Project Adventure
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GeoCrossing

Item #12737

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Dear Project Adventure Customer,

Congratulations on purchasing a Project Adventure GeoCrossing! We are excited to have the opportunity to introduce you to this product. If you are familiar with the activity called the Spider's Web, the GeoCrossing may appear like a 3-D version of that classic. As you get to know this portable initiative, you will see it can be much, much more! We are confident that you will find this exciting prop an excellent addition to your curriculum.

Enclosed you will find an activity guide that outlines four different activities to do with your GeoCrossing. Use this guide as a starting place for creating activities that will fit the unique needs of your groups.

Important Safety Information:
Several of the GeoCrossing activities involve advanced spotting. The activities should be attempted with groups that have had previous spotting experience, been brought through a carefully taught spotting sequence, and have successfully demonstrated the ability to be effective spotters.

Assembly:
When assembled, GeoCrossing looks like this:

Procedure for assembly and balancing:

- Lay out two end pieces into their full square position. These pieces have an internal bungee cord for easy assembly and take-down.
- Attach the eight (8) short pieces together in pairs to make four (4) side pieces. Attach the four (4) side pieces to the squares assembled in Step 1. Depress the metal button at each junction. Make sure the buttons are aligned with the holes at both ends of each of these four pieces.

- By adjusting the angle of the GeoCrossing, find a position that balances the GeoCrossing on its base. Start with centering the corner joint in the middle of the base.
- If you cannot balance the GeoCrossing in the base, you can hang it from a basketball hoop with a rope or you can put a small weight (beanbag, book, etc.) on top of the corner joint in the floor base.

NOTE: Please keep GeoCrossing away from excessive heat as it may cause the plastic to warp.

Enjoy the GeoCrossing! Please contact our Customer Service department with any questions at (800) 468-8898 Ext. 4556 or visit us on the web at www.pa.org.

Activity Name: Space Portal

Type: Problem Solving – Transport
Group Size: 15-30
Time Frame: 45 minutes – 1 hour

Skills: Problem Solving
Leadership
Effective Spotting

Materials: The GeoCrossing, assembled

Briefing:
"Your group has been traveling through space for many months. You have decided that it is time to return home. The structure that you see in front of you is a portal that will return you to planet earth. For all of you to return safely to your homes, each of you must pass through the portal in a different way."

Procedure:
1. The goal is to pass all members of the group through the GeoCrossing without touching the structure.
2. Once a person has passed through the GeoCrossing, they are encouraged to actively spot and support people as they pass through.
3. A valid pass is defined as: in through one side and out through a different opening.
4. Unlike the Spider's Web, each opening of the GeoCrossing can be re-used BUT, each person who passes through the GeoCrossing must take a different route. Going through a

side or a combination of sides in a different direction counts as a new route. For example, given that there are six sides to the structure, if a person enters through side 1 and exits through side 2, another person could enter through side 2 and exit through side 1. These would both be legal moves.

5. Spotters and people being passed through may not touch the structure.
6. If any person touches the GeoCrossing while a person is being passed through, the person who was being passed through must make another attempt.
7. Spotters may step inside the GeoCrossing to spot group members who are being passed through the structure.

Suggestions for Debrief Questions:

- How did the team approach the task? Did the team create a workable plan, and was it implemented?
- How did the group keep track of the combinations that had been completed?
- How were group members supported during this activity?
- If you did the activity again, what would you do differently?

Instructor's Notes:

- Getting the GeoCrossing to balance can be a challenge! Once it is balanced, it is actually fairly secure. It may be hung from a beam or a rafter instead of being balanced on the floor.
- Keep in mind the concepts of Challenge by Choice™ and offer alternative roles for group members.

Variations:

- Create consequences for touching that are appropriate for the group. The consequence listed above may be too difficult, or too lenient depending on the readiness of the group.
- Consider placing colored dots or numbers on the different sides of the GeoCrossing. This would allow group members to enter and exit the structure based on a given color or number sequence.

Safety Considerations:

- Effective spotting skills are essential in this activity. Prep the group for being good spotters with an appropriate sequence, similar to preparing for the Spider's Web or Porthole activity
- Do not allow any diving through the GeoCrossing
- Make sure that spotters are attentive throughout the entire passing of a student through the GeoCrossing
- The GeoCrossing must be located in an area where the ground is free of obstructions and hazards.

ACTIVITY NAME: GeoTwist and Turn

Type: Problem Solving
Group Size: 12-18
Time Frame: 30-45 Minutes

Skills:
- Effective planning
- Multiple roles and responsibilities
- Communication
- Balance

Materials:
- The GeoCrossing, assembled
- 50 feet of rope

Briefing:
"This rope represents all that you have in common as a group: your values, your goals, your wishes and dreams. This structure represents all the tasks and problems your group will face. To be successful in this activity, you must weave the rope throughout the GeoCrossing. This will represent your ability to confront tasks by leading with all that you hope to achieve."

Procedure:
1. Have the group stand in a circle around the GeoCrossing. Hand the rope to the group.

2. Explain that the challenge is for the group to thread the rope through the GeoCrossing in as many combinations of openings, entering and exiting the rope through the different sides of the structure, in _____ minutes.
3. The rope must pass through as many combinations of GeoCrossing openings to complete the task. The rope needs to be entirely off the floor before the group begins the problem. See "Procedures" for previous activities for clarification on the definition of combinations.
4. When the rope is passed through the first opening, no more than 3-4 feet of rope can be passed through at one time.
5. Once the 3-4 feet of rope has entered the structure, the rope must be passed back through a new opening. In other words, no more than 4 feet of rope can accumulate on one side before it is passed through another opening.
6. The rope may not touch the GeoCrossing frame. If a touch occurs, the leading end of the rope must move backwards through three openings, and then it can start moving forward again.
7. If a person touches the GeoCrossing, the rope must start again from the beginning.
8. After the time has ended, determine the number of combinations through which the rope has been successfully passed. Attempt another round; try for more combinations within the same amount of time.

Suggestions for Debrief Questions:

- What factors contributed to the group's success? What factors limited the group's efforts?
- What type of support was needed to accomplish the goal? How did you provide this support to one another?
- How effectively did the team communicate? What were some examples of effective and ineffective communication that occurred?
- What are the qualities that connect you as a group? What goals to do you have? How do these things help your group be successful?

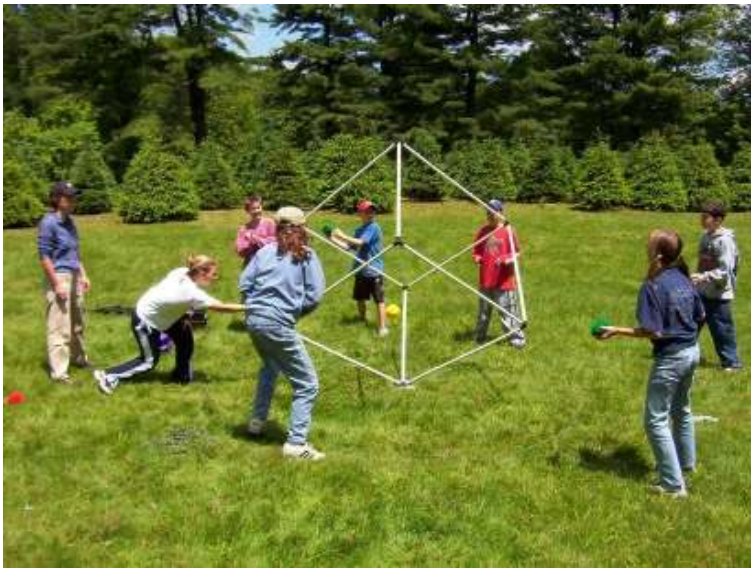
Variations:

- Create consequences for touches that are appropriate for level of the group.
- Take away the time component and create a rule that challenges the group to successfully complete a certain number of combinations without any touches (or with less than a given number of touches).
- To increase the communication challenge, ask half the team to close their eyes or put on blindfolds.
- Consider placing colored dots or numbers on the different sides of the GeoCrossing. This would allow group members to pass the rope through the structure based on a given color or number sequence.
- Allow the group to create their own goal!

Safety Considerations:

- Be aware of participants' body positions. Holding still for an extended period may cause discomfort, so allow for breaks as appropriate.
- Do not allow the rope to be wrapped around necks.

Activity Name: GeoJuggle



Activity Type: Problem Solving-Timed Event
Group Size: 12-16
Time Frame: 30-45 Minutes

Skills:

- Planning and organization
- Decision making
- Communication
- Throwing and catching

Materials:

- The GeoCrossing, assembled
- Juggling objects (about 15 fleece balls)
- Boundary Marker
- Stop Watch

Briefing:

"Welcome to the Very Special Manufacturing Plant. At this factory, we produce very exciting and interesting objects. We take time and care in creating our products! Each product must be taken through many stages of the manufacturing process. As workers at this factory, each of you has a unique job. Each of you must have a moment, even if it is brief, with each product before it can be distributed to buyers. We also strive for efficiency at this plant; therefore, all products must be worked on as quickly as possible. Finally, we have very high quality control standards. Because of this, there will be penalties if any of the following manufacturing guidelines are broken!"

Procedure:

1. Position the boundary marker around the GeoCrossing. The outside of the circle should be approximately two feet away from the GeoCrossing.
2. Position the group in a circle around the GeoCrossing, outside of the boundary.
3. Place all of the objects on one side of the GeoCrossing.
4. Explain that the goal is to pass each object back and forth through the openings of the GeoCrossing until each person has thrown and caught it once.
5. The passes must always occur through the GeoCrossing (a person may not pass an object to someone on the same side of the GeoCrossing or over or under the structure).
6. Explain that no one may stand or touch the ground inside the "zone" outlined by the boundary marker during each round. Any touch inside the zone adds ten seconds to the group's overall time.
7. Objects being passed may not touch the GeoCrossing. Each touch adds five seconds to the group's overall time.
8. Any object that touches the ground is lost and may not be reused until the next round. For every object that touches the ground add 20 seconds to the group's time.
9. Before timing a round, it may be helpful to give the group planning time in which to create a pattern for passing the objects so that each person catches and throws it. The pattern can change, but every person must catch and throw for a solution to be acceptable.
10. When the last person receives the object, they place it on the ground (or in a container) to complete the transaction and finish the cycle for that object.
11. Once the last object has been received and put on the ground, the problem is finished.
12. Do several rounds with the objective of juggling all the objects in the shortest time possible!

Suggestions for Debrief Questions:

- What, if any, factors limited the group's ability to perform at world-class levels?
- How effectively did the group organize itself? What worked? What didn't?
- What key insights from this activity would the group want to bring to its next project?

Variations:

- Adjusting the distance of the boundary marker from the structure can impact the degree of challenge. Move it closer or eliminate it to make the passing easier.
- Add in other objects to be passed to make it more interesting. Bigger objects increase the likelihood of a touch, while smaller objects are more difficult to catch.
- Increase or decrease the number of objects to vary the level of challenge.
- Consider having the group set a goal for time AND the number of objects successfully transferred through the GeoCrossing.

Safety Considerations:

Be sure to use tossable objects that are soft, such as fleece balls.

Activity Name: 3-D Pathways

Activity Type: Problem Solving
Group Size: 12-16
Time Frame: 30-45 Minutes

Skills:

- Planning and organization
- Decision making
- Communication
- Support and trust

Materials:

- The GeoCrossing, assembled
- Paper and pencil
- Noisemaker (Rattle or something similar)
- Established path through the GeoCrossing

Briefing:

"As a group of highly-trained computer programmers you have been given the task of debugging one of the world's largest computers. To debug it, you must discover the correct sequence of steps."

Procedure:

1. Explain to the group that the task is to figure out the path through the GeoCrossing. Let the group know that you know the path that they must take. The objective is to find the path through the structure so that you can get one person safely through the pathway from entrance to final exit. Initially, there will be a total of eight moves.
2. To learn the correct path, one member of the group must choose one the six sides of the GeoCrossing through which to enter the structure. As soon the attempt is made, you will receive feedback telling you if it is the correct way to enter the structure. There will be no response if the step is correct. I will shake a noisemaker if you have entered through an incorrect opening. There is no penalty the first time you enter through a wrong opening.
3. If a mistake is made, you must leave the structure exactly the way you came in. If you do not, there will be a penalty. The penalty is that I will add another step to the final solution.

4. If a correct move is made upon entering the structure, the person should make another forward movement, by attempting to exit the structure through any opening. Again, if the move is correct, no sound will be made.
5. After briefing, group members may position themselves anywhere around the structure to assist the person in the structure. Assistance includes spotting: some of the required paths may involve passing someone. No verbal or written communication is allowed with the person on the pathway while they are on the path itself (unless there is an immediate safety concern). Nonverbal communication is allowed.
6. The group will rotate turns so that no person enters the structure for a second time until everyone has entered once.
7. When a participant exits the pathway and the next person enters, he/she needs to be careful not to duplicate past mistakes. If a mistake is made for the second time, however, there will be a penalty of an additional step added to the final solution. Remember that it is the sequence of openings, not the opening itself, that is the mistake. The opening that you have been penalized for may still be part of the solution when entered or exited in the correct sequence and/or direction.

Suggestions for Debrief Questions:

- Was your group successful in debugging the computer? What factors contributed to your success? What factors limited your success?
- As a group, were you able to learn from your mistakes? Why or why not?
- What support did you receive during this activity? What support did you provide?

Instructor Notes:

- When planning the group's route, consider the readiness of the group. Not only will the total numbers of moves affect the challenge level of the activity, so will the combination of entrances and exits. Think about the spotting involved when planning a route. Some routes will involve considerably more or less spotting.

Safety Considerations:

- Refer to the safety considerations for the activity GeoCrossing.

Variations:

- Allowing a group to use paper and pencil to track the progress of the group could be helpful.
- Consider placing colored dots or numbers on the different sides of the GeoCrossing. This will help group members remember the paths they have chosen and make it easier for the facilitator to keep track of the group's progress.