

# Saving Sam

## This activity can be used to:

- help you get to know your students at the beginning of the school year;
- allow you to observe how they work together in teams;
- informally introduce your students to the scientific method;
- foster problem solving and cooperative learning skills in the classroom



## Setting up the scenario:

Instruct your class to break up into pairs. Hand out these materials to each pair:

- 1 gummy worm — *this represents Sam*
- 1 gummy Lifesaver® or similar — *this represents Sam's life jacket*
- 1 cup — *this represents Sam's boat*
- 2 paper clips

Tell your students:

*Sam is stuck on a boat and he can't swim! His boat has capsized and Sam is in trouble. He needs to retrieve his life jacket from underneath the boat so that he can safely float to shore. You and your partner's job is to save Sam by retrieving the life jacket from under the boat and putting it on Sam. Unfortunately, the only tools you can use to accomplish this task are your paper clips. You may choose to use one paper clip per person, or you can opt to let one person use both paper clips at the same time.*

**REMEMBER:**

**You cannot touch Sam, the boat,  
or the life preserver with your bare hands.**

Note: As a “fun fact,” you may want to mention that worms are hermaphrodites. This means that technically, Sam is both a boy and a girl—which makes the name Sam rather appropriate!

## **Discussion Questions**

1. How did you and your partner figure out how to save Sam?
2. Would it have been easier if you were working alone? Why or why not?
3. Was there a clear leader in your group? Did someone call the shots or make decisions about how to save Sam?
4. Could Sam be saved if you had only one paper clip?



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