

Math Adventures in Team Building

Building Community in the Classroom

Concept: Geoffrey R. Lorenz

Author: Bonnie J. Krueger

Editor: Deborah Kopka

Book Design: Brenda J. Knowis

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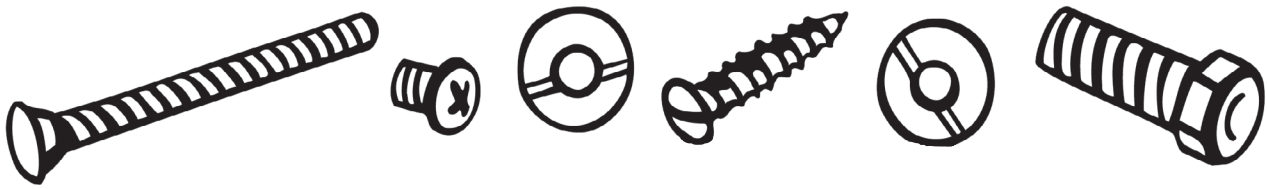
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Backwards Math

Materials Needed:

- Photocopied and cut out set of the Number Cards, page 46, for each team

This activity allows students to use their reasoning skills and generate their own math problems. Divide the students into small teams, and provide each team with a complete set of Number Cards. Station the teams around the classroom.

There are several ways to proceed with this activity:

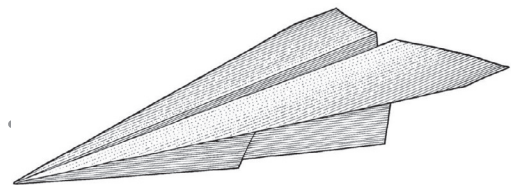
1. Call out a number. The team members work together, using their cards to come up with an equation that equals the number called. Each card can be used only one time. Encourage the teams to combine Number Cards to create a larger number (for example, the 2 card next to the 3 card = 23) or use more than one operation ($2 + 3 - 1 = 4$). Remind the students that they need to have the answer as part of their equation.

2. Call out only the numbers of a simple equation (in their correct order). The teams use these numbers to decide which cards make the equation correct. For example, if the numbers announced are 3, 6, and 9, the teams decide that the equation should be $3 + 6 = 9$. Make this activity more difficult by using multiple operations in the same equation.

Paper Airplanes

Materials Needed:

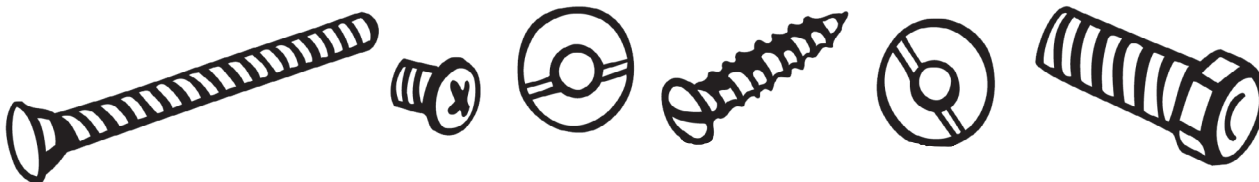
- One piece of paper large enough to be folded into a paper airplane for each student
- Crayons or markers for each team
- Masking tape or colored tape



What student doesn't love to make paper airplanes? This activity encourages the folding, decorating, and flying of paper airplanes, all while learning useful classroom material.

Divide students into teams. Demonstrate for students how to fold a paper airplane. Have each student fold one paper airplane to add to his or her team's fleet. Encourage students to decorate their planes so they can be identified easily. Clear the center of the room to create a runway for the airplanes. Have the teams gather at one end of the room. Mark a take-off line on the floor with tape at this end of the room, and have all students complete a "test run" of their planes before beginning the activity.

Ask the first team a question, such as a math problem or science question. Give the team a few seconds to decide on an answer to announce to the class. If the answer is correct, one member of the team launches his or her airplane from the take-off line. Now ask a question of the next team, which also selects a teammate to fly a plane if the team answers correctly. The team with the airplane that flew the farthest wins a point for the round. The activity continues with the first team being asked another question, allowing another team member to fly his or her plane. The activity ends when all of the airplanes have been flown.



It's Time For...

Materials Needed:

- Photocopied and cut out set of the Clock Cards, page 43

This activity helps students learn to tell basic time and relate time to their daily lives. Divide the class into small teams.

Select one card from the set, and show it to the teams. Announce whether the time that appears on the card is AM or PM. The goal of the activity is to have the students think about the different events that often happen at the time. For example, if you show the 6:00 PM card, one team might say “dinner time,” and another team could follow with “homework.” An answer such as “breakfast” or “going to school” does not make sense for the time on the card and would therefore not be accepted. Every team that gives an appropriate answer receives one point.

At the end of each round, discuss the answers with the class. What other times might people eat dinner? What might make them eat dinner earlier or later than 6:00 PM? Is it light or dark outside at 6:00 PM?

After all teams have had a chance to give an answer for the first card, move on to the next card. Continue in this way until all cards have been shown.

Blind Shapes

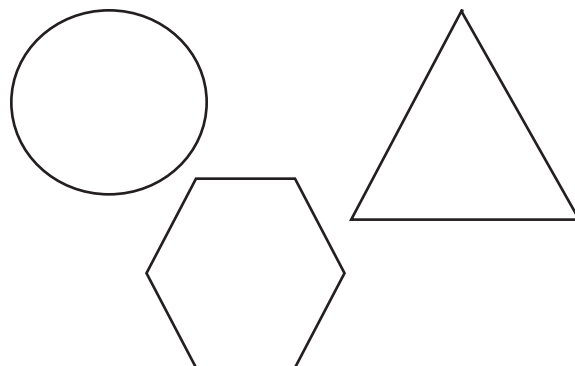


Materials Needed:

- None

The class might have a firm grasp on drawing basic geometric shapes, but can they make shapes (1) using their own bodies, and (2) with their eyes closed? Divide the class into groups of three to four. Instruct everyone to close their eyes and hold hands with their group members.

Announce a basic shape, such as square, circle, or triangle. The groups must work together to create the shape (while standing) using their arms. Encourage the students to talk to each other about the properties of the shape, such as its number of sides or angles. It might be a good idea to initially recommend that the groups pick a leader to help give directions. Give the students a fair amount of time to work on their shapes—it's much more difficult than it seems! After the groups have finished, tell everyone to open their eyes and see each shape that was formed.



To increase the level of difficulty, select larger groups of students or announce more complex shapes.

0	5	+
1	6	-
2	7	=
3	8	\$
4	9	.