

ODYSSEY OF THE MIND



SPONTANEOUS PROBLEM SOLVING

SPONTANEOUS PROBLEMS

Verbal

Hands -On
Verbal

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VERBAL

In a **Verbal** spontaneous problem, the team is given a brainstorming-type problem to solve in a specific amount of time and scored according to the number and creativity of responses generated. The order in which members respond is usually random, and a higher point value is awarded for a creative answer than a common one.

Examples:

- Name uses for a jack-o-lantern after Halloween.
- Name things that are opposites.
- In what ways are a cloud and a spoon alike?
- If I were about to be operated on, I would not like to hear _____.

HANDS-ON VERBAL

In a problem that is **Hands-on Verbal**, team members are usually presented with an object, and asked to suggest or demonstrate its uses. The object is passed from person to person as they generate answers. Like Verbal problems, points are scored not only for the quantity of answers in a given amount of time, but also for the creativity of those answers.

Examples:

- Here are two paper plates. Tell or show how they could be used, or what they remind you of.
- Take this cereal box, and tell us something we didn't already know about it.
- Create a creature out of toothpicks and marshmallows, and say something clever about it.

HANDS-ON

In a **Hands-on** spontaneous problem, the team is given a task to perform in a short period of time. This task is non-linguistic in nature, that is, points are not awarded for what is *said*, but rather for what is accomplished. Teamwork figures heavily in the scoring, as do ingenuity and technical success in completing the task.

Examples:

- Using only an envelope, a mailing label, and a rubber band, the team must use them to stretch the farthest distance possible.
- The team is given a length of yarn and a basketball. Without cutting the yarn, they must devise a means of carrying the basketball fifteen feet without touching the ball with their hands.
- The team is given an assortment of everyday items and told to create a vehicle that will travel between two points.

TOO BUSY FOR SPONTANEOUS PRACTICE? THINK AGAIN!

It is common for new coaches to have their teams concentrate on the solution to the Long Term problem and put the preparation for the Spontaneous competition on hold. These same coaches are often surprised to find that, while their Long Term scores were about the same as other teams', the scores for the Spontaneous problem were vastly different. "If it hadn't been for Spontaneous," they lament, "we would have had a shot at going to the State Tournament." In fact, rather than the Long Term scores, *it is most often the difference in teams' Spontaneous scores that determines -which teams move on to the next level of competition.*

The abilities to solve problems as they arise, to brainstorm, and to modify the ideas of others without criticism are useful and important tools in themselves. These skills should not be taught and practiced strictly for the sake of the competition: However, as new coaches approaching the date of the Regional Tournament, we often ignore the fact that it is **an important part** of the Odyssey of the Mind competition. As such, we really need to prepare the kids for it.

As the time for the Regional Tournament approaches, the list of things that need to be done on the Long Term problem may tempt you to forego regular Spontaneous

practice. All coaches run into this dilemma at some time, and some have found ways to solve it.

- Some co-coaches designate one coach as the Spontaneous coach, and one the Long Term coach. That way neither one becomes overwhelmed, and the kids work on both with good results.
- Some teams begin the season with **two regular weekly meetings**: one is always devoted to Spontaneous, and one is always on Long Term. Additional meetings are eventually added to work on the Long Term, but the Spontaneous meeting remains a fixture on the weekly schedule.
- Some teams practice Spontaneous one or more times per week before school in the morning. That way afternoon and evening meetings can be exclusively devoted to the Long Term problem.

The point is, there are ways to continue to work on Spontaneous without sacrificing work on the Long Term and vice versa. It just needs to be seen as a priority throughout the process.

Track Without Field?

Think of it in this way: Imagine that a track team only practiced its running events, and not the field events. At the meet, they are expected to compete in both. How well prepared would they be if they didn't practice both types of events? And even if they were the fastest group of runners the world has ever seen, **their team would not do well in the meet overall if they had neglected to practice the field events also.** In Odyssey of the Mind it is wonderful to have a terrific Long Term solution - but if your kids would really like to advance to the next level of competition, **they need to do well in the Spontaneous portion of the tournament also.**

PROCEDURES FOR SPONTANEOUS PROBLEMS

1. All team members report to the Spontaneous Holding Room, if one is being used.
2. When the team is called, all team members may go to the Spontaneous Problem Room.
3. Upon entering the Spontaneous Problem Room, a judge will tell the team members whether the problem is verbal, hands-on, or a combination.
4. The team members will be given one minute to decide which five team members will participate. (If there are only five, then all must participate.)

5. The non-participating team members may stay in special seats set aside for them in the room. If they choose to stay, they must remain quiet and serve as observers only.
6. Any interference from the non-participating team members will be penalized as follows:

Minor Infraction = -5 points (from raw spontaneous score) This will be given for inadvertent interference that does little or nothing to actually help the team. (This penalty may be given more than once.)

Intermediate Infraction = -15 points (from raw spontaneous score) This will be given one or more times for inadvertent interference that helps the team or one time for one instance of deliberate interference. If deliberate interference substantively helps the team or occurs more than once, a major penalty will be assessed in addition to this penalty.

Major Infraction = -35 points (from raw spontaneous score) or a spontaneous score of 0. (Cannot fall below 0.) This will be given for deliberate and repeated interference or for obvious help. (This penalty may be given more than once.)

These are all at the discretion of the judges.

If a coach does not choose to send all team members to spontaneous (either to the holding room or to the problem room), it is perfectly acceptable. There will be NO PENALTY for not sending more than five team members. However, if a team has only five or fewer team members, all must report.

REMINDER

1. To avoid congestion, only one adult may accompany the team members to the holding room.
2. If the turning cards' procedure is used, the team member responding **MAY NOT** turn the card until he/she finishes responding. The judges will stop any team member who does so and make him/her repeat his/her answer. Repeated offenses may result in an Unsportsmanlike Conduct Penalty.

Helpful Hints Regarding Odyssey of the Mind Spontaneous Competition

The purpose of the Spontaneous problems is to challenge the students' ability to "think on their feet." It is also used as a control against outside involvement. Teams are not allowed to rely on someone else's ideas and creativity to solve their long-term problems. Teams using outside assistance will be penalized. In spontaneous problems, teams are faced with a situation where they cannot seek assistance from others. Team members must solve problems under pressure and function effectively as a team.

The value of responses changes often. In some problems, they may be scored one (1) point for a common response and three (3) points for a creative response. In other cases one point may be awarded for common responses and five points given for creative responses. Yet, in other problems, zero may be scored for common responses, and one point for a creative response.

Some spontaneous problems involve hands-on or non-linguistic activities. Some long-term problems may be designated non-verbal for non-English speaking participants.

Scoring Spontaneous

As teams continue to work together, they will increase their speed considerably. Make up a scoresheet prior to the problem. This may be done simply by taking a piece of paper and dividing it in half with a "common" section and a "creative" section. As responses are given, indicate a mark in the appropriate section. After the time has run out, complete the score by awarding the appropriate points for the common and creative responses. Occasionally problems are given for fluency only and the total number is the score recorded. Allow students to evaluate their team members to help them recognize more creative responses.

Hints to Help Improve Spontaneous Scores

1. Listen carefully so you don't have to ask questions and waste valuable time.
2. Speak loudly and clearly. If a judge asks for a team member to repeat an answer it may take away from the score by using too much time.
3. Don't repeat former answers. This wastes time if the judge stops the team member.

4. *Never* argue with a judge. Time is limited... the team member may win the point but lose too much time in the process to make a difference.
5. Don't wait until your turn to begin thinking. Have three or four answers in your mind.
6. Don't speak out of turn. The judge will stop the team member and it wastes time.
7. Don't be slow.
8. Questions about instructions should be avoided if possible.
9. Don't elaborate answers unnecessarily. This can use too much time.
- 10.** Don't panic. Try to keep responses flowing and pass the turn on to the next team member. Even if you can only think of a common response, give it. Your team members may have a creative response to give.
- 11.** Unless prohibited by the judge's instructions, if an example is given by a judge a team member may use it. (It won't receive a very high score.)
12. Notice how long a minute of thinking time really is.
13. Enter the competition site with calm and confidence. A well-practiced team is very obvious to the judges.
14. Try to practice as many ways of answering as possible. Assign numbers, throw dice, turn cards, go in order... etc. Think of other ways team members might be assigned their turns.
15. If a problem is a "hands-on" type, try to budget your time. Allow enough time to think about various alternatives to solving the problem. Avoid long discussions or arguments over who is "in charge" or whose idea will be used.

BRAINSTORMING

Brainstorming is a group problem-solving technique named by advertising executive Alex Osborne. Before beginning to brainstorm with your team, it is important to review Osborne's ground rules:

Rule 1: Withhold judgment of ideas

An essential problem-solving skill is the ability to conceptualize freely. Conceptualization is the process that creates ideas. Nothing smothers the free flow of ideas like a sharp critical remark or harsh laughter from another person. Osborne wanted ideas expressed. He believed that a judgmental attitude would cause group members to be more concerned with defending ideas than with generating them.

Rule 2: Encourage wild ideas

It is easier to tame a wild idea than to think of one. Asking for wild ideas encourages group members to be imaginative. Placing a premium on that which initially seems far out encourages group members to expand their thinking.

Rule 3: Quantity counts

The more creative ideas a person or a group has to choose from, the better. It makes sense that if the number of ideas to be considered is greater, the chance of finding a really good idea is also greater.

Rule 4: Piggyback on the ideas of others

Participants are encouraged to build up or modify the ideas put forth by other team members of the group. (Creative people tend to be good listeners.) Alerting people to the possibility of combining previous ideas can open vast resources for most people.

Coaches Tips:

- Teach children to be good listeners. They will be better at problem solving if they listen to each other and to the directions..
- Discuss the problem again when time is up. Evaluate responses as to which responses were creative.
- Use a tape recorder to help you evaluate responses and pacing. Try snapping fingers and decrease time between snaps.
- Begin by working in pairs and recording the answers. Let each pair keep a record of the total number of responses. Take examples from their lists and brainstorm other ideas that could have developed from a single response.

When the kids reach the point where their first impressions are exhausted, teach them to adapt, combine and rearrange thoughts and thus to conceive new ideas. Use the Scamper Checklist, developed by Bob Eberle, to improve this technique.

SCAMPER TECHNIQUE

When the team has run out of responses, work with them on rearranging, adapting, and combining their thoughts to create new ideas.

- | | | |
|----------|--------------------------|--|
| S | Substitute | What could you substitute? What could you do instead? What would do as well or better? |
| C | Combine | What could you combine? What might work well together? What could be brought together? |
| A | Adapt | What could be adjusted to suit a purpose or condition? How could you make it fit? |
| M | Modify | What could be adjusted to suit a purpose? |
| | Magnify | Can you make it bigger, greater, stronger? |
| | Minify | Can you make it smaller, lighter, slower? |
| P | Put to other uses | How can you use it for a different purpose? What are some of the ways you can use it? What does it suggest? |
| E | Eliminate | What could you subtract or take away? What could you do without? |
| R | Reverse | What would you have if you reversed it or turned it around? Could you change the parts, order, layout or sequence? |



LET'S

BRAINSTORM!!!

Things you find in a garage
List things that are wobbly
List things that glow
List things easy to forget
Things in a bank
Things you take to the beach
Things that are white
Kinds of brushes
Kinds of rings
Things on a farm
List things that can hurt
List things that stretch
List spongy things
List difficult things to share
List things you wouldn't want to
List ways to grow
Things in a library
Things in your bedroom
Things that come in a pack
Things at a salad bar
Things that spread
Things that are sticky
Things you can smell
Things that are round
Things made of plastic
Things with motors
Things that are slippery

Things that come in: ajar, a bag, pairs
Things that float
Things that are soft
Things you have repaired
Things found in the kitchen
Things you do in the morning, night
Things made of glass
Things on the playground
Things in your desk
Types of chairs
Things needed for a trip
Household cleaning items
List uses for:
old cars
old clothes
old presidents
old televisions
old shoes
old records

Things you could hold in the palm of your hand
Things you could hold in a cup
Things that shake
Things found in a third grade classroom
Things you wear on your head
Things that can be heard

VERBAL SPONTANEOUS PROBLEM PRACTICE IDEAS

Uses for:

Trees
String
Light bulbs
Animal skins
Hats
A million bars of soap
Newspaper
Paper clips
Classroom tables
Plastic silverware

Kinds of:

Hands
Things that come out of a hole
Things which support something
Rings
Things that are square
Things that are hollow
Things that are hard
Things that are soft
Things that are tall
Things that are short

Situations:

Identify strange objects and/or pictures.

What is in a covered box?

I can't think of anything worse than...

How is a willow tree like an umbrella?

If Cinderella hadn't lost her slipper, how would the prince have found her?

Unusual ways to earn money for your class.

How sloths got three toes.

Answer is: *rough and scratchy*. Write the question.

Different ways to go to school.

Different ways to get students lined up for lunch.

Different ways to calculate size and weight of an unseen hippopotamus.

What would you say if a waiter spilled spaghetti on you?

Think of as many functions as you can for a wink.

If you could place only one thing in a house of glass walls to promote privacy, what would it be?

Imagine that overnight all the grass turned red. What would happen?

Other than in animals and humans, where else would you find teeth?

What are the attributes of: a school lunch box, a mushroom?

List things that:

Reflect

Are subtle

Are made more beautiful by age

Are white and edible

Are found in twos

Cannot be seen

Can get squishy

Are green and can't be eaten

MORE SPONTANEOUS PRACTICE PROBLEMS

- Name as many kinds of ___ as you can. (i.e. poles, rocks, giants, keys)
- Name as many different ___ as you can.
- Name as many uses as possible for this object, (show object) i.e. egg, teaspoon, tool
- Look at the object and say something about it. (i.e. toothbrush, golf ball, toy car)
- What would you say/ask if you were introduced to ___? (i.e. Medusa, the Pope, Elvis)
- You are in charge of planning a dinner for _____ and friends. What will you serve? (Dracula, E.T., Queen Elizabeth)
- Name as many springs as you can and tell what they'd be used for.
- Name as many people as you can who love things and tell what they love.
- Name things that repair other things and tell what they repair.
- Use the word ___ in as many ways as possible, (i.e. buy, two, see)
- Build: a house of cards or a tower of paper or a bridge of straws.
- Looking at an ad from a newspaper/magazine, respond to it with any comment that comes to mind.
- Name as many things as you can think of that change color.
- Using a proper name to begin with, add anything else to make it a recognizable thing, (i.e. Billboard)
- List games that two people can play.
- List things that are useless without its color.
- List things that cannot be fixed if broken.
- Name things that can be seen in the dark.
- List things that run out in an hour.
- Name things that have a least one right angle.
- What things can be recognized by their smell?
- What can you make using the materials you see n front of you? (rubber band, drinking straw, paperplate, paper clip, cardboard tube, 10" of string, toothpick, pencil, three colored circles)
- List uses for a rubber band.
- Name kinds of bottles.
- Compare a button and paper.
- Name uses for a sidewalk.
- Use the word "tail" in a word or phrase.
- Name all kinds of beds.
- List uses for toes or what toes can do for you.
- Combine a door and an ice cream cone.
- List all the uses for an umbrella.
- List all kinds of boxes.
- List all the animals you can think of that jump, swim, fly, wiggle, etc.
- What are the uses for two tennis ball halves?

STILL MORE SPONTANEOUS PROBLEMS

- If electric current could be carried on laser beams, name as many uses for the obsolete wire as you can.
- Using six pencils, make four equal triangles. Limitation: The angle of the triangle must be formed by the ends of pencils, not the intersection of pencils.
- Bag device: Each group is given a bag of materials. Each is to invent and describe "The Thirsies" using everything in the bag once. The group is given ten minutes to complete the task.
- List uses of chewing gum.
- Use the word "wheel" in a word or phrase.
- Using only your fingers, make as many different noises as possible.
- Use two cotton swabs and improvise uses or pretend they are something else.
- Name something that everyone needs one more of and convince us why.
- Make up three-syllable rhyming words (hinkety-pinkety)
- Now try four syllable words.
- Talk to a dollar bill. (How do you feel? Inflated?)
- Name the advantages of having trees, oceans, glass, friends, mountains, pets, fur, mosquitoes)
- Select a weather condition and make a statement as to when you want it to happen, (example -A blizzard to close school when exams are scheduled.)
- Name all the supports you can think of.
- Draw a squiggle and pass it on to a teammate who has to make an invention from the squiggle.
- Create a recipe for friendship cake or crabby casserole using eight ingredients.
- Statue: Strike a pose and make a comment.
- Look at a building or a house across the street and tell how you visualize that space is arranged inside number of rooms, furniture/equipment, interior design and decorating.
- Name uses for a watercolor marker.
- Use eight straws to construct a sculpture. Nothing else may be used.
- Incorporate numbers in words - two-faced, innate, three-fold, fourscore, etc.
- Give uses for a flower pot.
- Give uses for a piece of hose.
- Give uses for a Ping-Pong ball.
- Name things you might carry a grasshopper in.
- Name a cookie ingredient.
- Name a kind of dog (hot dog, watch dog, hound dog, dog face)
- Name a piece of equipment you would take camping.
- Name a word that begins with the letter "r".
- Name a game that can only be played outside.
- Give uses for a feather.

CREATING YOUR OWN SPONTANEOUS PROBLEMS

Take one or more items from the first column, choose a type of creation from the second, and choose an objective from the third.

"Stuff"	"Create a... "	"that... "
<p>paper clips toothpicks masking tape envelopes mailing labels play-doh string popsicle sticks pencil paper cup paper bowl styrofoam cup</p> <p>paper plate paper bag spaghetti, macaroni, etc. marshmallows cheerios</p> <p>toilet paper roll egg carton tin foil empty shoe box rubber band empty film canister empty cereal box ruler</p>	<p>vehicle container tool device new product article of clothing creature toy piece of furniture bridge structure utensil</p> <p>student survival kit teacher survival kit wilderness survival kit item of the future ancient artifact</p> <p>protective covering for hands feet, head, an egg, . an ornament eating utensil work of art new invention shelter for a _____ carrier</p>	<p>will move feet will support weight will propel ping pong balls ? .feet will stretch as far as possible every teacher should have every student needs every Odyssey coach needs every Odyssey team needs will remove leaves from you lawn will rid your house of pests will protect an egg from breaking will transport golf balls from point A to point B</p> <p>will maneuver an obstacle course will hit a target ___ feet away will do your homework for you is guaranteed to wake up someone is guaranteed to put someone to sleep will amuse a baby will detect intruders will clean your room for you can change the oil in a car will cure a disease will set off fireworks</p>

SOME SPONTANEOUS POINTS

1. Don't use a quiet voice if a judge asks you to repeat an answer. It may take away from the score by using valuable time.
2. Don't duplicate a former answer. This wastes time when the judge has to stop the team.
3. Don't argue. It wastes time. Even if you win the argument, you may have used too much time.
4. Don't wait until your turn to begin thinking. Have three or four answers ready to go.
5. Don't speak out of turn. The judges will stop you and not score the response.
6. Don't ask questions about instructions unless they are necessary to understand the problem. This comes off thinking time.
7. Don't elaborate on the answers unless elaboration alters the category (common or creative) of the answer.
8. Don't try to think of a creative response when you already know a common one. Even if you can only think of a common response, give it. Your team members may have creative responses.

Hints for Verbal Spontaneous Problems

1. When you are stuck, look around you for ideas, i.e., Michael's shirt has an "alligator" on it, the judge's hat looks like a "raccoon," the blackboard is green like my "snake," etc.
2. Do not waste time trying to come up with the cleverest answer, use a common response if that's what you have ready. The time spent in trying to be clever is rarely worth it with the extra points received, i.e., if one spent five minutes to come up with a three-point answer, that's at least 27 points less than the 30 points the team could easily have made with common responses, "Strategy."
3. Practice, practice, practice. When done with a problem, spend some time thinking of the clever responses you couldn't think of during the time allotment. Make helpful suggestions, this way the team gets to alter their way of viewing objects (nonlinear thinking) in a pressure-free environment.
4. If it's a young group, I liked this one for amusing my own children: using a writing surface (one of those "Magna Doodle" things work great and wastes less than paper) have someone draw a doodle. The next person has to change the doodle into something else. Very complicated doodles serve no useful purpose here and tend to wreck the game atmosphere. A triangle can become a bird's beak, a half-circle a turtle, a bunch of polka dots a bunch of flowers, etc. Really gets the creative juices going and no particular talent in art is necessary.
5. Mixed team of older kids: get three tools and put them on the table. Come up with mechanical problems from your own life and ask the team to come up with ways to fix the problems. Can get VERY interesting - how to fix a sticky lock with a hammer, a saw and a nail?
6. Basically it still comes back to practice. The practice should be as varied as possible, including both practice problems done tournament style and other exercises which stimulate divergent thinking in as many different ways as possible. Make sure the kids understand that these games can also be applied in competition. Instead of drawing a squiggle, they can be seen in the folds of clothing, lines of a drawing or print, outline of the windows, etc. Tools can become the items in the room, problems could be whatever needed maintenance they've seen since their arrival or at home, etc.
- 7) Spontaneous Rules
 - Listen! Watch the judges' lips as they read the rules. Concentrate!
 - Expect the unexpected!
 - Evaluate Quality vs. Quantity
 - Listen to the instructions and ask questions if you don't understand something.