used as a discus.

Name things you can do with a clock.
ex. Use its second hand as a toothpick.

Name as many types of "pools" as possible.
ex. A betting pool.

Think of things that can be done with a piece of chewed up gum.
ex. It may be used to decorate the wall while waiting in line for a ride at an amusement park.

Name things that reflect, and what they reflect.
ex. Mirrors reflect images. Actions reflect motives.

Name something that starts out big and then gets smaller.
ex. An ice cube melts and then gets smaller.

Say as many things as possible about a cup of water.



CPS Practice Exercises

ex. It is composed of two gasses which are in a two to one relationship.

Name as many uses that you can think of for a 24 pack cube of Pepsi-cola.

ex. Use it as the weight to drop on a catapult.



CPS Practice Exercises

331 - 340

Given: 5 medium rubber bands, 10 dimes, 3 chains, Legos, shoes with laces

Members form a circle in which alternate members face toward and away from

the center. Attach the wrists of the members standing next to one another.

Without talking, complete the following tasks.

1. **Stack the dimes**
2. **Untie and retie two individuals' sneakers**
3. **Unstack three chairs**
4. **Build a car with the Legos**

Given: Marshmallows, toothpicks

Build a structure as high as you can

The team is divided into two groups. One group's members are the leaders,

the other group's members are the workers. **The leaders are given two minutes to**

develop a nonverbal communication method (ex. sign language) in order to direct the workers to perform a task. The judges then give the leaders a task.

The leaders must non-verbally direct the workers to perform a task (ex. building something out of clay)

Given: 10 marbles, table or other raised surface from which to start, cardboard-flat and tubes, paper plates, construction paper, egg cartons, plastic cups,

nails, push pins, masking tape, sponges, tacks, various boards, small boxes,

8 foot and / or shorter pieces of plastic molding for paneling or other supplies as

desired and available. **Design and build a marble run with as much variety as possible. At the end of the**

allotted time (10-30 minutes), run 10 marbles and judge the run on variety, creativity, and

engineering. The problem might be altered to give more points for very slow descent

of the marbles.

Given: one large plastic gallon bag with the following materials; large paper

or plastic plate, 3 toothpicks, 2 plastic straws, balloon, 2 rubber bands,

large Styrofoam cup, 6" square of contact paper, sheet of plain paper, business size envelope, small bottle of glue, scissors.



CPS Practice Exercises

Design and build a device which will store energy that will then be released to transport a raw egg a minimum of 12 inches using only the materials provided and without touching the egg during the test with your hands.

Given: 15 large marshmallows, 15 licorice sticks, a cup, lifesavers.
Build a structure that will hang from the ceiling. You will have 10 minutes to complete the problem. After you have built the structure it will

be hung from the doorway.

Attach a cup at the bottom of the structure and fill it with lifesavers.

After each addition of 5 lifesavers the structure will be rocked.

Each time the structure is rocked (and survives), 2 points will be given.

The length of the structure will earn points as well- 5 points per 1 inch.

Build a bridge type structure. You will be given one minute to discuss the problem. You may talk to your teammates.

You will have 10 minutes to complete the problem.

After you've built the structure, a cup will be placed in the middle of the

bridge span. The addition of each lifesaver to the cup counts as two points,

and each inch of the structure's horizontal span will equal 5 points.

Given: 6 paper clips, fingernail file, 10 foot piece of string, 3 rubber bands, meter stick.

A pipe is placed on a tabletop, extending over the edge at least 6 inches. Two other pipes are placed on the floor directly below the pipe on the table top and spaced one foot apart. An 8 foot square is taped around the setup such that the pipes are in the center. Team members are not allowed inside the square. **The team must find the vertical distance from the bottom of the pipe on the tabletop to the top of the pipes on the floor.**

Given: crayons, cardboard.

Recreate as much of the Sistine Chapel Ceiling as possible

. The team has three minutes to think and eight minutes to work.

There is to be no talking.

Given: golf balls, swizzle sticks, duct tape, one rubber glove.

Build a structure as high as possible.

Given: cardboard, pasta.

Create an artistic work and then describe what it represents.



CPS Practice Exercises

Given: 2 Styrofoam cups, 1 sheet of typing paper, 2 popsicle stick, 1 mailing label, 2 Cheerios.

Construct a platform(s) that will cover the 2 Cheerios while supporting a team member off the ground for at least 10 seconds.

Scoring- 10 points for every second the team member is supported (up to 150 points possible), 10 bonus points for each Cheerio that remains uncrushed and unbroken.



341 - 350

Given: a deck of cards, 10 inches of tape.

Build the highest structure possible which will stand for 30 seconds.

Given: a sheet of typing paper, 5 pieces of 2" square sticky paper, 5 beans,

5 elbow macaroni, 5 toothpicks, 1 small lump of Clay.

In three minutes, **build a picture**. In the following two minutes,

tell a story about the picture one team member at a time.

Given: 15 foam balls, 5 large paper clips, 5 rubber bands, 3 popsicle sticks,

a plastic spoon, a 12" piece of string, a mailing label, 5 straws, a

4'x4" piece of cardboard,

a paper towel tube, 1 large box, 1 small box.

Place one large and one small box ten feet from a line marked on the

floor. You will have three

minutes to think and construct, and three minutes to solve the problem.

Construct at least

three different devices to shoot the foam balls into the boxes. Each device must be made from

at least two items and must shoot at least five balls. Balls may be retrieved and retried,

but not while someone is shooting. There will be a 5 point penalty if this occurs.

5 points will be awarded for each ball in the larger box and 10 points for each ball in the

smaller box at the end of the 3 minutes.

Given: 5 colors of index cards- 5 of each color.

In two minutes, **each member is to try to get 5 of one color of card.**

Members must trade 2 cards at a time and may not talk. Members may not take

cards unless they are given to them.

Members may also not signal to other members in order to get them to give cards.

This is an exercise in teamwork and observation.

Given: 2 pencils, 2 packages gummy lifesavers, 4 packages regular lifesavers, 2 blindfolds.

You will have 5 minutes to develop and test and 2 minutes to complete task.

The problem is to develop a nonverbal communication / system to put lifesavers on a pencil in a preset order. Two people will



CPS Practice Exercises

wear the blindfolds, and they will be putting the lifesavers on the pencil.

Given

4 boxes, 10 air filled balloons, about 100 straight pins, tape, tweezers, pen.

prepare boxes as shown. **Put the balloons into the boxes without popping them using tweezers, tape and the pen.**

Place a deck of cards, including the jokers, in the middle of the table.

The team has one minute to think and three minutes to respond.

Team members, in sequence, will flip the cards over, one at a time, **telling a story using whatever card they flipped as a part of the story.**

The story continues until all the cards are gone. Scoring- one point for common

responses and three points for creative responses. One extra point given for each

second under the three minute time limit if all the cards were flipped.

Given: table top marked with a start line and a finish line that are one meter apart,

3 sheets of typing paper, 1 pair of scissors, 2 yards of String or yarn, 36 inches of masking

tape, 9 tennis balls, 2 unsharpened pencils, 1 wooden ruler, 5 plastic straws, 1 Styrofoam

or paper cup.

Within 15 minutes, create a device that will transport one tennis ball at a time from behind

the start line across the finish line. The device may not be touched by humans either going

to the finish line or returning to the start time for another "load."

Allow five minutes to

demonstrate solution to problem. Balls may be removed by a team member after they

have crossed the line, and a team member is allowed to place a tennis ball into the device

for transport Scoring- 1 point for each piece of equipment used on completed device.

10 points for cleverness of design of device. 10 points for each ball transported across finish line.

Given: 4 ft. of string, 3 paper clips, 1 sheet of typing paper, a Dixie cup.

There are two lines on the floor 3 feet apart. A 10 ounce glass bottle lies on its side,



CPS Practice Exercises

pointing left on the far side of the second line. The problem is to **rotate the point of the bottle 3 full times without crossing the first line.** You have 4 minutes to plan and 3 minutes to execute the solution.

Given: 6 straws cut in half, a cup of shaving cream.
Without talking, **build the highest structure you can in 3 minutes.**
Measure the structure at its highest point.

Given: 3 pieces of typing paper, a paper towel tube, 10 pipe cleaners, a Styrofoam plate, a wad of clay.
Using the above materials, construct a device that can **cushion an egg from breaking** when dropped from a height of six feet.



351 - 360

Given: 1 container of play-dough, 1 wash cloth, 2 shoe strings, 10 toothpicks, 10 pennies.

Create a model of a new invention. After the model is complete, the team must explain what it is, what it does, and how it improves the world.

Given: 5 straws, 10 toothpicks, a block of clay, a piece of paper, an egg. **Build a structure as tall as you can that will support the egg.** You will be judged on the height and creativity of the structure.

Given: 4 pieces of paper, 4 pencils.

The coach will make up a sentence and assign each team member a word to draw (ex. Chicken legs are really skinny.) **Members will have 3 minutes think time, and 5 minutes to respond. After all the words are drawn, they are to be placed on the table in the order in which the team thinks that the sentence reads.** Any team member may guess at a word, as long as it is not the word that they are drawing. Five points will be given for each correct word guessed, and fifty points will be given for the correct sentence.

Given: 3x5 inch piece of aluminum foil, paper clips, bowl of water. **Make a metal boat that will support weight and stay afloat in a bowl of water. Points will be given for each paper clip placed before the boat sinks.**

Given: 1 pack of 50 3 x 5 inch index cards.

Build the tallest structure you can using only index cards. Scoring: one point per inch in height. Members will have 2 minutes to nonverbally discuss and 5 minutes to build. The problem may be done a second time with verbal discussion time.

Given: paper cup, 6 straws, 6 inches of tape, 10 toothpicks, 5 marshmallows, 1 piece of typing paper, scissors.

Build a structure that the paper cup can be placed on and will support weight.



CPS Practice Exercises

Points will be given for height and weight supported.

Given: 2 foot long ramp 6 inches high, brick 3 inches from the end of the bottom of the ramp, 2 straws, 12 small Marshmallows. Coach announces that in 2 minutes an egg will be rolled down the ramp. **The team must construct a barrier to protect the egg from the brick and still allow the egg to reach the table top.**

Given: 4 small straws, 30 elbow macaroni, 5 pipe cleaners, 4 mailing labels, 10 toothpicks, about 50 mini marshmallows, assorted rainbow rotini, and at least 10 spaghetti noodles. **With 2 minutes to plan and 8 minutes to work, the team will build a free standing structure with the materials provided.**

Scoring

1. One point for each inch of height of the structure inside the base. The height will be measured with a yardstick perpendicular to the base of the structure. The highest point of the structure that is entirely inside the base will count for the height measurement. Any part of the structure above that point will not count for height.
2. 0 to 15 points for teamwork. This will be the subjective opinion of the judge and the judge's decision is final
3. 0 to 15 points for creativity of the structural design - that is how you put it together so it stands up. This is also a subjective opinion of the judge.
4. 0 to 35 points for creativity of the decoration or style of the structure. Again, this is a subjective opinion of the judge.

Given: 20 Dixie cups, 1 roll of scotch Tape. **Build a creative structure.**

With 2 minutes to think and 3 minutes to solve, two team members are blindfolded and the other three team members have to move them around an obstacle course using only sounds (not voices or words). Points given for targets hit that are placed on the floor. The object is to get them to meet at a



CPS Practice Exercises

certain target on the floor.

Given: various items of interest- hats, eggbeaters, etc.

The team will perform a rotating improv using the items laid out on the table.

Members take turns using one or more articles from the table to create an improvisational play or skit.



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361 - 370

Given: a box of craft items.

Team must make something that symbolizes OM and their feelings about OM.

The task is to move all 5 team members from point A to point B (20 feet) as quickly as possible. At no time may more than 3 hands or feet (or combination thereof) be in contact with the floor. All members must be moved at the same time. If more than 3 hands or feet touch the floor, the entire team must return to the starting line and begin again.

Given: 10 popsicle sticks, 5 toothpicks, 2 straws, 5 mailing labels, 2S marshmallows.

You have 5 minutes to build a structure supporting a Styrofoam cup into which you will put pennies.

Scoring- 3 points for each inch of height, 1 point for each penny held.

Given: a perceptual puzzle of 12 pieces.

Match each edge with the appropriate piece to make a square.

a	b	b	c	a	a
d b	d a	d c	d b	b c	b d
c	c	a	a	d	c
b	c	b	a	d	a
c a	b d	a d	a d	b c	b d
d	a	c	b	a	c

Given: 5 straws, 3 paper clips, rubber band, paper, small plastic container,

25 wine bottle corks.

Build a structure that holds as many corks as possible. The score for each cork

is it's height in inches above the surface.

Total Score: sum all cork scores.



CPS Practice Exercises

Given: 9 whole pencils.

See how many equal triangles you can form.

Given: 20 marshmallows, 50 toothpicks.

Build the tallest structure possible in 5 minutes.

Given: clear lidded container full of pre-counted dry beans, two small paper cups, one plastic cup, one ruler, one piece of paper, one pencil.

The team will have three minutes to solve this problem.

The solution may be discussed with teammates at any time, however, questions to the judge will be answered only in the first minute. **The problem is to count or estimate**

the beans in the jar. Up to 10 extra points will be awarded for teamwork

and the creativity of the solution

Given: 20 toothpicks, 1 foot long piece of masking tape, 1/4 can of Play-dough,

1 piece of paper, 4 straws, 4 paper clips, 1 roll of pennies.

You must build a structure at least 10 inches tall. You must use a team created

container that sits on top of the structure. It must hold weight in pennies.

The more pennies, the more points.

Given: 1 straw, 1 ft. string, 1 mailing label, 1 paper clip, tennis balls,

1 rubber band, 1 toothpick, 1 ballpoint pen, 1 popsicle stick.

You have 2 minutes to build and test something that can catch a tennis ball thrown by a team member from a distance of 15 feet.

At the end of the planning and building time, choose one person to pitch and

one person to catch the balls that are not caught by the device constructed.

The team has an additional 2 minutes to successfully catch 3 balls.



371 - 380

Given: 50 straws, 1 block of clay.

With 2 minutes to discuss and 3 minutes to build, **construct a**

structure as high as possible using as much of the materials as possible.

There is to be no talking. Scoring- one point per complete inch, one point per straw used, negative points for each ounce of clay not used.

Given: 50 straight pins, 50 straws.

Build the tallest structure possible in 5 minutes.

Given: a bath towel, 20 pennies, 20 nickels, 20 dimes, two 8 1/2" x 11" frames Lay a towel on the floor.

Tape off an area about 5 feet from the towel.

Members are to toss the coins onto the towel.

Then, they are to put the two frames over any place on the towel. The coins inside the frame counts double.

Given: (per sub- team) newspaper, 5"x7" index card, a roll of masking tape. Divide the team in half and distribute materials. **The problem is to build a tower that will be free standing and able to support the card on top when completed.** After 5 or 10 minutes, measure to see which tower is the tallest. If it can hold the card, it is the winner.

Given: one taped-off box, 4'x4' , facing a space 6' across delineated by an 8' line (the 6' area between the line and box is the span the beans must cross) , one sheet typing paper, one 12" piece of aluminum foil, one yardstick, 3 small paper cups, one large nail, 5 tubes (Can be copper, cardboard, PVC larger than 1/2 inch in diameter), 2 buckets - one empty and one filled with dried beans, one large spoon. In part one, the team will have three minutes to think, discuss, ask questions of the judge, adjust and divide materials. At the end of the time for part one, team members and materials will move to positions in the square or behind the line. At this time, all verbal communication stops and materials may not be thrown in an airborne manner across from the line to the square. **In part two, the team will have 2 minutes to move the beans from the full bucket, which is placed behind the line, to the empty bucket, placed in the square, using only the tools provided.** The team may not touch the beans or the floor outside the square or beyond the line with hands or feet. The starting bean bucket may not be used to carry the beans



across the space. Scoring- one point for each cup of beans in the finish bucket. Up to 10 extra points at the discretion of the judge for creativity of the solution. Up to 10 extra points at the discretion of the judge for teamwork.

Given: 1 cup of shaving or whipped cream, 3 mailing labels, 2 pieces of paper, 2 safety pins, 30 toothpick, 2 straws, Not to be used in structure container, M&M's, dice, 12" ruler. This is a 2-part problem. In part one you have 6 minutes to **design and construct a structure** with the materials provided. The structure must be more than 4 inches high. At the end of part one, the judge will give you 10 points if the tallest part of the structure is above 4 inches. For every inch above 4 inches you will receive 5 points. In part two you will **place a plastic container on your structure. In sequence you will roll a die. Whatever number comes up is the number of M&M's that you put on the container. These must be put in all at once.** If a 3 were rolled, 3 candies would be put in the container all at the same time - not one at a time. This process will go on until the structure collapses. Each M&M is worth 3 points. Only those that were supported by the structure count (If a 6 was rolled, 6 candies were put in the container, and the structure collapsed, those last 6 M&M's do not count.) If you fill your container with one or more M&M's, you receive a 10 point bonus. You will also be scored on how well our team works together (1-10 pts.)

Given: a 12" long piece of aluminum foil for each member of the team. Team members are given 5 minutes to create something out of the foil. Creations are scored for creativity on a scale of 1 to 10. (Teams who watch each other and create objects based on a theme should be scored higher.) The team is divided into 2 groups, 2 signalers and the rest are builders. The object is to **develop a signaling system not using sound, but using other body language.** Two lines are placed 6 ft. apart. The signalers must stay behind the lines. There are cards with sentences on them . The cards are about the size of a CD. The signalers will know that the only good cards are those that the first word starts with the letters A - M. Starting at the lines, the builders put down the cards to make a trail connecting the lines. There is a small object midway between the lines that the trail must go around both ways. And to add one more part on each side of the object, the cards must be turned 45 degrees relative to the direction of the trail. Of course, only the signalers know about the trail having to go on both sides of the object and having to turn the cards 45 degrees. Points are given for meeting all 3 criteria and completing the trail in the fastest time.

Given: 2 large books, a balloon, a miniature set of pliers, two pieces of notebook paper. The books are heavy and placed about 2 inches apart. The object is to separate the books, without touching them, at least 5 inches.

Given: 5 pipe cleaners, 4 pieces of masking tape, 1 page newspaper, 2 paper clips and 4 minutes. Build a ranch. In the following 2 minutes, each team member must describe it.





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381 - 390

Given: envelope containing: an egg, newspaper, balloon, paper clip, plastic bag, 10 ft. string, name tags, ladle.

An area is marked off 10 ft. x 3 ft. A box is place on the line marked B. No one may stand in the marked off area. With 5 minutes to think and discuss, **find a way to deliver each of the items in the envelop and the envelope from line A to the box without each item leaving the boxed in area as it crosses.** Points will only be given if each item is at rest in the box. Scoring- 10 points for the following: egg, newspaper, balloon, paper clip; 5 points for the following: plastic bag, string; 2 points for each nametag; 1 point for the ladle and 1 point for the envelope.

Given: 50 toothpicks, 4 plastic straws, 1 piece of clay, 1 ping pong ball, scissors- the scissors may not be use as part of your structure. **You have 6 minutes to think, plan your strategy, and complete the problem.** You may ask questions or talk to each other at any time. Questions count towards your time. **Your problem is to build a structure using only the given materials.**

The structure must have the ping pong ball inside of it and the ball may not touch the base. The structure will support a plastic container on its top that will be able to hold nails. Your structure will be scored on its height, ping pong ball presence and the number of nails it supports. You must place the nails in the container one at a time without removing them. Nails must be supported for 3 seconds to count for scoring. You will be finished when your structure breaks or when the time is up. For each 4" height increment your structure reaches, your score will be increased. Your structure will be measured before you put the container on it. Scoring- if your structure stands at least 4" high and successfully supports the container, you will receive 10 points. The total number of nails held will be multiplied by the total number of 4" height increments. If your structure is 4" tall and holds 10 nails then 4" =1 increment and 1x10=10 points. Increments must be a full 4" to be counted.

Given: (to be used by signaler behind screen:) keys, bell, can filled with dry beans, spoon plastic cup (to be used by builders:) construction paper cut outs of triangles, circles and squares. There should be a total of two shapes of each color - red, yellow and blue. With four minutes to practice and develop signals and three minutes to actually complete the problem, **reproduce a construction paper pattern** 2 signalers- behind a screen telling shape and color using materials given. 1 Signaler- seen telling location with nonverbal signals. 2 builders- only handle shapes.



CPS Practice Exercises

scoring- 25 points for each area correctly constructed.
1 - 10 for teamwork 1-10 for creative signals.
25 point bonus for getting all 3 areas correct.

Given: a paper bag filled with the following: 1 egg, 1 safety pin, a key, a piece of paper with a phone number on it, a band-aid, a tooth brush, dental floss, nail polish, handcuffs, a jelly bean, a ring, toothpicks, a tissue, a whistle, a spool of thread, a stick man, a peanut. Your problem is **to pass the bag around the table and pull out an item. As you pull the item out, you have to tell a portion of a story concerning the item.** The story must be connected from to member to team member. However, the story must be told from the end to beginning. Your problem begins with, "They lived happily ever after."

Given: straw, 12" string, envelope, mailing label, toothpick, hanger, yardstick, ruler, goofballs. Set up empty and full pop cans at random within an eight foot square. Surround each one with Styrofoam cups. **Two members will knock over the cans without moving the cups using golf balls and standing in two fixed locations. The three other members can walk around and use given items to help the golf ball users, but they may not guide the golf balls. Scoring- knockdowns are worth 3 points each, and standing Styrofoam cups are worth 2 points each.**

Build the tallest structure you can using 14 grapes.

Given: a piece of poster board designed as shown below, a piece of large construction paper for every other team member. The number inside each square equals the point value. **With the paper given, see how many squares you can completely cover (without going over the edges) in 2 minutes. You may tear or fold the paper.**

Given: bowl of Cheerios, string 18" long, spoon, fork, pieces of masking tape - 1 " x 6" , sheet of typing paper, large paper clip, large-eyed needle, toothpicks. You will have one minute to think and three minutes to complete the task. There will be no talking at any time, but hand and/or body gestures will be allowed. **The problem is to assemble a Cheerio garland by attaching Cheerios to the string. The garland must be able to be picked up and held by the judges after completion without**



CPS Practice Exercises

the Cheerios falling off. The Cheerios must not be touched directly by team members hands but may be handled by any of the materials supplied. Scoring - One point will be scored for each Cheerio remaining on the string after the judge picks up and holds garland vertically. 5 - 25 points could be awarded for a creative approach and/or creative teamwork.

Given: 20 paper clips, 5 chopsticks.

Connect all 20 paper clips together in a chain. Give each team member one chopstick. **The team must undo as many paper clips as possible in seven minutes.** They may talk, but they may not give each other their chopsticks.

Given: paper, markers, crayons, etc.

In three minutes, **create a new state. Name it, design a symbol, a flag, a song (to be sung to the judges) and a tree.**

Given: a comb, a package of tissue, a key, a yard of string, a credit card.

Imagine you are stranded on a desert island. **Construct an alarm system using the items in your pocket (listed above).**



391 - 400

Given: 10 toothpicks, 1 coffee filter, 1 12" piece of string, 1 12" piece of tape, 1 drinking straw, scissors.
With the materials provided, **the team must construct something and explain it.** The completed object must fit into a cough drop tin. Scissors are only used to solve the problem, and may not be used as part of the completed solution. The team has one minute to think and discuss, and four minutes to construct the object and place it in the box. There is to be no talking in the last four minutes.

Given: Each team member gets approximately one quarter of a cup of clay.
They have two minutes to **make anything about which they may tell a story.** The first member starts their story and the second member adds to it using his or her clay creation as a prop. The team has two minutes to tell the story. No talking is allowed during the two minute creation time. Scoring - overall story 1-25, individual creations 1-10, individual response 1 point for common, 5 points for creative.

Given: an envelope, 6" of masking tape, rubber band, a straw, a label, a piece of typing paper.
Attach a glass Christmas ornament to the wall 6" from the floor. Attach a string to the wall 6' above the bulb. Attach a weight to the string. Place the weight on a 4"x4" post which is 4' from the wall so that when it is released, the weight will hit the ball. **Team members must use items to protect the bulb from breaking.** Points will be given for teamwork and for achieving the goal.

Given: envelope, ping pong ball, gym shoe, small empty paper bag, 2 straws, tennis ball, roll of masking tape.
In five minutes, the team must **construct a sculpture using every item, connected with masking tape. They must then tell the name of the sculpture and what it represents.** The score will be based on creativity and teamwork.

Given: paper bag, chair, broom, straws, paper, string, sticky labels, yardstick, 2"x 2" piece of tape, marker, scissors.
Set up a 20" x 10" rectangle as the starting point. Five feet



CPS Practice Exercises

away, set up another rectangle the same size along with the items listed above. **The object of the problem is to move an egg from the starting rectangle to the ending rectangle. During the trip, the egg must move up, down and make a change in appearance before entering the ending rectangle. The team must also explain what their system is and why the change has occurred.** There will be 7 minutes to build, 2 minutes to execute, and 2 minutes to explain.

Given: a piece of poster board, markers, a chain, a cotton ball, 2 Kleenex, a pen, a blender blade, a tupperware lid, a glove, a newspaper ad. Using the materials provided, **create a treasure map leading to the most important part of life.**

Given: 10 playing cards, 10 paper clips, 4 quarters, 4 dimes, 4 nickels, 4 pennies.
Build a structure that will support the coins using the available materials.
Scoring- monetary value of coins times their height in inches above the building surface.

Given: 6-4"x6" pieces of paper, a penny.
Members are to **build the tallest structure possible to support the penny.**

Given: gum drops, toothpicks.
Build a structure and describe each others creations.

Shape a piece of Play-dough into a "voodoo" doll, and each team member must predict the future of another member's doll.

Given: a shoe box containing the following: Bic pen with Cap, 3 empty Pepsi cans, tennis ball, 12 inch piece of yarn, 6 inch length of masking tape, empty paper towel tube, 2 Band-Aids still in the wrappers, a blindfold. The problem is for the team to create and use a nonverbal communication system to complete the following tasks in the sequence listed.
1. A blindfolded team member must remove all the contents of the box and place them on the table.
2. Take the box to team member located at point X
3. Return to the table, get Band-Aids and put them on team member located at point Y.



CPS Practice Exercises

4. Return to the table, roll the tennis ball to team member located at point Z
(this person must stay in position)
5. Take all remaining objects to point X and place them in the shoe box.
The team has 3 minutes to plan and 4 minutes to perform their solution.



401 - 410

Given: 2 pencils, 6 oz clay (3-2 Oz. balls), 10 straws, 3-8.2"x11" sheets of tagboard, 20 pieces of dry macaroni, 12 inches of masking tape, 2 Styrofoam cups, 4 large marshmallows, 5 toothpicks, 1 golf ball. This is a two part problem. Part one: the team is given 2 minutes to think and 5 minutes to complete the problem. **They are to build a structure with the materials given. Each team member will be given a card numbered 1-5. They will roll a die and whatever number comes up, that person will add one piece of material to the structure.** Scoring- 1 point for each material left on the structure at the end of 5 minutes. 10 points if the structure holds the golf ball. 1-10 points for team work. 1-15 points for the creativity of the structure. 25 points if the structure never falls during the 5 minutes. **In part two, the team will be given one minute to respond in turn with a description of what their structure is.** scoring- 1 point for common responses and 5 points for creative responses.

Given: scissors, 1 sheet of typing paper, clay, tape, 2 pencils, rubber band. You have one minute to think and three minutes to respond. You may talk at any time. With the materials provided, **you must build a catapult within a one foot square. At the end of three minutes, you must place a target where you want. You must then launch a ping pong ball by moving only one thing in one direction. The closer you come to the target, the more points you get.**

Given: pieces of gingerbread, tubes and cans of icing, sprinkles, etc., M&M's, mint marshmallows, gumdrops, plastic knives, toothpicks. The team has 30 minutes to **create a gingerbread house that stands up. They then have time to tell a story about the house.**

Given: 1 bag of coconut, 1 serving tray. You will have one minute to think and experiment and three minutes to respond. Your problem is to **shape the coconut and say what the shape represents.** Team members may give a different response to the same shape, or reshape it and give a different response, however, a team member may not respond to his or her own shape.



CPS Practice Exercises

Given: chalk, eraser, paper wad, pencil, scissors, paper clip, Uno deck- numbered 1-6

Number each item. Each person, in turn, draws two cards, then must **create an imaginary sentence linking the two selected objects.**

Given: yard stick, 2-6 in. pieces of yarn, 4 paper clips, 1 sheet of typing paper, 2 rubber bands.

Your task is to **move a cup of water across a 6 ft. by 10 ft. area without spilling any water.**

You have 6 minutes to design and build a structure that will carry the cup across the area

Then you have 2 minutes to carry it across. You may not step in the taped off area

Given: air filled balloons which fill up a container, 1 inch paper strips, ruler, tape

You must move paper strips to the container holding the balloons.

You may not pop any balloons. May not touch balloons.

Scoring- 3 points for each 1 in strip of paper at bottom of the container.

Minus 5 points for each popped balloon

Given: 5 straws 20 toothpick, 2 sticky labels, 3 sheets of pair.

Design a tower that is at least a foot tall, and can hold a Coffee can plus nails.

Scoring- points given for each inch over one foot.

25 points for the can. 5 points for each nail.

Given: Rummikub tiles- 4 different tiles of each color, pencil, paper.

Using the first letter of the number's name on the tile, make as many words as you can.

The team must decide on three colors they want to use and eliminate one color

before they start the word list.

Given: rubber bands, pencil, Easter grass, string, pin, tissues, plastic grocery bag, a raw egg.



CPS Practice Exercises

Using the materials provided, **construct a covering for a raw egg that will prevent the egg from breaking when dropped from a step ladder. Drop the egg!**



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411 - 420

Given: ping pong ball, 1" PVC pipe 7' long, straw, wheaties, rubber band, envelope, 6" string, paperclip.
Use materials provided **to rescue the ping pong ball from the pipe.**

Given: one 12"x1 2" piece of aluminum foil.
You have one minute to make something out of the foil. **Pass the object to your left one person. You must now respond about the object you now have.**
This passing and responding shall go on for two minutes.

Given: a glass of water, and empty glass, a straw, a spoon
Now **move the water from one glass to the other in as many different ways,**
in three minutes, as you can think of.

Given: various types of hats, various colors of lipstick, powder, foundation, eye shadow, eye liners and makeup pencils, 2 stick of chewing gum.
Create 3 original characters using 3 team members.
Each team member must, in turn, comment on each character.

Given: an envelope, 3" of scotch tape, 5 rubber bands.
Make the longest bridge possible.

Given: (materials) quarters, dimes, nickels, pennies, 6 different colors
of construction paper (communication items) pencil, ruler, sheet of typing paper, tin can,
2 marbles, spoon, paper lunch bag.
Devise a nonverbal communication system in which 2 communicators instruct 3 workers how many of each coin is to be paced on a given color paper. You have 5 minutes to think and practice and three minutes to perform. Scoring - score is the value of the coins placed.
100 point bonus if the problem is completed. 2 point bonus for each unused second under the 3 minute limit.
Penalties- twice the coin;s value for coins over the maximum allowed on a given color.



CPS Practice Exercises

25 point penalty for a coin not completely on a paper. 100 point penalty for each time talking occurs during the 3 minute work period.

Maximum Coins Per Paper

	Red	Yellow	Orange	Green	Blue	White
Quarter	3	5	2	7	3	1
Dime	12	2	3	9	2	1
Nickel	4	13	6	4	6	4
Penny	7	4	8	6	2	2

Given: 25 M & M's

You will have 2 minutes to think, plan and **create a shape out of the M & M's.**

The second part of the problem is verbal; at the end of the 2 minutes of creating, **you will take turns identifying, describing, or explaining your shape.**

Given: 2 sheets of typing paper, 10 paper clips, a pair of scissors, 2 pieces of 1 " masking tape.

The team will **build a structure that portrays the theme of a memorial monument to a person (famous) or their choice.**

Given: a paper plate and a pair of scissors for each member of the team. Members have 2 minutes to create something. Then they are to respond to the judges by telling what it is. Score 1-10 points for creativity. Each members have 5 cards numbered 1-5. Each is to respond when it is their turn (each has a number in front of them) to someone else's creation, as they cash in that coinciding number (3 minutes)

Create and construct a skit out of notebook paper

Given: 10 white balls, 10 yellow balls, 2 balloons, 3 3" x 5" cards, 3 toothpicks, 2 straws, 2 rubber bands, 2 mailing labels, 6" piece of string.

The team is to **get as many balls into the plastic cups without knocking down the foam cups within the three minute completion period as possible.** Team members are to roll balls from behind the file line (set 10 feet away from cups) towards the cups. The six plastic cups are lying on their sides, and their bases are placed against a wall and spaced 12" apart. Seven Styrofoam cups are spaced midway between each plastic cup and on the two ends. Foam cups are



CPS Practice Exercises

placed upright on their bases and set 12" in front of the open end of the plastic cups. The plastic cups are taped in place; the foam cups are not taped in place. Foam cups cannot be reset if knocked over, and plastic cups may not be relocated or moved in any way. While balls are rolling past the foul line, no team member shall be between the wall and the foul line. When no ball is rolling, the team may be in the area between the foul line and the cups to retrieve balls to be rolled again. Materials provided may be in any area and can be moved or adjusted at any time. The team is allowed in the area. The team cannot use the material to push, pick up, or place a ball into the plastic cups. The team will have a 2 minute practice period when the team may place material, practice, and talk. Balls will be counted for score only once at the end of the 3 minute competition period. During the competition period, the team may not talk. Scoring- 10 points for each yellow ball in the plastic cups at the end of the time period. 5 points for each white ball in the plastic cups at the end of the time period. Minus 10 points for each time a cup is touched or a ball is directed past the foul line. Minus 5 points for each ball still rolling and a team member is beyond the foul line. Minus 10 points for each time a team member talks during the competition period.



421 - 430

A skunk smells, name other things that smell

Name jobs that work with the body.

You've just discovered a new planet - tell what color it is and why

Give the name of a street and who lives there.

Name things or persons that are powerful.

You will be given a three letter key word. You are to think of as many three word phrases as possible using each letter, in order, of the key word.

You must use words that start with each letter of the key word and they must

be in the same order of the correct spelling of the key word.

ex: If the key word is "OAR", an acceptable phrase would be "omers Are Ready".

Name cartoon characters, and with whom they were associated.

ex: Mickie Mouse and Minnie Mouse

Name animals that you would rather not meet in the woods and why.

Common- A bear, because he might eat you.

Creative - A Myna bird who might imitate you.

Name everything you would find in the Principal's office.

Make up book titles that relate to a vacation a family might take together.



431 - 440

Name jobs people have, and why you would like to have that job-or why not.

State what an antibiotic would do, say, or think after entering the human body.

Name something inside of something that is also inside of something.
ex: Eggs are inside a carton and the carton is inside a refrigerator.

Name forms of transportation

You have one hour to live - what would you do?

What would you do with all the world's garbage?

Name who put the mustache on the Mona Lisa and why?

What would an alien buy at a grocery store?

The team is given 7 letters - A,E,C,M,J,L,and H. The team is to make as many words as they can out of these letters, using at least three letters per word. A combination of letters that do not make a real word can be used, if the person puts it in a recognizable phrase.
ex: Mary had a little LAM.

If you were a jelly bean what color or flavor would you be and why?



441 - 450

Each person is blindfolded. When time begins the team attempts to count from 1 - 20 without two or more members talking at the same time. If more than one person says any number, the team has to start at number 1 again.

(3 minutes total - no think time)

Who would you invite to dinner and what would you serve

Give a piece of advice.

ex: *Chew before you swallow.*

You are a bird walking down the street and you notice in a window that all of your feathers are gone, what would you say?

ex: *Somebody get me some sunscreen before I become fried chicken.*

Name things that you could be marooned on and how you could get off.

If _____ was _____ , I'd _____.

Name different kinds of "gones."

ex: *Gone with the Wind or Pentagon.* .

Name as many things as possible that would happen if there was no sun.

Create a stack of cards with words and free choices on them.

Verbally tell a story using the cards dealt to you.

Name things that tell time.



451 - 460

Name things that are general or have the word "general" in them.

Name things that are Bills or have the word bill in them.

Choose miscellaneous objects and create a story as the items are passed around.

Name as many bells as you can.
ex. For Whom the Bell Tolls

Name ways you can use an empty gum wrapper.

Name things you would like to find in the pocket of a coat.

Name or create a super hero and tell what their super power is.

Name things that go CRUNCH!

What do you imagine when you bite into a York peppermint patty?

Before you is a magical sponge. It will soak up anything you want. What will it soak up?



461 - 470

What can you do with a pop can?

Name things you can shake and why you shake them.

Think of all the states containing the letter A.

Given a necklace chain, think of all it could be used for.

You are stranded alone on a deserted island, 15 miles from the main land. All you have with you is an orange peel, a canteen of water, and the sail from your wrecked boat. How can you use these items to be rescued?

Name things that drive DI coaches crazy.

Each team member takes a turn selecting a word from the dictionary that is unknown to the whole team. Everyone writes a fictitious definition for the word except the team member who chose the word. He/she writes the correct definition. All definitions are read aloud and voted on.
(This encourages verbal creativity!)

An astronaut takes off from earth. A problem develops in the space craft. There is time left only to say three words to the base control before losing audio contact. What three word messages do you think the astronaut might send?

It's not a crack in the wall, it's.....

"Alphabet Soup"

The team will name foods in alphabetical order starting with "apple". Each team member takes a turn and continues through the alphabet. A letter may be skipped but the food must stay in ABC order. When through the alphabet, start over with, "A". One point for each answer. No creative answers. No points if not in ABC order. For example, If a team member says 'beets' after 'carrots' they do not get a point.



471 - 480

I'm a _____ and I _____.

This is a round robin with 2 minutes think time and 3 mins answer time.
Have snap, crack and crunch written on 3 index cards. Number
snap card 1 and 2: crackle 3 and 4 and crunch 5 and 6. Roll a die
and when 1 or 2 appears on the die respond to things that snap.
If 3 or 4 appears, respond to crackle and when 5 or 6 appears
respond to things that go crunch.

_____ follows _____ to _____.

"In The News Tonight"

Team members will begin with, "In the News Tonight" and begin a
news story. Each team member will add to the story.
You may begin by saying, "In the News Tonight", but that
sentence will not receive points.

Name reasons there are no "B'" size batteries

If you woke up as Superman, what would you do?

List ways to get out of doing your chores at home.

Name excuses for missing school or not doing homework.
ex: *The dog ate my homework*

You're on your way into spontaneous, you look at your
team mates and say _____ .

If cows could fly what would pigs do?



481 - 490

Name things that push things and what they push.
Use flip cards and only go through the deck once.

Given a piece of string 15" long with 5 or 6 small plastic rings tied to it -name what it might be.

Name things that fold.

Each person rolls a die to determine which "blob" to respond to.
After rolling the die team member should say something about the picture
next to the number roll should a "6" be rolled, respond to any picture you like.

What would you say if you were a windmill?
Ex: It sure is windy up here, or is it just me?

You have found a special key. This key unlocks the door to a secret garden.
What would you find in your secret garden as you unlock the door and look inside?

Using the saying, "An apple a day keeps the Dr. away"
replace "apple" and "doctor" and create new sayings.

Name things that live under your bed.

Name things that jump.

Name things that are straight.
ex: Bering Strait, straight arrow



491 - 500

Name things that bounce.

ex: Kid on a trampoline

Give reasons why the cow might have jump over the moon.

ex: He got first place at the State OM competition Amusin' Clown Crew

Give a pair of words to complete this analogy:

A , is part Of ' whole -'

ex: Clown to a Circus

How much wood could a hacksaw hack, if a hack could hack wood?

Ten some places that you would like to run to and why.

If you had a flat tire and no spare, what could you use?

Give explanations for the "lean" in the Leaning Tower of Pisa.

Using the plastic center piece from a pizza box, state other uses besides keeping

the pizza box lid from smashing the pizza.

Use as a stopper Playground for ants

A giants false tooth

It is now the year 2025. Utility companies are now able to deliver their

service to residences without the use of wires or cables.

We now have a surplus of wire. Name uses for this surplus wire.

Name different voices and where they are heard



501 - 510

Tell a story to a deck of cards.

ex: The King of Hearts married the Queen of Clubs and had 9 children

What would you say if you were a wagon wheel on a wagon on the Oregon Trail

If you were stuck on the top of the statue of liberty how would you get down?

We've all heard it said that money does not grow on trees, though most of us wish it did.

If you could have any type of tree in your backyard what would it be and why?

How do you spell OM?

ex: happy face 777

Use the word "time" in creative ways.

Name all the ways you can use the word "IT".

Name things that are inside of something, that is inside of something else.

ex: Foot inside of a sock inside of a shoe

List things that have a coat.

Name things that produce sound and what causes them to produce it.



511 - 520

Given: 2 yard sticks, a large paper clip, 6" of tape, 8 1/2 X 11 piece of paper, three marbles and a 2" x 2" block of clay.

Team members may not carry the marbles in any way between the tables. You will be given 2 minutes to discuss and 5 minutes to perform the task.

You may not talk during the 5 minutes you are performing the task.

Your problem is to move 3 marbles from one table to another (both the same height and 2 feet apart) without touching marbles with your hands.

Given: Crayons, markers etc. and paper.

Each team member is given one piece of paper and crayons or markers.

Each team member is to come up with an original creature and tell its name,

what it eats and where it lives.

Given: Cake pan half filled with water, 6 marshmallows, 16 toothpicks, a 5 X 7 index card, a pencil, a Dixie cup, a comb and pennies.

Make a structure that floats and can hold as many pennies as possible without tipping or sinking.

Given: An "X" on a chalk board.

Without using your hands, erase the "X" from the chalk board with an eraser using a body part. You may pick up the eraser no more than one time.

Everyone must take a turn.

Given: 50 toothpicks, 1 package of 5 sticks Wrigley's chewing gum and 1 paper cup.

Using the materials on the table, you have 5 minutes to build the best house that you can that will support the paper cut and the weights.

You will receive points for the following: 2 pts. for each inch in height of house,

3pts. for every penny in cup, 10pts. for creativity of house design,

10pts. for team work.

Given: Scissors, 12'' tape, 50 straws, clay (2 x 2), ruler, playing cards.

There is a stack of cards before you. Each member will choose one card.



CPS Practice Exercises

The team will look at all five cards and choose one card to use.

The team will then use the clay given to make a model of the card.

The model should be the height shown on the card.

You will be given a ruler for measuring.

You can receive 20 points for how close you are to the model on the card.

You can receive 10 points for teamwork.

Given: Big Mac box, 6 straws, tuna fish can and a pack of chewing gum.

Using box & pack of chewing gum, build a structure to support a tuna fish can

Given: 3 pieces of construction paper, 3 mailing labels, 5 paper clips, 3 rubber bands, 10 building blocks and one spoon.

You are going to build a basket that will hold and carry 10 blocks.

You will need to pull with your hands for one minute without touching it.

While you pull it, it must stay together with the blocks in it.

You have 5 minutes to discuss and build, then one minute to pull

Given: 2 mailing labels, 2 clothes pins, 12" of string, 1 marble, 1 ping-pong ball,

1 8 1/2 x 11 piece of paper, 2 paper clips, 1 teaspoon, 1 Styrofoam cup and 1 mouse trap.

Take the materials given and construct a device/mechanism that will produce a chain reaction.

You have 8 minutes to think and to construct your device/mechanism and 2 additional minutes

to cause your chain reaction to occur. During the 2 minute period you may not touch your device

other than to initiate the first reaction.

You will receive 10 points for every different reaction caused.

You will also receive an additional score of 1-15 points for the creativity of your device

and 1 - 10 points for teamwork.

Given: Table with 6" x 6" square of 1" wide tape, 4 sheets of paper, 1 sheet

of gummed labels, golf ball, ruler and scissors.

The tape represents a bottomless pit into which no supports may be placed.

Your task is to support a golf ball as high as possible over the middle of the pit.



CPS Practice Exercises

No points awarded if structure touches table outside the square created by the tape.



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521 - 530

"A,B,C Nature Scavenger Hunt"

Send all team members outside. Split them into two groups.

Give both teams 30 minutes to collect items, one for each letter of the alphabet. Score 3 points for the creative items and one point for common items.

Given: 3 mailing labels, 4 rubber bands, a 1 " cube of clay, 4 drinking straws,
100 pieces uncooked spaghetti, 2- 3" x 3" pieces of cardboard, 8 penny nails, a ruler and
12" of string. **The problem is to build 2 structures at least 6" tall, each one**

supporting one of the 3" x 3" cardboard pieces. These two towers must then span a distance

of at least 10". Eight minutes are allotted to build this bridge.

After the 8 minutes expire, 8 penny nails are added to the span until the span

or one of the towers collapses.

Scoring: 40 points for 2 towers 6" tall

5 bonus points for every 2" the towers exceed 6"

10 points if the span between the towers is at least 10"

5 bonus points for each additional 2" in the span

1 point for every nail the span supports

1/2 bonus point for every nail if the towers are 8"

1 bonus point for every nail if the towers are 10"

1/2 bonus point for every nail if the span is 12"

1 bonus point for every nail if the span is 14"

Given; 20 Legos and one plastic sandwich bag.

Your team has 7 minutes to **put all the Legos into the sandwich bag without using your arms or legs.**

Given: 4 straws, one sheet of paper, 5 paper clips, a piece of tape, scissors,

5 rubber bands, a stack of books and one small building block. The team is to

design a ramp support by a stack of books that a small building block will slide down. You may not use your hands to make the block slide.

Given: One blank sheet of paper and magic markers.



CPS Practice Exercises

Design a greeting card and write a verse for a new holiday.
Time limit is 10 minutes.

Given: One piece of paper and a crayon, pencil or marker.

A team member starts a picture in the first 10 seconds of time.
Team members will consecutively draw for 10 seconds at a time adding to the previous team members' picture. No thinking time. Time limit is 4 minutes.

Given: 2 straws, masking tape, one ping pong ball, 1 piece paper, 1 paper plate,

1 blow dryer, Styrofoam cup with no bottom, toilet paper tube, paper towel tube, shoe box

with no ends and a shoe box with ends.

Tape off a 4 ft. by 10 ft. area. Tape the Styrofoam cup, toilet paper tube, paper towel tube,

and both shoe boxes inside the 4 x 10 area. **The object is to create a way to move a ping pong ball using the other materials given through a series of tunnels**

and into the last shoe box placed at a corner without ever touching the ping pong ball

or crossing the taped off rectangle. You have 3 minutes think time and two minutes solve time. No talking is allowed during the solve time.

Choose five team members and give them 5 minutes to discuss their favorite foods

(breakfast, lunch, dinner, snack or etc.). The team member must then **form their favorite food using themselves while sharing what they are with the team**

Given: One cork, 100 toothpicks, a 12" piece of duct tape, 4 pieces of 2" x 2" foam board,

6 rubber bands, one piece of construction paper and an egg carton.

Use these materials to recreate a famous piece of art work.

Given: One egg carton, a key and a magic marker or labels.

Label the 12 holding cups in an egg carton with the marker into 12 categories

(holidays, circus, school, movies, cities, animals, songs, etc.)



CPS Practice Exercises

Team members take turns tossing a key from 2 feet away into the egg carton.

Whichever holding cup the key lands in determines the category that must be used to

answer the question "What does this key open?"

ex: Movies - Key opens popcorn machine; opens entertainment, opens laughter, opens tears, opens surprise.



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531 - 540

Given: One empty toilet paper tube, 4 tissues and one rubber band.

Build a ghost.

Given: A yardstick, a plastic tub, a 4" x 4" block of wood, 10 rubber bands,

a 12" piece of tape, a 12" piece of string, a basketball hoop and a basketball.

Using the materials given, **create a device to shoot the ball into the hoop**

without using your hands.

Given: Five paper clips, 5 straws, 20 wooden sticks, 2-10" pieces of tape, 6 rubber bands, a paper cup, pennies and a bowl of water large enough to float

your structure. **Build a raft that will float.**

It then must hold the paper cup while putting pennies in as weights.

Each weight

is worth 10 points. The problem is finished if the raft falls apart or could not float.

You have 2 minutes to think and 3 minutes to build and hold weight on your structure.

Given: Masking tape, 5 cardboard circles each marked with one of these numbers - 1, 3, 5, -2 and 0, and a blindfold.

Inside a 10 x 20 foot area are place numbered cardboard circles.

Blindfold one team member. The remaining team members will use non-verbal

directions to give the blindfolded member directions. The blindfolded member will

attempt to pick up cards for their score. The judge will provide

the team with 2 blocks of wood, an empty soda can, 2 small rocks and a ruler.

Given: Rolling pin, 12" craft wire, 2 Styrofoam cups, 3 paper plates, 4 mailing labels,



CPS Practice Exercises

20" string, 1 ball clay, 24" masking tape, 2 pencils, 4 marbles, 4 pieces typing paper,
2 ping pong balls, 2 empty soda cans, 2 full soda cans, 1 metal or wood spoon, 1 brick,
2 - 2 x 4's (3 feet long), bungee cord, 6 paper clips, scissors, 4 rubber bands, one empty thread spool and one egg.

You will have a 9 x 12 foot area covered with a plastic tarp in which to work.

A small table will be placed on the tarp within this area. **Your problem is**

to design and build a five-step chain reaction which, after the 5th step, breaks an egg.

Each step in the process must initiate the next step. The table may be used along with the materials provided. Note: the table, tarp and scissors may not be altered.

Scoring: Each step will receive 3 points for a common movement or task and 5 points

if it is creative. If the chain reaction succeeds in breaking the egg, 5 points will be scored.

If the egg cracks but does not break, 3 points are scored. Once the chain reaction has been set in motion, team members may not touch or adjust it with their hands.

Additional points may be earned for each additional step designed into the reaction

beyond the 5 required. Team members have 10 minutes to build and test your solution.

Given: Obstacle course and blindfold.

Set up an course using your choice of obstacles. Blindfold one team member.

The other team members must **devise a means of communication with the blindfolded team member. The blindfolded team member must navigate the obstacle course without the use of verbal communication.**

Given: Newsprint paper, markers, scissors and glue sticks.

"Treasure Pleasure" **Create a map to a self-named island where a treasure chest is waiting.** This is a nonverbal problem.

Given: One square foot of aluminum foil, one ball of yarn, 2 feet of tape,

2 crayons, 2 sheets of paper.



CPS Practice Exercises

Create a children's toy out of the materials given. It must have at least one fully functional feature.

Given: A ball of clay, five blindfolds.

"Shape it Up" Blindfold all five team members. **A ball of clay will be passed from one team member to another. Each team member must contribute**

some shaping to the clay to result in a finished product. Points are awarded on how well the clay resembles something. You have 2 minutes to discuss and test your solution. You have 4 minutes to solve the problem while blindfolded.

You may not speak to each other during the 4 minutes.

"Statues" **Team members stand in a circle and one at a time take turns posing. The team member to the right must describe who or what the posed member is.**



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541 - 550

Given: One soda can, 5 dried beans, a belt, one piece tin foil, a ruler, one piece paper and a pencil. Blindfold 2 team members. **The remaining team members must direct the 2 blindfolded team members to place**

colored ping-pong balls into numbered cans. You may use only the materials given to direct the team members and you may not talk. You will be given instructions as to which color balls go into which cans after your 3 minutes practice time.

You will have 5 minutes to perform your problem. You will receive 10 points for every ball in the correct can, and 5 points taken off for every ball in the incorrect can.

<u>Practice</u>	<u>Real</u>
White balls- can #1	Red balls - can #1
Black balls - can #2	Blue balls - can #2
Blue balls - can #3	White balls - can #3
Red balls - can #4	Purple balls -can #4
Purple balls - can #5	Black balls - can #5

Coach/Judge's note: Use about 10 balls of each color. Place the balls in piles according to color, and cans in numerical order. Give team practice instructions for the first 3 minutes and the real instructions for the 5 minute time period.

Given: Five straws, one sheet paper, one plastic fork, one soda can and 2 mailing labels **Make a device to propel a rubber band to a target 3 feet away.**

Given: An eraser, juice box, paper plate, 3 straws, 1 oz. of Playdough, one pencil
Line up 6 empty pop cans in this formation:



From 4 feet away, knock over the cans using only the materials provided. No body parts may be used.



CPS Practice Exercises

Given: Two pans, 2 small paper plates, a few sheets of paper, 2 straws, a rubber band, scissors and tape.

Your mission is to build a catapult that will throw 3" x 3" pieces of paper that are crumpled up. You have 10 minutes to plan, (you may talk and look through the materials given) and five minutes to build and test.

Scoring: -25 points if catapult fails, 2 points per every inch the paper moves. Maximum 15 points for creativity and aesthetics.

Given: Two paper plates, 20 toothpicks, 5 drinking straws, 2 plastic forks,

10 paper clips, marbles, 1 foot masking tape and poster clay.

"Flying Saucer" - nonverbal. The problem is to **suspend or elevate a paper plate above a table and put marbles on the plate without having them fall off.**

You will have 3 minutes think time when the team is allowed to talk, 5 minutes

to construct and 2 minutes to put marbles on - no talking during part 2 & 3 but

other communication is allowed. Scoring: 2 points for each inch the plate is

above the table, 5 points for each marble on the plate.

Five team members are outside a room. Four members go inside and one waits outside, blindfolded. The four members inside the room remove one shoe and place it in a pile of other miscellaneous shoes in the center of the room. The judge(s) will mix up the pile of shoes. The fifth team member is then led into the room. The four team members line up in a row, sitting with their feet out in front of them, approximately 7 ft. from the pile of shoes. You are then given 3 minutes for the blindfolded member to match up the right shoe to the right person.

The blindfolded member may not touch the shoes that are still on the other four members. You are not allowed to talk during the 3 minutes, and the four seated members cannot get up and physically guide the blindfolded member. You have 2 minutes to devise a communication system and 3 minutes to carry out the task. You will be given 5 points for every shoe that is pulled out of the pile that belongs to a team member, and 5 points for every correctly matched shoe.



CPS Practice Exercises

Maximum - 40 points.

Given: Ten popsicle sticks, 3 pipe cleaners, a ball of clay, 3 clothespins and a 12" piece of tape.

Build a bridge that will extend over a 9" x 12" piece of blue paper. Using match box cars, you will receive 20 points for each car supported by the bridge. You can receive 1-10 points for team work and 1-20 points for the creativity of the bridge structure.

Given: A full set of dominos.

Create a three dimensional figure using a full set of Dominos. All Dominos must be used and like numbered sides must touch.

Given: One 1/8" x 1/8" x 10" stick of balsa wood, 2 band-aids, one paper clip and 6 glass marbles . Using only the given materials and

without touching the marbles, **get the marbles across a 2 foot square without going inside the square.** You have one minute to think and 2 minutes to solve the problem.

Given: Aluminum foil, mouse trap, 4 ft. of string, play dough, birthday candle, 8 x 12 piece of paper, 2 paper cups, 2 pie tins and a stick. Using the materials given you must **extinguish the birthday candle (you cannot blow it out).** You must use the mouse trap and candle in the solution. The candle must be 3 feet away from the mouse trap. A judge will light the candle. You have 3 minute to build and test and one minute to demonstrate.



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551 - 560

Given: 20 tootsie rolls, 6" of tape, 5 toothpicks and 20 mini marshmallows.

With these items given **make a bridge that connects 2 tables about one foot apart**. Think time is 2 minutes and building time is 5 minutes. While building, make up a song or original song and sing it during the building time using the works of materials. After time ends, judges will place tootsie rolls on the bridge, one at a time. You cannot lose points, you will get an additional 3 points for every tootsie roll held without falling. Scoring: 1 to 5 on Creativity of the song, 1 to 10 for the theme of the problem and 1 to 10 for teamwork.

Given: One bag miniature marshmallows, 1 box toothpicks, 6" masking tape, one sheet 8 1/2 x 11 paper, and an object to be used as a weight. You will have 3 minutes to plan and 5 minutes to build. You may talk only during the planning time. Your problem is to **construct a structure as tall as possible using only the materials provided**. The structure must be freestanding and support the weight for one minute. Scoring: 5 points for each cm. of height, 25 points for holding the weight for one minute.

Given: Newspapers, a brick and a roll of masking tape.
Build a free standing structure as high as possible, able to support a brick and also able to have the brick pass under it.

Given: A small empty jewelry box, a stone, a piece of string, scissors and crayons. (The scissors may not be part of the solution.) The team has 2 minutes to **create a theme and skit and one minute to present a solution**. Talking is not allowed during the presentation.

Given: 10 pieces spaghetti, 1 " square of clay, 1 paper cup, 1 - 6" x 6" piece of cardboard and a box of nails. The team has 2 minutes to plan and 6 minutes **to build a structure as tall as possible to support the cardboard and the cup**. The team



CPS Practice Exercises

then has 2 minute to load nails one at a time into the cup. Score will be one point for each inch per nail and 10 points for teamwork.
ex: 4" tall structure holding 5 nails = 20 points.

Given: Model Magic modeling compound, florists wire (either 15" lengths or on ball), 3/8" x 12" dowel rod, 4" square wooden base, lollipop sticks and scissors.

Using only the items given, **create an artist's figurine.**

The figurine must be in human form when completed and the joints must be moveable so that the form can be poseable when completed.

Restrictions: Each team member must contribute to some aspect of the solution.

Scissors are to be used for construction purposes only. Non-verbal once construction time begins.

Judging points:

Teamwork - how strong was the team's planning session; were the task divided evenly and amicably; were all aspects of the problem considered.

Judging Points:

Appearance of the finished figurine: How closely does it resemble the human form;

are the limbs in proper proportion to each other; how finely detailed it is, i.e.

hands, feet, facial features?

Does it function? Are the joints in fact movable? Does the figurine move in natural

human motion? Does it hold a pose? Is the entire structure solid?

NOTE: The team's final product was not particularly functional.

However, they learned

valuable lessons toward teamwork - watching each other in order to maintain the

proportion of the figurine, the style and techniques each one used. I found that those

with little or no artistic background quickly developed new techniques, and those with

strong artistic backgrounds held back their creative urges for the sake of continuity

of the project. The final product was used as a prop for their "Great Impressions" solution.

Given: Four 3" nails with heads, 5 labels and 100 straws.

Build a structure to hold straws. If a straw touches the table, deduct 5 points.

Score one point for each straw not touching the table.



CPS Practice Exercises

Given: One very large rubber band (suggest industrial size).
Team members are numbered one through five. When time begins,
team members "flip" the rubber band onto the floor, and say something about the shape (pictured image) the rubber band makes when it hits the floor. The team member closest to the rubber band picks it up, flips it and responds. All team member must have a turn before responding during the next round. Creative responses are valued. Should team members forget who has not participated in a given round, they are penalized five points.

With a lump of clay, **create a bust of a famous composer (without words).**

Your team must **devise a way for each team member to sit on another team member's lap, at the same time.** You may not touch anything in the room, besides the floor, with your feet. You may not touch your fellow team members with your hands during your solution of the problem. This is a nonlinguistic problem. (Team members may talk during a 3 minute discussion time, but not during the execution of their solution.)
Scoring: 1-10 points should be awarded for excessive creativity and teamwork. A successful solution may be given a bonus of 25 points.



561 - 570

Given: A 4" x 5" piece of aluminum foil, a tub of water and a pile of pennies.

Use the aluminum foil to **build a boat to hold as many pennies as possible.**

You have 5 minutes to build and test the boat and to see how many pennies the boat will hold before it sinks.

Given: Different color markers and a large sheet of paper.

Each team member is given a different color of marker. **On the large piece of paper, team members, in a circle, take turns adding onto the drawing**

of the person before them. After time stops, team members that participated can make creative comments about the teams' masterpiece.

Given: One container of Playdoh, 3 toothpicks, 1/2 straw, 2 marbles, 2 pipe

cleaners, 12 mini marshmallows and 1- 4"square of cardboard.

Build a unique animal. It must fit on the 4" card. Each team member will build onto the story of why this animal is unique. 0-10 points are awarded for the animals movement and how it relates. Give one point for a common

answer and 3 points for a creative answer. You have 4 minutes to discuss and build and 2 minutes to respond.

Given: Poster board, 5 pieces typing paper, 3 mailing labels and scissors.

Build a single structure which stretches from edge of the poster board to the other edge. You have 5 minutes to discuss and build.

The structure will be measured at the end of the 5 minutes. The team will receive 2 points for every inch of length.

You will be penalized 5 points for every inch of structure off the poster board.

Given: Ten pieces spaghetti, 2 straws, one mailing label, 1 - 8 1/2 x 1 1



CPS Practice Exercises

sheet of paper, 2 - 3" x 5" cards, 4 toothpicks, 1 - 12" piece of string, 2 cotton balls, 20 saltine crackers and 20 rigatoni pasta.

"Bridging the Gap" **Make a long span structure on a table with the materials given that will support the crackers and pasta for extra points.**

You have 5 minutes to build a structure having only two vertical supports. The structure will be measured at the end of the 5 minutes. The structure length will be measured between the furthest unsupported span of the structure as measured parallel to the table top. For each one inch of structure length between the two supports, the team will earn 3 points. For each cracker and each rigatoni supported off the table the team earns one point. Any crackers or rigatoni supported more than 2 inches off the table will each earn 2 points. A penalty of 5 points per word will be given if you talk during the problem.

Given: 25 tennis balls, 1 - 8 1/2" x 11" sheet paper, 4 rubber bands, 2 mailing labels, 1- 36" piece of string, 2 paper clips, 2 toothpicks, one balloon

and one cotton ball. **Make a structure or structures out of the 25 tennis balls and the materials given.**

The team has 5 minutes to discuss and make a free standing structure. The structure must stand for at least 15 seconds after the 5 minutes. Points will be scored after the 5 seconds of stand time. Each tennis ball supported 2" above the table is worth 5 points. Bonus points: 1-10 points for creativity and 1-10 points for team work.

Given: Four student desks, 1-12" pieces of string, 25 blown up balloons, and 4 self stick labels. Your team has 3 minutes to **stick all the balloons to the desks.** They may not touch the floor at any time.

Given: Five small lumps of clay and 15 toothpicks. Give each team member a small lump of clay and 3 toothpicks. **Make something using some/all of the items.** Be creative!



CPS Practice Exercises

Given: 25" of string, 4 paper clips, 4 straws, 50 cotton swabs and a bucket with a handle. **How many cotton swabs can you get into the bucket from 10 feet away?**

Given: A spoon, wood ruler, paper cup, keys, pencil, 2 marbles and a sheet of paper. In front of you are 6 different colors of construction paper. A bowl of M&M's are on the table. Using the items listed above, the team is to **develop a non-verbal communication scheme by which one or more team members will direct the others to put various color M&M's on the same color papers.**

Coaches: Dream up any color/M&M patterns you wish.

Scoring: One point for each correct M&M, 10 points for each paper that is totally correct and 100 point bonus if all are correct. Feel free to eat the evidence!



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571 - 580

Given: A deck of cards and a box of Cheerios.

Build a structure with the cards that will support as many Cheerios as possible. Points will be awarded for height, creativity of structure and number of cereals held .

Given: One little square sponge, 4 nails, 2 paper clips, one round magnet,
and one 3" x 4" piece of cardboard.

Build the tallest structure using all the items given.

You have one minute to think without playing with the objects. After the one minute you will have 5 minutes to build your structure. When you are finished, if time is not up, you can say stop and get 15 points for every minute of time left. You get 10 points for every inch you have built.

Given: Two "twisties" for garbage bags, 12 miniature marshmallows, 8 toothpicks, 3 straws, one regular size envelope, one paper plate, one paper towel tube, one ping pong ball and one can shaving cream.

Cover the table surface. The team has 5 minutes to discuss building the **best possible structure that will support a ping pong ball on top of the envelope at the top of the structure**, and 2 minutes to assemble it.

Coach hint: If they ask, they may tear apart or break any of the items, and the envelope flap can be torn off and licked.

Given: One 5"x 5" piece of cardboard, 5 straws, 12' of tape and a pair of scissors. **Build a structure that must be at least 6" tall.**

Points are awarded for each inch over 6 inches. All materials must be use.

Given: Two paper towel rolls, 8" square of cardboard, 6 sheets tissue paper

or construction paper, 3 - 1 foot strips of tape and scissors.

Create an animal, give it a name, habitat and traits.



CPS Practice Exercises

Given: One ball of clay and 2 straws.

Construct as many items as you can from the materials given.

Given: Roll of toilet paper, straws, glass of water and marshmallow creme.

Build a structure high as possible.

Given: Two pictures from magazines of desolate, barren or industrial areas. For example, an unclaimed strip mine.

Act as travel agents and describe these loations as "vacation paradise" detailing attractions and amenities.

Given: One ping pong ball, 6 rubberbands, 4 alka seltzer tablets, one pair scissors, 2 straws, one roll of masking tape, one balloon and 6 styrofoam cups.

Move a ping pong ball across a kiddie pool full of water, around a five gallon bucket and back to the starting point without getting wet or coming in direct contact with the ping pong ball.

Given: Two straws, one tennis ball, a snorkel mask, one foot of masking tape, 20 toothpicks, 2 envelopes and one square foot of hot pink poster board.

Use the items given to **create your own original invention to help society**. You will be given points for creativity, how much the invention will help society and teamwork. You must be able to explain the invention, how it helps and how it works. Up to 10 bonus points will be given for a creative title for the invention. All the materials do not have to be used, but you are limited only to the items given. Destroying the materials is legal. You have 2 minutes to discuss and 4 minutes to build.



581 - 590

Given: 140 different varieties of wrapped candy or candy bars and a dark bag to put the "Sweets for the Sweet" There will be no thinking time. You have five- minutes to respond. **Each team member takes a turn pulling out one piece of candy at a time. That team member will start a story and then pass the bag to the next team member who will continue the story by pulling out another piece of candy.** Using the candy for what it is will be judged as common. Creative would be using the name, wrapper and any other writing in an unusual or creative way. Time is stopped after 5 minutes. It is OK to empty the entire bag before time is up.

Ex: Team member pulls out a Hershey Milk Chocolate bar - "I lived in Hershey, Pennsylvania" or a Payday is pulled out - "Where I got paid today" or a Bar None is pulled out - "I went to spend it all at the bar".

Given: A 12" piece of string for each team member
Take turns creating something with the string and tell what it is.

Ex: Shape a light bulb - Say 'A bright idea!'

Given: One good light bulb, one business envelope, one rubber band, one 8 1/2 x 11 sheet paper, one paper clip, 1 - 6" piece of tape and 1 - 12" piece of string.

The team is given 4 minutes to think and **devise a method, using all or some of the materials given, to protect the light bulb from breaking when it is**

dropped from a height of 6 feet onto a brick. Note: the materials may be altered. The team receives five extra points if the light bulb still "lights" afterwards.

Set ten different objects in front of the team. Give them 4 minutes to discuss and

organize a story or skit using as many of the objects as possible. At the end of the 4 minutes, they are then given another 4 minutes to perform or present their story or skit.



CPS Practice Exercises

Given: A deck of cards and 10" of masking tape.

Build as tall a structure as possible with the materials given.

It must stand for a designated amount of time.

Given: A KitKat candy bar.

The team has three minutes to **equally divide a KitKat candy bar, one section for each spontaneous team member.** You are not allowed to unwrap the wrap. After time has stopped, each piece must be weighed for accuracy.

Given: Two napkins, two straws, and 12 pop cans to be use as obstacles, tape, Popsicle sticks and crayons.

Design and build a vehicle to go through an obstacle course of pop cans.

Given: A ball of string, marshmallows, coat hanger, 1 foot x 1 foot piece

of aluminum foil, 2 pieces of masking tape and a sponge.

Using some or all of the given materials, **design and build an instrument that will prevent or clean up pollution and explain how it works.**

Given: Two identical sets of Lego's.

"Recreate a Structure'" **With one set of Lego's create a structure.**

The team then needs to create a verbal method of communication before splitting

into two groups of two and three members. Place a wall between the two groups.

A group on one side of the wall will have the original structure. The other group needs

to recreate that original structure with the second set of Lego's using only verbal

communication from the team members with the original structure.

Scoring: 10 points for each correctly placed Lego and 10 points for teamwork.



CPS Practice Exercises

Given: 1 tennis ball, 4 toothpicks, 2 paper clips, 2 straws, one sheet 8 1/2 x 11 paper and 2 rubber bands.

You have 4 minutes to discuss and **build a device to hang a tennis ball**. You may not pierce the tennis ball. At the end of your 4 minutes, the judge will hang your device from a door jamb or some other

suitable place using a piece of masking tape.

You receive five points for every inch from the top of the device to the top of the tennis ball .



591 - 600

Given: Toilet paper tubes, straws and toothpicks.

Create a race track for a match box car.

Suggest using a brick and a couple of pieces of wood as starting ramps.

Given: One sheet of paper and a pencil for each team member.

"Language Invention" **Each team member is to make-up 3 words and write the definition for each made-up word.** The team will receive points for creativity and originality. 0-1 points for poor words, 3 points for creative words.

ex: a "Donkey" - a person who rides a donkey.

Given: Five large and 5 small marshmallows, 5 small pieces spaghetti, red hots,

10 toothpicks, pipe cleaners and icing (optional).

Build an animal, real or imaginary that will represent your team and your long term solution. Give it a name and describe it in one sentence.

Given: Bag of M&M's and colored construction paper.

Blindfold one team member. **The object of the team is to get the blindfolded team member to put the M&M's on the corresponding colored construction paper without using verbal clues.** A method of communication must be worked out before blindfolding the one team member.

The best part is -

you can eat the M&M's when you're done and you have to use a whole bag!

Given: One package bendable straws, 3 adhesive labels, 2 rubber bands and 7 paper clips.

Build a catapult out of the materials given. The device will then be used to catapult 3 objects (a penny, a paper clip, an eraser) toward a designated target 5 feet away from the presentation area. Score will be based on teamwork, creativity of device and marked scores on the target area. You have

10 minutes to build the catapult. No time limit for execution.



CPS Practice Exercises

Given: One bag marshmallows and one box toothpicks.

Build a structure as high and as wide as possible with the materials given.

Structure will be measured by the height times half the width. You have 5 minutes to build the structure.

Given: Elbow macaroni, spaghetti, banana, orange slices and a piece of paper.

Team members must place one item on the paper while telling a story. Each piece may add a new dimension to the story.

Given: 1 " x 1 " piece of clay, 50 toothpicks, one deck playing cards, 100 pennies and one plastic cup.

Part One: Build a structure using the clay, toothpicks and cards. It must be as high as possible and hold the cup and pennies.

Part Two: Place the cup on the structure and place in the cup one penny at a time.

You have one minute to think, 3 minutes to build and 2 minutes to put pennies in the cup.

Scoring: 2 points for every inch of height (not including the cup), 10 points if structure

holds the cup, 1 point every inch in height for each penny the cup holds

(minimum of 3 seconds) and 1-15 points for teamwork.

Given: Blindfold, masking tape, a basket, various objects

(pencils, ping pong balls, ruler, etc.) **Team members must design a non-verbal direction system to be used to guide one teammate, who is**

blindfolded, through a maze. The blindfolded team member must also pick up various objects and carry them to the finish area. You may use the basket

for easier carrying. One team member must be chosen as the guide and may not pull

or push the person in any direction or turn their body to face in any direction. You have

5 minutes to design the communication system and 5 minutes to go through the maze.



CPS Practice Exercises

Judges only: Map out a course on the floor using masking tape, include several turns.

Place objects on the course to be retrieved by the blindfolded team member.

Scoring: 20 points for creativity - deduct one point for each object left behind, 10 points

for quickness in completing the maze in 1-2 minutes, 7 points for 3-4 minutes and 5

points for 5 minutes. Point level and time may be adjusted for a larger course or more

objects.

Given: Two strings or heavy yarn, 8 feet each, two plastic or styrofoam cups, 4 paper clips, one fly swatter, one gallon container and 12 golf balls.

Mark two lines on the floor about 7 feet apart with the gallon container placed at the

center point between them. The team has 7 minutes to discuss and practice

their solution. **The problem is to transport as many balls as possible to be emptied into the gallon container.** Team members must work

from behind the marked lines. They may not step over the lines or touch the floor beyond

the lines, however, they may reach across the lines. Two members must be on one side,

three members on the other side.

Allow 2 minutes for the problem solution. You receive 5 points for each ball in the bucket.

Given: Three unopened tissue boxes of the same size, 6 - 8 1/2 x I 1 pieces

paper, 4 plastic drinking straws, eight paper clips, 12" masking tape and a pair of scissors.

Using all or some of the materials given, build a structure as high as possible.

The tissue boxes may not be cut or punctured. The time limit is 8 minutes. The final

structure must stand for at least 5 seconds.

Given: Seven sheets of typing paper. **Make a free standing structure as tall as possible** You receive 2 points for every inch in height.



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CPS Practice Exercises

Given: One action figure, one can - any kind, one ball string, 3 straws, one foot of tape, 2 index cards and one spoon.

You (the action figure) are trapped inside a deep hole. You find the given materials, build a vehicle and escape.

Given: Two pieces paper, 6 pieces thin spaghetti, 2" masking tape, one coffee canister, one billiard ball and an unlimited supply of nails.

Your task is to **create a structure using the paper, spaghetti and tape**. This structure must be able to support the coffee can and must be far enough off the ground that a billiard ball can be rolled underneath the coffee canister. The billiard ball is to be used for measuring purposes only. The team can gain points by putting nails into the canister. The more nails that are put into the canister, the more points the team gains. This structure must be free standing and must be raised high enough to roll the billiard ball under it the entire time. The team has five minutes to plan their structure and two minutes to build it.



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601 - 610

Take an old newspaper and see what usable items you can make from the paper
Ex. broom

Judges build a creature ahead of time out of pipe cleaners, Styrofoam balls, feathers, toothpicks and small pom-poms.

Two team members view the creature and must nonverbally lead the other three team members in building a duplicate creature.

All five team members have two minutes to discuss strategy before viewing the creature
5 points for each correctly placed item, 10 bonus points for a correctly finished creature

Three team members must use their bodies to form letters or words while the remaining two team members must correctly identify the letter or word.

This is a nonverbal problem

Correct letters score one point and correct words score 5 points

Given one coat hanger, the students are asked to make something that moves
common: car, plane, bird

creative: whale, wind, chimes, slingshot

Part 1- Each team member is given a 12 inch square piece of foil.

Each member makes a creation within a one minute time limit.

Part 2- In sequence with no time limit, the team members tell about their creations

Part 3- In sequence the team members tell about any of the creations they wish.

Two minute time limit

Given: One rubber band, 18 in. of string, 6 in of tape, 5 drinking straws,
1 baggie, 1- 8 1/2 in x 11 in piece of paper.

Your problem is to drop a raw egg and to protect it from breaking.

You will receive 10 points for every foot that the egg drops,
providing it does not break or crack

You will receive 5 points for every foot that the egg drops,
if it cracks only, and does not break

You must also solution with a style presentation for which you may receive up to 30
points.

You have 5 minutes to prepare and 2 minutes to present your solution



Given: Scissors, and in one envelope: 4 mailing labels, 6 straws, 1 sheet of paper
1 block of clay, 1 paper clip and 5 pieces of spaghetti.

The scissors may be used in the construction, but not in the solution

Between two tables, three feet apart, is a board with a two feet long string hanging down from the center

Using the materials provided, you must construct a structure supported by only touching the string that will hold the weight of the pennies.

Given: Paper plates, straws, rubber bands, paper, mailing labels, paper cups, balloons, cups and yarn.

The problem is to create three original aliens from only the materials listed above.

In part one, you will be given 7 minutes to think and create the aliens.

In part two, you are to explain to the judges your aliens and the characteristics that explains what planet they came from.

For this you will be given 4 minutes

Given: Six straws, 15 toothpicks, 12 in. of string, 2 adhesive labels and scissors (to work with only).

Build a self supporting structure as long as possible using only the materials given. The structure must be constructed such that it is supported above the table top or floor

One point for each inch of clear span between two adjacent floor supports.

Five minutes time limit

Be a Celebrity

Given: (One set per person) Three pieces of tape, one post-it note, one paper plate, one toilet paper roll,

3 foil stars and 2 pop sickle sticks.

In this problem, you dress up as a celebrity of your choice.

You have three minutes to think and talk or ask questions and 5 minutes to dress up and explain who your are.



611 - 620

"Freddie the French"

Given: An envelope containing one cork, 2 paper clips, 4-1 in. pieces of string, 1 Styrofoam cup, 2 bread ties, 4 toothpicks, one mailing label, 2 rubber bands, 3 index cards, and one pair of scissors to alter material but not for use in the story.

You are to begin by selecting one item from the envelope .

The person selected begins to talk takes this item and begins a story about it., the person then passes the item to the left

that person must take a second item from the envelope, add it to the first item and continue the story about the items.

the story and the construction continues until 5 minutes is up.

Solution is evaluated on:

- 1- the number of items used and attached at the end of 5 minutes
- 2- The creativity of the solution built
- 3- The creativity of the story
- 4- How well the story and the solution fit together

A cup of dirt, a cup of sand and popsickle stick

Create a new natural resource and describe how it is formed

Four straws, 8 pieces of Bubblicious Gum, 20 toothpicks and a cup of shaving cream.

You have 8 minutes to think and build your dream house.

You may talk

"To Infinity and Beyond"

Given: In a 9 x 12 envelope, 1 balloon, 2 straight drinking straws, 1-foot white string, 1 foot square of aluminum foil, 1- 9 in. paper plate, 2 small paper clips, 2 large paper clips,

a pair of scissors and a disposable roll of scotch tape.

This is a two part problem. In part one you will be given 6 minutes to discuss and create your solution.

In part 2, you will be given 2 minutes to present your solution

Your problem is to create an object from the materials in the envelope.

No other materials may be used.

Your finished object will fly in the air and be scored one point per inch on the distance of flight

through the air. You will also receive 1 to 10 points for how well your team works together



Given: One ruler, one pencil, 7 cotton balls, 6 magnets, 2 paper plates, 8 crayons, one piece of paper, scissors and 12 in. of masking tape.

Make a structure at least 7 inches tall that can be lifted with magnets while supporting the 8 crayons

Collect from around your house 40 items (rubber bands, batteries, candy, hairbrush, etc) and put them into a bag.

One at a time, a team member reaches into the bag and removes an item, telling a story,

the next team member chooses an item and continues the story. Continue for 2 minutes or until you run out of items.

Select an assortment of various objects and rearrange them to resemble things

Given: A bag of Doritos and a carton of sour cream. **Build the highest tower you can.**

Given: Taped rectangle- 1-2 feet by 4-5 yards , pieces of tape, container and blocks
Tape a rectangle to the ground. You may not step out of the taped rectangle. You may not cross the line in front of you unless traveling with a block, and not during thinking time.

Split your five team members into two groups.

Group one may use only their hands and group two may use only their feet. The team members from group one may not touch the floor inside the taped rectangle with their feet.

the team members from group two may not touch the floor inside the taped rectangle with their hands.

Two people, one from group one and one from group two, travel with a single block to the other end of the taped area and put it into a container, then travel back.

The remaining teams do the same thing.

The two team members have to be connected in some way.

They must tag the other team before they assume position and then the other team members hands them a block.

You can only travel with one block at a time.

A Problem Of A Different Color

Given: 5 napkins (or pieces of paper), 5 bags each containing 5 of each colored of the new M&M's (about 24 different colors x 5)

Judges: Provide each team with the above materials.

Open out the five napkins and place them in a circle on a table (diamond fashion) with the 2 straight sides touching

the sides of the napkins to the right and left. Place a bag of colors on each napkin.



Judge reads to the team

- 1. This is a two part problem about color. colors are not only pretty, they can be useful for communication too. colors can be used to represent things or ideas, give directions, or convey emotions and feelings.**
- 2. In this problem, each team member will be given a sert of colors to use in creations responses. You may not eat, alter or destroy the colors until the Judge gives permission to do so!**
- 3. In Part 1, each of the 5 team members will have 3 minutes to thinks and come up with as many different ways of using color, color combinations or actual shapes to represent something.**
- 4. Your colors must stay on your own napkin but may go to the edge and combine with the teammates colors to the right or left to create a 'teamed' response.**
- 5. In Part 2, each team member will tell what each color or group of colors represents.**
- 6. You may talk to each other at any time during Part 1**
- 7. Colors may be exchanged one for one with other team members, but any colors exchanged must be used in the solution**
8. Scoring will be as follows:
 - a. 1 point for each response given
 - b. 3 points for each response combined with a bordering teammate
 - c. 1 bonus point for each exceptionally creative response
 - d. duplicate responses will not receive a score

Note: Small pieces of paper cut from glossy magazine ads or wrapping paper will work as a color substitute for the M & M's, but the "fun factor" is greatly reduced. You can use standard M & M's or Skittles, but they should be supplemented with additional different colors such as the magazine cutouts.

This lets you add gold, silver, etc.



621 - 630

Style Show

Given: A basic set of TOOBERS and ZOTS (foam building toy), 2 sheets paper and 2 pens or pencils

Judge reads to team

1. This is a two part problem

2. In part 1, you will have 10 minutes to design and assemble your solution

3. In part 2, you will have 3 minutes to present your team's solution for scoring

4. You will be given a set of materials to use in designing, building and presenting your solution.

The materials provided may be used for any purpose the team wishes, but may not be cut, torn or damaged in any way.

5. In Part 1, the team will create an article of clothing, or an "ensemble" of wearing apparel, which a team member will "model".

The team must also prepare an accompanying dialogue or explanation of the apparel to be scored.

6. In Part 2, the team will present a Style show in which the clothing, the model and the other participates will be judged.

7. Scoring will be as follows:

a. Creativity of the apparel created.....1 to 10 points

b. Creativity and effectiveness of the Style Show.....1 to 10 points

c. Team members participate in the show (2 points each).....2 to 10 points

d. How well the team worked together...1 to 10 points

Make a face and name an emotion that suits it

Make a structure as tall as possible with anything you have in your pockets

Given: Bag of mini-marshmallows, 15 large marshmallows, 20 toothpicks, 10 life saver hard candies, 1 ramp 6" high 15" long

The team is to build a structure that will roll down the ramp.

Three points for each 1/2 inch past the end of the ramp that the vehicle rolls.

The vehicle must have some non-rolling component, and at least 2 wheels

Using two Styrofoam cups, newspaper, a roll of tape and an egg, **build the highest structure you can that will rest an egg on top**

Given; 15 mini-marshmallows and 2 toothpicks

These are magic toothpicks. Name as many things as you can that you can create or do with these items



Using two chopsticks, tell and demonstrate as many ways as possible to use them

Given: One square of sandpaper, green construction paper, balsa wood, tape, bottoms of two egg cartons each cut in half,

10 hard-boiled eggs and scissors (not to be part of the solution)

Build a tier stadium with "seats" for the fans (hard boiled eggs) of the Little League World Series.

If the carton is used as a bast, it cannot be used as seats

Given: One straw, tape , a plastic spoon, an empty 2 liter bottle, strung, yardstick, clothes pin, funnel, egg beater,

2 sheets of paper and 20 balloons.

You have been given 20 balloons. Your task is to blow up as many balloons as possible using the most creative methods as possible.

You may not touch the balloons to your mouth.

You have 3 minutes to think and design and 3 minutes to blow up the balloons.

You cannot touch the balloons during think time.

Given 10 blue and 10 red packets of sugar, **design the largest K Mart logo possible**

Lines, Lines, Lines

Given; 7 rubber bands, one length of nylon string 16" long, 1 length of twine 3" long, 3 address labels (or 6 computer labels),

10 paper clips, one pair of scissors, and one 8 1/2 x 11 piece of paper.

Your problem is to make a continual line.

You may use all the materials and scissors provided.

The line will start at the indicated spot. You will have 5 minutes to think and execute the problem.

At the end of 5 minutes a measurement will be taken of the continual line.

Scoring is as follows:

one point for each inch that the line measures

one point for every inch of length that the team creates out of the material provided.

Judges: Make a line for the team to start their "line" at. You will need two retractable tape measures.

This problem is designed to allow the team members to explore the various uses of these materials in any hands on problem

and is weighted to allow points for length with the materials versus the length their own bodies may contribute to this problem.

Team members, materials, scissors and everything presented in the materials may be used.



Using masking tape on a tile floor or formica topped table, form shapes or messages that a blindfolded team member attempts to read by using their sense of touch

Given straws and clay, connect them to make the longest structure or pinwheel.



631 - 640

Given: Two pieces of paper, 3 paper clips, 5 mailing labels, scissors and 4 straws

Move as much water as you can from a full bucket to an empty bucket, using as many of the materials as you can without moving either bucket.

Buckets are re placed 5 feet apart.

You have 3 minutes to think and build, two minutes to transfer water and one minute to describe how you used the materials. Score on team work, creativity and how much water is moved

DA BRIDGE

Given: 10 3x5 index cards, 15 push pons, 20 drinking straws, 6 rubber bands, 5 mailing labels, and one match box car

Design a bridge that spans a 3 foot gap between two school desks.

It must be free standing and must be able to support the weight of the matchbox car as it runs unassisted.

You have 3 minutes

Moving balloons from one large garbage baskets to another large garbage basket without using your hands.

Use only 3 items: spatula, straws, chop sticks, paper clips, and construction paper

Take turns drawings crayons from a box. A crayon is chosen, the person holding the crayon renames it

and passes it onto to the next person. Each team member must rename the crayon., choose a new crayon and repeat the process.

Build a structure out of 25 toothpicks an one box of preset Jello. the object is to hold as many potatoes as possible

Each team member is given 5 colorful magazine pictures

THE team has five minutes to tell their story using the pictures

You will receive one point form ccommon portions of the story and five points for extremely creative portions of the story

Your problem is to tell a story that begins with Earth, goes somewhere not on Earth, and ends in the human body

Nest Building

Given: 12 soda straws, 3 tall popsicle sticks, 1 9oz paper ccup, 5 toothpicks, one piece of cardboard (4" x 11/2")

and an assorted number of washers worth a desired weight.



You must build a nest at least 3 inches off the table

You have to build a nest in at least 5 minutes and test it in 2 minutes with washers.

You may go until it falls or time is up

Scoring:

Each lighter washer will be worth 1 point

Each heavier washer will be worth 4 points

You have just received your doctorate from the University of OM

What field or specialty is listed on your degree?

Build a bridge strong enough to hold 4 dictionaries using only scotch tape and paper.



641 - 650

Face It

Given: 2 paper plates, 1 Styrofoam cup, 2 rubber bands, 5 paper clips, 2 sheets white paper an 1, 8" sheet of aluminum foil

You may use the following to help construct the mask only!

1 pair of scissors, one roll of tape, markers and crayons

The team has 5 minutes to construct a mask using the materials given.

At the end of the 5 minutes, the teal will have 2 minutes to discuss and explain who or for what purpose the mask

would be used. One member must be wearing the mask

You will be scored by the following:

Overall creativity of the mask (use of materials).. 1-50 points

Overall teamwork.. 1-25 points

Explanation (purpose or use) .. 1-25 points

Bonnets Galore!!

Given: 2 paper plates, 2 paper cups, 2 rubber bands, 4 gold fasteners, 2 straws, 2 index cards and one spring from a ball point pen.

Judges will have the tape, scissors and a hole punch available for construction only

You have 3 minutes to create a bonnet for each team member using the items provided

Team members cannot talk to one another, but may communicate in nonverbal ways

After 3 minutes, team members, while wearing their bonnets will have 2 minutes to share ways that their

bonnets may be used in other ways.

Scoring: Three points for each bonnet created, 5 points for using all the items, 1 point for common responses of other uses of bonnets and 3 points for creative responses.

Build a tower with a spool of thread, a ruler, 10" of tape, a pencil and scissors without speaking

Receive 3 points for every inch of height

Given: 30 pieces of spaghetti, 1 cup of mini marshmallows, 3 mailing labels, 4 straws and 10 toothpicks

Materials to place on structure: 1 golf ball- 10 points, 2 tennis balls- 10 points each, 5 balloons- 5 points each,

20 ping pong balls - 5 points each.

You have 8 minutes to complete the problem. **You are to build a structure with the**



materials provided

The structure must be at least 3" above the table to count for score.

You will place items on top of the structure

You may be scored at any time during the 8 minutes.

Given: A ball of clay 1 1/2" in diameter, 4 straws, 4 blindfolds, 6 toothpicks and 50 paper clips

One team member will serve as Director and the remaining members will be blindfolded.

The team will have one minute to plan strategy, three minutes to build a structure and one minute to add the paper clips.

The blindfolds do not have to be worn during the 1 minute planning time.

At the end of planning, team members will put the blindfolds across their eyes.

The Director will (during 3 minute building time) direct the team members in building a structure which will support paper clips

The Director may not touch any of the building materials or paper clips

After the 3 minutes of building, the blindfolded team members will have one minute to add paper clips

Scoring: 3 points for each inch of height of the structure

1 point per paper clip

1-25 points for teamwork

Given: one blown up balloon, 1 up balloon, one straw, one piece of paper, 2 toothpicks, a string and tape

Attach and move the balloon across the string without using your hands.

Given: One tennis ball in a 12 foot taped square

Remove the tennis ball without stepping in or touching inside the taped area

Given: A medium sized fish tank, 2 dixie cups, 6" duct tape, 2 straws w/ wrappers, and 20- 3/16" nuts

Create a naturally buoyant structure.

You will receive 50 points for being a buoyant device and 1 point for every weight held without sinking.

Use a broomstick, 8 twigs, 2 shirts, large marshmallows, 3 pieces of gum, a balloon, string, and tape to make a creative creature



651 - 660

Vegetable Targeting

Given: A length of pipe 6" in diameter, 10 rubber bands, 100 toothpicks, a small roll of duct tape, 6 -1 ft. lengths of 1/3" dowel rod, 2 cardboard boxes (at least 1.5' x 1.5'), toilet plunger, a small novelty child's gold stick, 5 sheets of plain white paper, a box of spaghetti, and 50 potatoes

Setup: There will be a dart style target on the floor. The target will have 10 different scoring areas, and will be 10 feet in diameter.

The outer ring (1 point) will be the widest (3ft) and the innermost ring (10 points) will be a circle 8" in diameter.

The middle 8 rings will become smaller as the point value increases

Task: The team will have 4 minutes to construct, with the given materials, as many simple machines or tools as possible (at least 2 different tools). When the 4 minute building period is over, the one minute solving period will begin.

The judges will notify the team when they have 30 seconds left to build and when the 1 minute period begins.

During the solving period, using the machines/tools, they built during the building period to somehow convey up to the 50 potatoes onto the target (potatoes may be cut into smaller pieces). Up to 6 time outs may be called by the team during the 1 minute period, during which the judges will stop the stopwatch, record the point values for each of the launched potatoes and remove them from the site.

Time will then continue until the next time out.

Potatoes will be scored by the lowest point value they touch. For instance, if a potato is half in the 10 point section of the target and half in the 9 point section, 9 points will be scored for that potato.

Given: Potato, plate, straws, clay, paper, toothpicks and packing popcorn

Create a new species of animal

Given: 2 Styrofoam cups, 35 toothpicks, 1 piece of cardboard, 10 mailing labels, 1 ft of masking tape

You have 3 minutes to discuss and 5 minutes to **build a structure that can hold as many pennies as possible**. This structure must be at least 1/2" off the ground

Given: An assortment of 8 kinds of wrapped candies heaped on a plate, spoons, knives, chopsticks, string

Marked on a floor in 4 corners are 3' x 3' squares. There are containers in each of the squares and a student must stand within each square. No one may leave a square after entering and no one else may enter that square or reach in.



The task is to sort as much candy as possible into the 4 corner containers using a common relationship for each container (shape, color, transparency, taste). Students may not touch the candy with their bodies, but use only the materials provided. Talking is allowed.

Given: 1 sharp pencil, 3 paper plates, 15 paper lips, 30 toothpicks, 12" masking tape and 1 sheet of paper

Build a tower as tall as possible that will be free standing as long as possible.

You have 2 minutes to think and 4 minutes to build. No talking is allowed

Given: 1 box of toothpicks, 1 ball of clay, 1 piece of cardboard with a 6" diameter circle drawn in the center

Using the materials provided, in 5 minutes time **build the largest structure possible**

Scoring: 1 point for each inch of width at the widest point

5 points for each inch of height -20 point penalty if structure touches inside the circle

Multiply the total points for width by total points for height less penalties for final score

Given: One sheet of paper and as many rolls of tape as possible

Make a giant ball of tape and come up with as many uses for the ball of tape as possible

Ex: The team mascot

Given: 77 straws, 1 egg and a 3 1/2 " piece of tape

Make a structure to support the egg

Build a card house and see how much weight it will hold

Given: (to each person) 4 mini marshmallows, 2 large marshmallows, Styrofoam cup, and 6 toothpicks

Each team member must make something out of these items and tell what it is.

Pass your creation on to the person to your left

They add their invention to it and tell what it is

Give everyone a turn

Given 6 eggs, 2" piece of string, 3 toothpicks, 1 envelope, ball point pen, 1 napkin, 1 straw, 1 comb and 2 paper clips

The 6 eggs will be moved across a table one at a time

They can be moved using only the items on the list. Each item can be used only once



661 - 670

Give each team member one marker. The team is given one sheet of paper on which is drawn an oval, square, rectangle, circle and triangle.

The first team member makes one mark on one of the figures, makes an opening statement to begin a story and passes the paper to the next team member. Each person makes a mark and adds a statement to the story. Two minute time limit.

Given: 21 tennis balls marked with 3 different colors, 2 file folders, 5 mailing labels, a business envelope, 1 paper towel tube, 2 paper clips, 2 rubber bands, 6" of string and 2 pencils.

The team must throw the colored balls into goal boxes without touching the ball with any part of their body or without crossing a line within 3 feet of the boxes.

Label the goal boxes as follows:

#1: Orange balls = +10 pts.

: Green balls = 0 pts.

: Yellow balls = - 5 pts.

#2 : Green balls = +10 pts.

: Yellow balls = 0 pts.

: Orange balls = - 5 pts.

#3: Yellow balls = +10 pts.

: Orange balls = 0 pts.

: Green balls = - 5 pts.

The team has 2 minutes to plan their strategies and 4 minutes to complete the problem.

Given: 4 paper cutouts- a square, circle, triangle and rectangle for each team member
Start to the judge's left and continue in sequence. Use any or all of your shapes to create something and describe what it is.

You may fold shapes but cannot cut or tear them.

Given; 10 Styrofoam cups, 20 coffee stirrers and a 3 lb. coffee can

Build a structure with the cups and stirrers to support the coffee can (and additional weights) .

You have 2 minutes to think and discuss and 5 minutes to build

Time stops to test the structure.

10 pts .. 8" high structure

2 pts extra or each inch above 8"

20 pts for supporting the can, creativity and teamwork

2 pts for every 5 nails the can will hold



CPS Practice Exercises

Given: 2 8 1/2 x 11 pieces of paper, 3- 36" balsa sticks, 3 sticks of wrapped gum and 3 each of nickels, pennies, quarters and dimes

Build a structure using the above materials (may use gum wrappers). Place the coins in top of the structure for as many points as you can

Quarters = 5pts, dimes = 1pt, nickels = 3 pts, pennies = 2 pts.

Given: One box of tissues (box may not be used) and one hard cover book

Using only the tissues, a structure must be created touching only one object in the room (table, chair, coat rack) that supports the book.

Scoring: 2 points for every inch of height the book is (if the tissues are removed, how far will the book fall)

Given: 4 straws, 4 rubber bands, 1 8 x 11 1/2 piece of aluminium foil, 1 plastic cup, 4 mailing labels, 4 index cards, 10 toothpicks, and one ball of clay

There is a disaster on planet OM. The team needs to use the material provided to build a space vehicle to get them to

planet OM. The space ship can also be used to help out in the disaster.

You have 5 minutes to think, 8 minutes to build and explain how your vehicle can help the planet OM

Given: 6 plastic straws, 6 cotton balls, red, yellow & blue markers, 16 toothpicks, 6- 3x5 index cards and scotch tape

With the above materials, create the design of a new postage stamp.

Make the highest structure you can using only members of your team



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671 - 680

Given: 2 plastic cups, 4 straws, 6 gum drops, 2 paper plates, 2 pieces of aluminum foil and 10 paper clips

Scenario- A robber is getting into your house. Devise a system to keep him out

Given: 6 paper clips, 4 straws, 3 rubber bands, 4 mailing labels and a small ball of clay.

Make a bridge out of the above materials that will support a ping pong ball.

You have 2 minutes to discuss, four minutes to build and 30 sec. to test the structure

Given: Scissors, glue, tape, 3 sheets of 8 x 11 paper, 2 rubber bands, 2 paper cups, 4 straws, 4 popsicle sticks and 4 Q-tips

your team has 5 minutes to build a flyable plane and practice flying it. When time is up, you will tell why you used each item

and you will have 2 attempts to fly your plane to a designated target.

You will get points for how close the plane comes to the target and how creatively you used the item on your plane.

Given: A piece of paper with 5 stars on it and a pencil

Each team member has 30 seconds to connect the 5 stars into their own constellation.

You may not speak to each other at any time

Collect the papers and redistribute so that no team member receives his/her own constellation

You now have one minute to study this new constellation and come up with both a name for it and a short story about how that name came about.

At the end of the minute, each person will 20 seconds to respond.

Pictures themselves should not be scored; scoring should be objective based on creativity and originality of relationship between picture and name/story

Given: 2 cups, 2 paper plates, 2 coffee filters, 2 cardboard tubes, 10 straws, 2 tacks, 2 margarine lids, 12" of tape, and balloons

You have 15 minutes to create a device that will burst balloons or a balloon five feet away

Given: A large assortment (500-1000) of pictorial stamps from all over the world and the US.

Have them laying face up on a table and have a small box nearby to receive the stamps once they have been used in the story.

The team must make up a story using any information found on any of the stamps.

You may use pictures, countries, any written words, etc.



Once a stamp has been used, it must be put aside and cannot be used again.

You will be given 5 minutes to think and 2 minutes to verbalize your story. You will be taking turns, each person using one stamp at a time with each person adding to the story line of the team member before them. You will be scored by the number of stamps used, by how creatively they were incorporated into the story and by how well the team worked together to come up with the solution during think time

Given: A slab of clay, a bag of marbles (large and small) and a bowl of water **Using the clay given, design and create a structure that you think will hold the most marbles above the water line in the bowl**

You will receive 3 points for each small marble held, 5 points for each large one.

You will receive 0 points if it doesn't float, 25 if it does

You will receive 1-50 points for creativity and teamwork

You will be given 5 minutes to build and 3 minutes to fill it with marbles

Once you begin filling your structure with marbles, you cannot redo or fix your structure in any way

Spaghetti Tower

Given: 10 pieces of spaghetti and 2 cups of shaving cream

Build the tallest free standing structure possible

You have 2 minutes to think and 3 minutes to respond

Score for planning, estimating and group problem-solving

Band Together

Provide either a pile of rubber bands or a specified amount

The problem for each team member is to pick up 100 or more rubber bands and quickly make a creation and describe it



681 - 690

Given: 4 toothpicks, 2 cotton balls, 2 bottle caps, 3 cotton swabs, poster board and markers

Create a flag for our new country O.M. and tell about it

Given: 2 pipe cleaners, 1 Styrofoam cup, 1 light bulb, 3 oz. modeling clay

Construct an alien capable of living on Pluto (take into consideration gravity and atmosphere - or lack of it). You have 3 minutes to build your alien and 2 minutes to explain it

Given: crayons or markers, one sheet of paper, one paper plate, 1 popsickle stick, and 12" of tape

You have 5 minutes to create a mask that shows a face you would like to portray to the world.

You then have 2 minutes to explain your face.

Place a thimble and a button on the table.

Using a die, have a team member roll it.

If it is an even number, they must say something about the thimble

If it is an odd number, they must say something about the button

A one or a 6, you must say something about both objects

Given: 1 sheet of 8 1/2 x 11 paper, 12 pennies, pen/pencil, 12" ruler, deck of playing cards, 2 straws and a pair of scissors

The team will have 10 minutes to **discuss and build a board game utilizing all the items given.**

You will then have 4 minutes to demonstrate

Playing cards are to remain undamaged

Scoring: 1-10 points for teamwork

1-10 points for creativity

1-10 points for how well the game is demonstrated

Given: 5 belts, 5 rubber bands, one large and one small can and 12 ft of rope.

Put the cans in the middle of a circle created by the rope.

Using the belts and the rubber bands, get the small can and place it into the large can.

Members may not put any part of their bodies in the circle

If they do, they can't use that part of their body. For example, if an arm crosses into the circle, that member can no longer use the arm



CPS Practice Exercises

Given: Q-tips and it's box, paper clips, straws and rubber bands

Tie a bucket so it hangs 6 ft. above the ground

The members must be 6 ft. away for the bucket

You will receive 5 points for each Q-tip that gets into the bucket.

You have 2 minutes for planning and 4 minutes for execution



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691 - 700

Name all the things you see in clouds

ex: Rocking Horse

Create a name for a store which describes what the store sells or what service they provide

ex: Van-o-rama sells vans

The judge will start a story by saying,

Once upon a time on a cold Wednesday night, I . . ."

The team will respond in order by going around the table and adding to the story.

The team will make up to three complete passes around the table with the last person ending the story with, "and I still want to know what happened to the dragon."

Three points for common responses, 5 points for creative responses and 10 bonus points for three complete rounds in a two minute time period.

Each team member is given a colored object (use 5 different colors, such as M & M's)

The team members are asked to use gestures, not speech, to portray their color for the team to identify

Name a kind of AL (owl)

common: Al Bundy, Al on Tool Time, my Uncle AL

creative: normalal, specialal, wise owl

Give a phrase or sentence that has a food item or a drink item in it

ex: Life is a bowl of cherries; Nutty as a fruitcake

If you were in a message in a bottle, what would you say?

Name something that is both good and bad and explain why.

You will be given one minute to think and four minutes to respond

ex: Drugs- can kill if misused, but can heal if used properly

Name things that occur in pairs

common: sun and blue skies, love and marriage, heat and humidity

creative: Tiger Woods and birdies, Bill Clinton and Big Macs



**There is an imaginary garden.
Name what is in it and who planted it**



701 - 710

Name things you cannot touch

Name things you can do with your eyes closed

Start to the judges left and continue in sequence.

Your problem is:

Following in alphabetical order, name a bird or mammal for each letter of the alphabet.

When you reach "Z", start over again

If you could choose anyone to be your DI Team Manager, who would it be and why

This is a forest. All the trees are cut down but one.

What does that one tree say or think?

Ex. Where are all my buddies?; Wait, You forgot me!

Dear Teacher,

My son/daughter was not at school today because . . .

You want to make cookies, but don't have a recipe. What ingredients would you use?

Ex: Gummi Worms

What can you do with a flat tire?

Ex. Use it for a target

Name some chores that you would give your parents to do

Ex. Clean my room

What would you do if your team won the DIGlobal Finals?

Ex. Keep my brain as a souvenir



711 - 720

**You have been in Cryogenic sleep for 500 years.
What is the first thing you see, do or experience when you wake up?**

Why did the chicken cross the road?

Name things that go bump in your closet.

Name kinds of cats or use the word CAT in any way you choose.

You will receive one point for common responses.

Highly creative or humorous responses will be awarded 10 points

Common: Tiger: Siamese: Tabby

Creative: KitKat: Tac (cat backwards!); Cataract: catapult

If you were "Up the Creek" without a paddle, how would you get to shore?

Name things or people that contain the word "Hairy" or a derivative- ie Harry

Start with a phrase such as "Chocolate Chip".

The first team member uses the word "chip" (Chip off the old block).

The next team member uses the word "block" (blockbuster).

The next team member would use buster (Buster Brown) and so on.

An Indecisive Appliance

The toaster named, "Phil" wants desperately to become another kitchen appliance.

Your problem is to state what appliance Phil wants to be and why?

You've started an exercise routine, what might your muscles say?

Finish the following sentence with a rhyming phrase-

Today I went out to play...

Ex. And scared all the girls away!



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721 - 730

You have just traveled "over the rainbow" What do you see?

Name uses for, or say something about a glass of water

You are having a birthday party for Omer. What would you give him?

Give each Omer a piece of aluminum foil. Create a present for Omer

You've just won first place at the Ohio State OM Championships. What do you do now?

Name things you would see driving on the highway at night?

You're leaving on a trip to Crab-Nebula. What would you pack?

Name kinds of wood.

Common: mahogany, oak

Creative: Tiger Woods, Woody Allen

Name things that can be found on the beach

Name things that make you happy and why



731 - 740

Name things that are transparent

Name things that are double letters

ex: butter; bubble

**Given a cinnamon stick to touch, smell and hold,
the team is reminded that we all know about the use of cinnamon for cooking.
Use all your senses, think of other possible uses for cinnamon**

Name things that are pointed

Name things that are flat

Name things that flash

Treasure Box

This is a two part problems. In part 1, you will have 1 minute to think, then 2 minutes to respond.

In part 2, the box will be opened and you will have 1 minute to think and 2 minutes to respond

**Your problem in part 1 is to express what you think might be in the Treasure Box.
In Part 2, you are to say why you are disappointed with the treasures actually in the box.**

Give reason why dogs bark

Give reasons why lions roar

Name things that make you happy and why



741 - 750

Name an emotion and the color that describes it

Name uses for a shoe string

Name as many unusual uses you can to use duct tape

ex: to tape a persons mouth shut

Name all the materials you have ever used to solve a DI challenge

What would YOU do for a Klondike Bar?

How many things can you do with a tomato?

Create a square with your fingers. You have just created your magical, mystical doorway to anywhere you would lilke to go.

Name as many cretive or common places you would like to enter through your doorway

Name uses for a box.

Name uses for the letters "D" and "I"



751 - 760

What can you do with smelly cheese

Name things that could get stuck in the plumbing

Name a new species and what it does

Laugh and name who or what would laugh like that

You work for a beverage company which is going out of business

You can save this company by inventing new flavors

Name as many new flavors as you can

Name as many reasons as you can for going to K Mart

Name things and approximate quantities of things that you could put in an aspirin bottle

ex: 100 aspirins; 2 ounces of water

Name things you can pick up and where you put them

What does the red button in the oval office do?

Name round things that do not bounce



761 - 770

**Gather as many household items as you want.
One person picks up an item and begins a story
The next person picks up an item and builds onto the story
Use enough items to go around several times**

Name a word that contains the word "nick" or use "nick" in a phrase.

Name things that make something else work
ex: batteries in a flashlight; the left side of your brain makes creativity work

You are a mouse that has just been caught by a cat.
Give reasons to the cat why you should not be eaten

Name ways fo getting to school

Name ways of getting out of this world

Name things you can do with bubble gum

What would your reaction be if you found a grey M & M

**You have just crashed a plane on an uncharted island.
You are by yourself.
What would you do and why?**

You are a famous stand-up comedian.
What people, places, or events in your life gave you the best material for your act?



771 - 780

If you were in an operating room... what wouldn't you want to hear?

Name things that share the same name as objects in space

common: Milky Way candy bar **creative:** Ford Taurus

You are a book.

What would you have on your cover to make people want to pick you up and read you?

Name a place and tell why you would not want to live there?

Look at a picture and name things that you would do with the objects in it

Each of you have five cards numbered 1- 5.

You will answer in sequence and place one card in the middle of the table after each response.

You will have 1 minute to think and 2 minutes to respond.

Each response will receive one time the point value of the card for a common response and three times the point value for a creative response

Your problem is to name things that are inside fo other things

Name things that make you happy

Each team member will have 6 cards and turn in 1 card each turn.

Scoring: 5 pooints for super creative; 3 for creative; and 1 for common

If you fell out of a plane and had no parachute, but could radio to the pilot, what would you say to the pilot?

Name things that change into something else

ex: ice changes into water

The team will be given no time to think and 3 minutes to respond

The response order will go in a circle around the table

Team members can not pass or skip their turn, neither may they answer out of turn

If one member of the team is stuck, the whole team is stuck

Each team member, in sequence, will state a proverb (epigram, platitude, or other words of

wisdom using the last word of the preceding proverb as the first word of his/ her own.



CPS Practice Exercises

Points will be given on humor and originality, as well as clarity and quality of the proverb.

Up to 5 points can be rewarded for exceptionally creative answers, at the judges discretion

Repeating a word is allowed, but not an entire proverb

ex: " Life is like a box of chocolates"; "Chocolates will ruin your skin, but who cares?"

"Cares and woes, like acne, fade with time"; "Time is a fire in which we burn";

"Burn your bridges, if you can swim faster"



781 - 790

Name ways to summon help

Name ways to clear a room

You are a performer and you are about to go on stage - what so you think about?

**You are in a foreign country and no one speaks English but you.
How do you communicate?**

You are a rock. What do you wish for?

What would you do with \$20,000,000

You are in an airplane and your pilot dies, what do you do?

What would you say to God?

What would you say to Elvis?

You are in the Twilight Zone - how do you get out?



791 - 800

If you could eliminate anything in the world, what would it be and how would you do it?

What if your left hand was velcro?

Name as many household items that begin with the letter "T" as you can.

If you had to live in a barn, what other living animals would you want in the barn and why?

Name types of windows

ex: windows of opportunity; port holes; Pella windows; house windows; plexiglas; tempered glass; Windows (on computer), clear windows; tinted windows

Name things you find in a lunch pail

You are a leaf. Where would you go and why?

A new state is joining the United States. You have been chosen to name it. What would you name it and why?

You're ready to go swimming, but you discover there is an alligator in the pool. What would you say or do to get the alligator to leave?

Given a tube from a roll of paper towels, name other uses for the tube



801 - 810

After the competition, name things to do with the DI trophy.

ex: Used as a paperweight

Name things that go up and down

ex: sun; eyelids; heartbeat; interest rates

One person says a few words and then each person on the team keeps adding to it to make a story

Invent a new cereal.

Give each person a sheet of paper to draw what the cereal box would look like

Make up a commercial and present your commercial for the cereal

If appliances in our house came to life, what would they say?

Name the appliance and what it would say

Name a famous person/character and make up the title of their biography

Name famous couples

Ex; Bill and Hillary; Lucy and Desi; Sonny and Cher

Name things to do on a long car trip

Complete this statement: " I know I'm in big trouble when _____ "

You are baking cookies and you eat all of the chocolate chips!

What will you substitute so no one will suspect?



811 - 820

Given 2 yard sticks, a large paper clip, 6" of tape, an 8 1/2 X 11 piece of paper, three marbles and a 2" x 2" block of clay.

Your problem is to move 3 marbles from one table to another (both the same height and two feet apart) without touching the marbles with your hands. Team members may not carry the marbles in any way between the tables. You will be given 2 minutes to discuss and 5 minutes to perform the task. You may not talk during the 5 minutes you are performing the task.

Given: Crayons, markers etc. and paper.

Each team member is given one piece of paper and crayons or markers. Each team member is to come up with an original creature and tell its name, what it eats and where it lives.

Given: Cake pan half filled with water, 6 marshmallows, 16 toothpicks, a 5 X 7 index card, a pencil, a Dixie cup, a comb and pennies.

Make a structure that floats and can hold as many pennies as possible without tipping or sinking.

Given: An "X" on a chalk board.

Without using your hands, erase the "X" from the chalk board with an eraser using a body part. You may pick up the eraser no more than one time. Everyone must take a turn.

Given 50 toothpicks, 1 package of 5 sticks Wrigley's chewing gum and 1 paper cup.

Using the materials on the table, you have 5 minutes to build the best house you can that will support the paper cut and the weights. You will receive points for the following: 2 pts. for each inch in height of house, 3 pts. for every penny in the cup, 10 pts. for creativity of the house design, 10 pts. for team work

Given: Scissors, 12" of tape, 50 straws, clay (2' x 2'), ruler, playing cards.

There is a stack of cards before you. Each member will choose one card. The team will look at all five cards and choose one card to use. The team will then use the clay given to make a model of the card. The model should be the height shown on the card. You will be given a ruler for measuring. You can receive 20 points for how close you are to the model on the card. You can receive 10 points for teamwork.



CPS Practice Exercises

Given: Big Mac box, 6 straws, tuna fish can and a pack of chewing gum.

Using the Big-Mac box and pack of chewing gum, build a structure strong enough to support a tuna fish can

Given: 3 pieces of construction paper, 3 mailing labels, 5 paper clips, 3 rubber bands, 10 building blocks and one spoon.

You are going to build a basket that will hold and carry 10 blocks. you will need to pull with your hands for one minute touching it. While you pull it, it must stay together with the blocks inside. You have 5 minutes to discuss and build, then one minute to pull

Given: 2 mailing labels, 2 clothes pins, 12" of string, 1 marble, 1 ping-pong ball, 1 8 1/2 x 11 piece of paper, 2 paper clips, 1 teaspoon, 1 styrofoam cup 1 mouse trap.

"Chain Reaction". Take the materials given and construct a device/mechanism that will produce a chain reaction. You have 8 minutes to think and to construct your device/mechanism and 2 additional minutes to cause your chain reaction to occur.

During the 2 minute period you may not touch your device other than to initiate the first reaction. You will receive 10 points for every different reaction caused. You will also receive an additional score of 1-15 points for the creativity of your device and 1 - 10 points for teamwork.

Given: Table with 6" x 6" square of 1" wide tape, 4 sheets of paper, 1 sheet gummed labels, golf ball, ruler and scissors.

The tape represents a bottomless pit into which no supports may be placed. Your task is to support a golf ball as high as possible over the middle of the pit. No points will be awarded if the structure touches the table outside the square created by the tape.



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821 - 830

"A,B,C Nature Scavenger Hunt" Send all team members outside. Split them into two groups. Give both teams 30 minutes to collect items, one for each letter of the alphabet. Score 3 points for the creative items and one point for common items.

Given: 3 mailing labels, 4 rubber bands, a 1" cube of clay, 4 drinking straws, 100 pieces uncooked spaghetti, 2- 3" x 3" pieces of cardboard, 8 penny nails, a ruler and 12" of string.

The problem is to build 2 structures at least 6" tall, each one supporting one of the 3" x 3" cardboard pieces. These two towers must then span a distance of at least 10". Eight minutes are allotted to build this bridge. After the 8 minutes expire, 8 penny nails are added to the span until the span or one of the towers collapses.

Scoring: 40 points for 2 towers 6" tall

5 bonus points for every 2" the towers exceed 6"

10 points if the span between the towers is at least 10'

5 bonus points for each additional 2" in tee span

1 point for every nail the span supports

1/2 bonus point for every nail if the towers are 8"

1 bonus point for every nail if the towers are 10'

1/2 bonus point for every nail if the span is 12"

1 bonus point for every nail if the span is 14"

Given; 20 Legos and one plastic sandwich bag.

Your team has 7 minutes to put all the Legos into the sandwich bag without using your arms or legs.

Given: 4 straws, one sheet of paper, 5 paper clips, a piece of tape, scissors, 5 rubber bands, a stack of books and one small building block.

The team is to design a ramp support by a stack of books that a small building block will slide down. You may not use your hands to make the block slide.

Given: One blank sheet of paper and magic markers.

Design a greeting card and write a verse for a new holiday. Time limit is 10 minutes.

Given: One piece of paper and a crayon, pencil or marker.

A team member starts a picture in the first 10 seconds of time. Team members will consecutively draw for 10 seconds at a time adding to the previous team members' picture. No thinking time. Time limit is 4 minutes.



CPS Practice Exercises

Given: 2 straws, masking tape, one ping pong ball, 1 piece paper, 1 paper plate, 1 blow dryer, styrofoam cup with no bottom, toilet paper tube, paper towel tube, shoe box with no ends and a shoe box with ends.

Tape off a 4 ft. by 10 ft. area. Tape the styrofoam cup, toilet paper tube, paper towel tube, and both shoe boxes inside the 4 x 10 area. The object is to create a way to move a ping pong ball using the other materials given through a series of tunnels and into the last shoe box placed at a corner without ever touching the ping pong ball or crossing the taped off rectangle. I

You have 3 minutes think time and two minutes solve time. No talking is allowed during the solve time.

Choose five team members and give them 5 minutes to discuss their favorite foods (breakfast, lunch, dinner, snack or etc.). The team member must then form their favorite food using themselves while sharing what they are with the team

Given: One cork, 100 toothpicks, a 12' piece of duct tape, 4 pieces of 2" x 2" foam board, 6 rubber bands, one piece of construction paper and an egg carton.

Use these materials to re-create a famous piece of art work.

Given: One egg carton, a key and a magic marker or labels.

Label the 12 holding cups in an egg carton with the marker into 12 categories (holidays, circus, school, movies, cities, animals, songs, etc.)

Team members take turns tossing a key from 2 feet away into the egg carton.

Whichever holding cup the key lands in determines the category that must be used to answer the question "What does this key open?"

ex: Movies - Key opens popcorn machine; opens entertainment, opens laughter, opens tears, opens surprise.



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CPS Practice Exercises

831 - 840

Given: One empty toilet paper tube, 4 tissues and one rubber band.
Build a ghost.

Given: A yardstick, a plastic tub, a 4" x 4" block of wood, 10 rubber bands, a 12" piece of tape, a 12" piece of string, a basketball hoop and a basketball.

Using the materials given, create a device to shoot the ball into the hoop without using your hands.

Given: Five paper clips, 5 straws, 20 wooden sticks, 2-10" pieces of tape, 6 rubber bands, a paper cup, pennies and a bowl of water large enough to float your structure.

Build a raft that will float. It then must hold the paper cup while putting pennies in as weights. Each weight is worth 10 points. The problem is finished if the raft falls apart or could not float. You have 2 minutes to think and 3 minutes to build and hold weight on your structure.

Given: Masking tape, 5 cardboard circles each marked with one of these numbers - 1, 3, 5, -2 and 0, and a blindfold.

Inside a 10 x 20 foot area are placed numbered cardboard circles. Blindfold one team member. The remaining team members will use non-verbal directions to give the blindfolded member directions. The blindfolded member will attempt to pick up cards for their score. The judge will provide the team with 2 blocks of wood, an empty soda can, 2 small rocks and a ruler.

Given: Rolling pin, 12" craft wire, 2 styrofoam cups, 3 paper plates, 4 mailing labels, 20" string, 1 ball of clay, 24" masking tape, 2 pencils, 4 marbles, 4 pieces of typing paper, 2 ping pong balls, 2 empty soda cans, 2 full soda cans, 1 metal or wood spoon, 1 brick, 2 - 2' 4" (3 feet long), bungee cord, 6 paper clips, scissors, 4 rubber bands, one empty thread spool and one egg.

You will have a 9 x 12 foot area covered with a plastic tarp in which to work.

A small table will be placed on the tarp within this area. Your problem is to design and build a five-step chain reaction which, after the 5th step, breaks an egg. Each step in the process must initiate the next step. The table may be used along with the materials provided. Note: the table, tarp and scissors may not be altered.

Scoring: Each step will receive 3 points for a common movement or task and 5 points if it is creative. If the chain reaction succeeds in breaking the egg, 5 points will be scored. If the egg cracks but does not break, 3 points are scored. Once the chain reaction has been set in motion, team members may not touch or adjust it with their hands. Additional points may be earned for each additional step designed into the reaction beyond the 5 required. Team members have 10 minutes to build and test your solution.



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CPS Practice Exercises

Given: Obstacle course and blindfold.

Set up an course using your choice of obstacles. Blindfold one team member.

The other team members must devise a means of communication with the blindfolded team member. The blindfolded team member must navigate the obstacle course without the use of verbal communication.

Given: Newsprint paper, markers, scissors and glue sticks.

"Treasure Pleasure" Create a map to a self-named island where a treasure chest is waiting. This is a non-verbal problem.

Given: One square foot of aluminum foil, one ball of yarn, 2 feet of tape, 2 crayons, 2 sheets of paper.

Create a children's toy out of the materials given. It must have at least one fully functional feature.

Given: A ball of clay, five blindfolds.

"Shape it Up" Blindfold all five team members. A ball of clay will be passed from one team member to another. Each team member must contribute some shaping to the clay to result in a finished 'product. Points are awarded on how well the clay resembles something. You have 2 minutes to discuss and test your solution. You have 4 minutes to solve the problem while blindfolded. You may not speak to each other during the 4 minutes.

"Statues" Team members stand in a circle and one at a time take turns posing.

The team member to the right must describe who or what the posed member is.



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841 - 850

Given: One soda can, 5 dried beans, a belt, one piece tin foil, a ruler, one piece paper and a pencil.

Blindfold 2 team members. The remaining team members must direct the 2 blindfolded team members to place colored ping-pong balls into numbered cans. You may use only the materials given to direct the team members and you may not talk.

You will be given instructions as to which color balls go into which cans after your 3 minutes practice time. You will have 5 minutes to perform your problem. You win receive 10 points for every ball in the correct can, and 5 points taken off for every ball in the incorrect can.

<u>Practice</u>	<u>Real</u>
White balls- can #1	Red balls - can #1
Black balls - can #2	Blue balls - can #2
Blue balls - can #3	White balls - can #3
Red balls - can #4	Purple balls - can #4
Purple balls - can #5	Black balls - can #5

Coach/Judge's note: Use about 10 balls of each color. Place the balls in piles according to color, and cans in numerical order. Give team practice instructions for the first 3 minutes and the real instructions for the 5 minute time period.

Given: Five straws, one sheet paper, one plastic fork, one soda can and 2 mailing labels
Make a device to propel a rubber band to a target 3 feet away.

Given: An eraser, juice box, paper plate, 3 straws, 1 oz. of Playdough, one pencil
Line up 6 empty pop cans in this formation:



From 4 feet away, knock over the cans using only the materials provided. No body parts may be used.

Given: Two spans, 2 small paper plates, a few sheets of paper, 2 straws, a rubber band, scissors and tape.

Your mission is to build a catapult that will throw 3" x 3" pieces of paper that are crumpled up. You have 10 minutes to plan, (you may talk and look through the materials given) and five minutes to build and test.



CPS Practice Exercises

Scoring: -25 points if catapult fails, 2 points per every inch the paper moves. Maximum 15 points for creativity and aesthetics.

Given: Two paper plates, 20 toothpicks, 5 drinking straws, 2 plastic forks, 10 paper clips, marbles, 1 foot masking tape and poster clay.

"Flying Saucer" - non-verbal. The problem is to suspend or elevate a paper plate above a table and put marbles on the plate without having them fall off. You will have 3 minutes think time when the team is allowed to talk, 5 minutes to construct and 2 minutes to put marbles on - no talking during part 2 & 3 but other communication is allowed.

Scoring: 2 points for each inch the plate is above the table, 5 points for each marble on the plate.

Five team members are outside a room. Four members go inside and one waits outside, blindfolded. The four members inside the room remove one shoe and place it in a pile of other miscellaneous shoes in the center of the room. The judge(s) will mix up the pile of shoes. The fifth team member is then led into the room. The four team members line up in a row, sitting with their feet out in front of them, approximately 7 ft. from the pile of shoes. You are then given 3 minutes for the blindfolded member to match up the right shoe to the right person. The blindfolded member may not touch the shoes that are still on the other four members. You are not allowed to talk during the 3 minutes, and the four seated members cannot get up and physically guide the blindfolded member. You have 2 minutes to devise a communication system and 3 minutes to carry out the task. You will be given 5 points for every shoe that is pulled out of the pile that belongs to a team member, and 5 points for every correctly matched shoe. Maximum - 40 points.

Given: Ten popsicle sticks, 3 pipe cleaners, a ball of clay, 3 clothespins and a 12" piece of tape.

Build a bridge that will extend over a 9' x 12' piece of blue paper. Using match box cars, you will receive 20 points for each car supported by the bridge. You can receive 1-10 points for team work and 1-20 points for the creativity of the bridge structure.

Given: A full set of dominos.

Create a Ofle dimensional figure using a full set of Dominos. All Dominos must be used and like numbered sides must touch.

Given: One 1/8" x 1/8" x 10" stick of balsa wood, 2 band-aids, one paper clip and 6 glass marbles .



CPS Practice Exercises

Using only the given materials and without touching the marbles, get the marbles across a 2 foot Square without going inside the square. You have one minute to think and 2 minutes to solve the problem.

Ida Weller Elem. School, Centerville

Given: Aluminum foil, mouse trap, 4 ft. of string, play dough, birthday candle, 8 x 12 piece of paper, 2 paper cups, 2 pie tins and a stick.

Using the materials given you must extinguish the birthday candle (you cannot blow it out). You must use the mouse trap and candle in the solution. The candle must be 3 feet away from the mouse trap. A judge will light the candle. You have 3 minute to build and test and one minute to demonstrate.



851 - 860

Given: 20 tootsie rolls, 6' of tape, 5 toothpicks and 20 mini marshmallows. With these items given make a bridge that connects 2 tables about one foot apart. Think time is 2 minutes and building time is 5 minutes. While building, make up a song or original song and sing it during the building time using the works of materials. After time ends, judges will place one at a time a tootsie roll on the bridge.

You cannot lose points, you will get an additional 3 points for every tootsie roll held without falling.

Scoring: 1 to 5 on Creativity of the song, 1 to 10 for the theme of the problem and 1 to 10 for teamwork.

Given: One bag miniature marshmallows, 1 box toothpicks, 6" masking tape, one sheet 8 1/2 x 11 paper, and an object to be used as a weight.

You will have 3 minutes to plan and 5 minutes to build. You may talk only during the planning time. Your problem is to construct a structure as tall as possible using only the materials provided. The structure must be free-standing and support the weight for one minute.

Scoring: 5 points for each cm. of height, 25 points for holding the weight for one minute.

Given: Newspapers, a brick and a roll of masking tape.

Build a free standing structure as high as possible, able to support a brick and also able to have the brick pass under it.

Given: A small empty jewelry box, a stone, a piece of string, scissors and crayons. (The scissors may not be part of the solution.)

The team has 2 minutes to create a theme and skit and one minute to present a solution. Talking is not allowed during the presentation.

Given: 10 pieces spaghetti, 1 " square of clay, 1 paper cup, 1 - 6' x 6" piece of cardboard and a box of nails.

The team has 2 minutes to plan and 6 minutes to build a structure as tall as possible to support the cardboard and the cup. The team then has 2 minute to load nails one at a time into the cup. Score will be one point for each inch per nail and 10 points for teamwork.. ex: 4" tall structure holding 5 nails = 20 points.

Given: Model Magic modeling compound, florists wire (either 15" lengths or on bale), 3/8" x 12" dowel rod, 4" square wooden base, lollipop sticks and scissors.

Using only the items given, create an artist's figurine. The figurine must be in human form when completed and the joints must be moveable so that the foam can be poseable when completed.



CPS Practice Exercises

Restrictions: Each team member must contribute to some aspect of the solution. Scissors are to be used for construction purposes only. Non-verbal once construction time begins.

Judging points:

Teamwork - how strong was the team's planning session; were the task divided evenly and amicably; were all aspects of the problem considered.

Judging Points:

Appearance of the finished figurine: How closely does it resemble the human form; are the limbs in proper proportion to each other; how finely detailed it is, i.e.

hands, feet, facial features?

Does it function? -Are the joints in fact movable? Does the figurine move in natural human motion? Does it hold a pose? Is the entire structure solid?

NOTE: The team's final product was not particularly functional. However, they learned valuable lessons toward teamwork - watching each other in order to maintain the proportion of the figurine, the style and techniques each one used. I found that those with little or no artistic background quickly developed new techniques, and those with strong artistic backgrounds held back their creative urges for the sake of continuity of the project. The final product was used as a prop for their "Great

Given: Four 3" nails with heads, 5 labels and 100 straws.

Build a structure to hold straws. If a straw touches the table, deduct 5 points.

Score one point for each straw not touching the table.

Given: One very large rubber band (suggest industrial size).

Team members are numbered one through five. When time begins, team members "flip" the rubber band onto the floor, and say something about the shape (pictured image) the rubber band makes when it hits the floor. The team member closest to the rubber band picks it up, flips it and responds. All team member must have a turn before responding during the next round. Creative responses are valued.

Should team members forget who has not participated in a given round, they are penalized five points.

Given: With a lump of clay, create a bust of a famous composer (without words).

Your team must devise a way for each team member to sit on another team member's lap, at the same time. You may not touch anything in the room, besides the floor, with your feet. You may not touch your fellow team members with your hands during your solution of the problem. This is a non-linguistic problem. (Team members may talk during a 3 minute discussion time, but not during the execution of their solution.)



CPS Practice Exercises

Scoring: 1-10 points should be awarded for excessive creativity and teamwork. A successful solution may be given a bonus of 25 points.



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861 - 870

Given: A 4" x 5" piece of aluminum foil, a tub of water and a pile of pennies.
Use the aluminum foil to build a boat to hold as many pennies as possible.
You have 5 minutes to build and test the boat and to see how many pennies the boat will hold before it sinks.

Given: Different color markers and a large sheet of paper.
Each team member is given a different color of marker. On the large piece of paper, team members, in a circle, take turns adding onto the drawing of the person before them. After time stops, team members that participated can make creative comments about the teams' masterpiece.

Given: One container of Playdoh, 3 toothpicks, 1/2 straw, 2 marbles, 2 pipe cleaners, 12 mini marshmallows and 1-4' square of cardboard.
Build a unique animal. It must fit on the 4" card. Each team member will build onto the story of why this animal is unique. 0-10 points are awarded for the animals movement and how it relates. Give one point for a common answer and 3 points for a creative answer. You have 4 minutes to discuss and build and 2 minutes to respond.

Given: Poster board, 5 pieces typing paper, 3 mailing labels and scissors.
Build a single structure which stretches from edge of the poster board to the other edge. You have 5 minutes to discuss and build. The structure will be measured at the end of the 5 minutes. The team will receive 2 points for every inch of length. You will be penalized 5 points for every inch of structure off the poster board.

Given: Ten pieces spaghetti, 2 straws, one mailing label, 1 - 8 1/2 x 11 sheet of paper, 2 - 3' x 5" cards, 4 toothpicks, 1 - 12" piece of string, 2 cotton balls, 20 saltine crackers and 20 rigatoni pasta.
"Bridging the Gap" Make a long span structure on a table with the materials given that will support the crackers and pasta for extra points. You have 5 minutes to build a structure having only two vertical supports. The structure will be measured at the end of the 5 minutes. The structure length will be measured between the furthest unsupported span of the structure as measured parallel to the table top. For each one inch of structure length between the two supports, the team will earn 3 points. For each cracker and each rigatoni supported off the table the team earns one point. Any crackers or rigatoni supported more than 2 inches off the table will each earn 2 points.
A penalty of 5 points per word will be given if you talk during the problem.

Given: 25 tennis balls, 1 - 8 1/2" x 11" sheet paper, 4 rubber bands, 2 mailing labels,



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CPS Practice Exercises

136" piece of string, 2 paper clips, 2 toothpicks, one balloon and one cotton ball.
Make a structure or structures out of the 25 tennis balls and the materials given.
The team has 5 minutes to discuss and make a free standing structure. The structure must stand for at least 15 seconds after the 5 minutes. Points will be scored after the 5 seconds of stand time. Each tennis ball supported 2" above the table is worth 5 points. Bonus points: 1-10 points for creativity and 1-10 points for team work.

Given: Four student desks, 1-12" pieces of string, 25 blown up balloons, and 4 self stick labels.

Your team has 3 minutes to stick all the balloons to the desks. They may not touch the floor at any time.

Given: Five small lumps of clay and 15 toothpicks.

Give each team member a small lump of clay and 3 toothpick. Make something using some/all of the items. Be creative!

Given: 25' of string, 4 paper clips, 4 straws, 50 cotton swabs and a bucket with a handle.
How many cotton swabs can you get into the bucket from 10 feet away?

Given: A spoon, wood ruler, paper cup, keys, pencil, 2 marbles and a sheet of paper.
In front of you are 6 different colors of construction paper. A bowl of M&M's are on the table. Using the items listed above, the team is to develop a non-verbal communication scheme by which one or more team members will direct the others to put various color M&M's on the same color papers. Coaches: Dream up any color/M&M patterns you wish.

Scoring: One point for each correct M&M, 10 points for each paper that is totally correct and 100 point bonus if all are correct. Feel free to eat the evidence!



871 - 880

Given: A deck of cards and a box of Cheerios.

Build a structure with the cards that will support as many Cheerios as possible.
Points awarded for height, creativity of structure and number of cereals held .

Given: One little square sponge, 4 nails, 2 paper clips, one round magnet, and one 3" x 4" piece of cardboard.

Build the tallest structure using all the items given. You have one minute to think without playing with the objects. After the one minute you will have 5 minutes to build your structure. When you are finished, if time is not up, you can say stop and get 15 points for every minute of time left. You get 10 points for every inch you have built.

Given: Two "twisties" for garbage bags, 12 miniature marshmallows, 8 toothpicks, 3 straws, one regular size envelope, one paper plate, one paper towel tube, one ping pong ball and one can shaving cream.

Cover the table surface. The team has 5 minutes to discuss building the best possible structure that will support a ping pong ball on top of the envelope at the top of the structure, and 2 minutes to assemble it.

Coach hint: If they ask, they may tear apart or break any of the items, and the envelope flap can be torn off and licked.

Given: One 5' x 5" piece of cardboard, 5 straws, 12' of @pe and a pair of scissors.

Build a structure that must be at least 6" tall. Points are awarded for each inch over 6 inches. All materials must be used.

Given: Two paper towel rolls, 8' square of cardboard, 6 sheets tissue paper or construction paper, 3 - 1 foot strips of tape and scissors.

Create an animal, give it a name, habitat and traits.

Given: One ball of clay and 2 straws.

Construct as many items as you can from the materials given.

Given: Roll of toilet paper, straws, glass of water and marshmallow creme.

Build a structure high as possible.

Given: Two pictures from magazines of desolate, barren or industrial areas. For example an unclaimed strip mine.



CPS Practice Exercises

Act as travel agents and describe these locations as "vacation paradise" detailing attractions and amenities.

Given: One ping pong ball, 6 rubberbands, 4 alka seltzer tablets, one pair scissors, 2 straws, one roll of masking tape, one balloon and 6 styrofoam cups.

Move a ping pong ball across a kiddie pool full of water, around a five gallon bucket and back to the starting point without getting wet or coming in direct contact with the ping pong ball.

Given: Two straws, one tennis ball, a snorkel mask one foot of masking tape 20 toothpicks, 2 envelopes, and one square foot of hot pink poster board.

Use the items given to create your own original invention to help society. . You will be given points for creativity, how much the invention will help society and teamwork. You must be able to explain the invention, how it helps and how it works Up to 10 bonus points will be given for a creative title for the invention. All the materials do not have to be used, but you are limited only to the items given. Destroying the materials is legal. You have 2 minutes to discuss and 4 minutes to build.



881 - 890

Given: 140 different varieties of wrapped candy or candy bars and a dark bag to put the 'Sweets for the Sweet' There will be no thinking time. You have five minute to respond. Each team member takes a turn pulling out one piece of cany at a time.

That team member will start a story and then pass the bag to the next team member who will continue the story by pulling out another piece of candy. Using the candy for what it is will be judged as common. Creative would be using the name, wrapper and any other writing in an unusual or creative way. Time is stopped after 5 minutes. It is OK to empty the entire bag before time is up.

ex: Team member pulls out a Hershey Milk Chocolate bar - "I lived in Hershey, Pennsylvania" or a Payday is pulled out - "Where I got paid today" or a Bar None is pulled out - "I went to spend it all at the bar".

Given: A 12" piece of string for each team member

Take turns creating something with the string and tell what it is.

ex: Shape a light bulb - Say 'A bright idea!'

Each: One good light bulb, one business envelope one rubber band one 8 1/2 x 11 sheet paper, one paper clip, 1 - 6" piece of tape and 1 - 12" piece of string.

The team is given 4 minutes to think and devise a method, using all or some of the materials given, to protect the light bulb from breaking when it is dropped from 'a height of 6 feet onto a brick. Note: the materials may be altered. The team receives 5 extra points if the light bulb still "lights" afterwards.

Set ten different objects in front of the team. Give them 4 minutes to discuss and organize a story or skit using as many of the objects as possible. At the end of the 4 minutes they are then given another 4 minutes to perform or present their story or skit.

Given: A deck of cards and 10" of masking tape.

Build as tall a structure as possible with the materials given. It must stand for a designated amount of time.

Given: A KitKat candy bar.

The team has three minutes to equally divide a KitKat candy bar, one section for each spontaneous team member. You are not allowed to unwrap the wrap. . After time has stopped each piece must be weighed for accuracy.

Given: Two napkins, 2 straws, 12 pop cans to be use as obstacles, tape, popsicle sticks and crayons.



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CPS Practice Exercises

Design and build a vehicle to go through an obstacle course of pop cans.

Given: A ball of string, marshmallows, coat hanger, 1 foot x 1 foot piece of aluminum foil, 2 pieces of masking tape and a sponge.

Using some or all of the given materials, design and build an instrument that will prevent or clean up pollution and explain how it works.

Given: Two identical sets of Lego's.

"Recreate a Structure" With one set of Lego's create a structure. The team then needs to create a verbal method of communication before splitting into 2 groups of 2 and 3 members. Place a wall between the two groups. A group on one side of the wall will have the original structure. The other group needs to recreate that original structure with the second set of Lego's using only verbal communication from the team members with the original structure. Scoring: 10 points for each correctly placed Lego and 10 points for teamwork.

Given: One tennis ball, 4 toothpicks, 2 paper clips, 2 straws, one sheet 8 1/2 x 11 paper and 2 rubber bands.

You have 4 minutes to discuss and build a device to hang a tennis ball. You may not pierce the tennis ball. At the end of your 4 minutes, the judge will hang your device from a door jamb or some other suitable place using a piece of masking tape.

You receive 5 points for every inch from the top of the device to the top of the tennis ball.



891 - 900

Given: Toilet paper tubes, straws and toothpicks.

Create a race track for a match box car. Suggest using a brick and a couple of pieces of wood as starting ramps.

Given: One sheet of paper and a pencil for each team member.

"Language Invention" Each team member is to make-up 3 words and write the definition for each made-up word. The team will receive points for creativity and originality. 0-1 points for poor words, 3 points for creative words.

ex: a "Donker" - a person who rides a donkey.

Given: Five large and 5 small marshmallows, 5 small pieces spaghetti, red hots, 10 toothpicks, pipe cleaners and icing (optional).

Build an animal, real or imaginary that will represent your team and your long term solution. Give it a name and describe it in one sentence.

Given: Bag of M&M's, and colored construction paper.

Blindfold one team member. The object of the team is to get the blindfolded team member to put the M&M's on the corresponding colored construction paper without using verbal clues. A method of communication must be worked out before blindfolding the one team member. The best part is - you can eat the M&M's when you're done and you have to use a whole bag!

Given: One package bendable straws, 3 adhesive labels, 2 rubberbands and 7 paper clips. Build a catapult out of the materials given. The device will then be used to catapult 3 objects (a penny, a paper clip, an eraser) toward a designated target 5 feet away from the presentation area. Score will be based on teamwork, creativity of device and marked scores on the target area. You have 10 minutes to build the catapult. No time limit for execution.

Given: One bag marshmallows and one box toothpicks.

Build a structure as high and as wide as possible with the materials given.

Structure will be measured by the height times half the width. You have 5 minutes to build the structure.

Given: Elbow macaroni, spaghetti, banana, orange slices and a piece of paper.

Team members must place one item on the paper while telling a story. Each piece may add a new dimension to the story.



Given: 1 " x 1 " piece of clay, 50 toothpicks, one deck playing cards, 100 pennies and one plastic cup.

Part One: Build a structure using the clay, toothpicks and cards. It must be as high as possible and hold the cup and pennies.

Part Two: Place the cup on the structure and place in the cup one penny at a time. You have one minute to think, 3 minutes to build and 2 minutes to put pennies in the cup.

Scoring: 2 points for every inch of height (not including the cup), 10 points if structure holds the cup, 1 point X every inch in height for each penny the cup holds (minimum of 3 seconds) and 1-15 points for teamwork.

Given: Blindfold, masking tape, a basket, various objects (pencils, ping pong balls, ruler, etc.)

Team members must design a non-verbal direction system to be used to guide one teammate, who is blindfolded, through a maze. The blindfolded team member must also pick up various objects and carry them to the finish area. You may use the basket for easier carrying. One team member must be chosen as the guide and may not pull or push the person in any direction or turn their body to face in any direction. You have 5 minutes to design the communication system and 5 minutes to go through the maze.

Judges only: Map out a course on the floor using masking tape, include several turns.

Place objects on the course to be retrieved by the blindfolded team member.

Scoring: 20 points for creativity - deduct one point for each object left behind, 10 points for quickness in completing the maze in 1-2 minutes, 7 points for 3-4 minutes and 5 points for 5 minutes. Point level and time may be adjusted for a larger course or more objects.

Given: Two strings or heavy yarn, 8 feet each, two plastic or styrofoam cups, 4 paperclips, one fly swatter, one one gallon container and 12 golf balls.

Mark two lines on the floor about 7 feet apart with the gallon container placed at the center point between them. The team has 7 minutes to discuss and practice their solution. The problem is to transport as many balls as possible to be emptied into the gallon container.

Team members must work from behind the marked lines. They may not step over the lines or touch the floor beyond the lines, however, they may reach across the lines. Two members must be on one side, three members on the other side.

Allow 2 minutes for the problem solution. You receive 5 points for each ball in the bucket.



901 - 910

Given: Three unopened tissue boxes of the same size, 6 - 8 1/2 x 11 pieces paper, 4 plastic drinking straws, eight paper clips, 12" masking tape and a pair of scissors. Using all or some of the materials given, build a structure as high as possible. The tissue boxes may not be cut or punctured. The time limit is 8 minutes. The final structure must stand for at least 5 seconds.

Given: Seven sheets of typing paper. Make a free standing structure as tall as possible. You receive 2 points for every inch in height.

Given: One action figure, one can - any kind, one ball string, 3 straws, one foot of tape, 2 index cards and one spoon.

You (the action figure) are trapped inside a deep hole. You find the given materials, build a vehicle and escape.

Given: Two pieces paper, 6 pieces thin spaghetti, 2" masking tape, one coffee canister, one billiard ball and an unlimited supply of nails.

Your task is to create a structure using the paper, spaghetti and tape. This structure must be able to support the coffee can and must be far enough off the ground that a billiard ball can be rolled underneath the coffee canister. The billiard ball is to be used for measuring purposes only. The team can gain points by putting nails into the canister. The more nails that are put into the canister, the more points the team gains.

You have just returned from a successful mission to the planet DI'ner. You discovered that the people there are illiterate, primitive and uncivilized.

Your mission is to **return to the planet DI'ner to create a new civilization and society.**

Your problem is to select 5 things to take with you on your mission.

You will be given 10 minutes to discuss and select the five items. Your team will then be given 3 minutes for each member to report on one item and why it was chosen.

Given: 50 rubber washers, 50 rigatoni, 50 small pretzel twists, 25 Q-Tips, an envelope containing: 1"x 1" piece clay, 2 drinking straws, 5 toothpicks, 1 mailing label, 1 sheet typing paper, 2 rubber bands, scissors.

In part one you will be given 4 minutes to discuss, develop a strategy and practice.

You may speak to each other during this time. In part two you will be given

3 minutes. You may not speak to each other at any time. **Your**

problem is to transport various items on Q-Tips to designated areas.

You may not touch the items with your hands. Also, during transportation, you may not touch the Q-Tips with your hands.



CPS Practice Exercises

You may not purposely alter the items. There will be three containers at various locations. Each container will have a boundary. You may not cross (by stepping) into the boundary area in order to place the items in the containers for points. If you step over the boundary, no points will be given for those particular items.

Scoring is as follows - Container One: 3 points per item, Container Two: 6 points per item,

Container Three: 9 points per item. Each used Q-Tip needs to be returned to the starting area

and placed in the discard box. For each Q-Tip placed on the discard box you will receive an additional point. You may not touch the Q-Tips with your hands in order to discard them.

You will also receive 1-15 points for teamwork.

Judges: be sure to give 4 minutes for part one. After part one ends, make the team stop and

replace the items and Q-Tips in the starting area. When the team is ready, begin part two.

Set Up:

Container 1: A 1/2 gallon plastic milk jug inside a 1 ft. square boundary.

Container 2: A 1 pound coffee can inside a 1 1/2 ft. square boundary.

Container 3: A 3 pound coffee can inside a 2 ft. square boundary.

Starting Line

Place items and Q-Tips out on table behind starting line.

Given: puzzle pieces

Team members **will use them to make abstract objects.**

This structure must be free standing and must be raised high enough to roll the billiard ball under it the entire time. The team has five minutes to plan their structure and two minutes to build it.



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