



LIFESAVER® RELEASE

It's one thing to send a piece of oceanographic equipment to the sea floor and quite another to get it back! Scientists send equipment to the sea floor to collect information. In fact, scientists send equipment to the sea floor to study tsunamis. After two years, scientists must get the equipment off the sea floor to service it. When they send a sound signal to the equipment, it releases from the anchors on the sea floor and floats to the surface. When equipment will be on the sea floor for a shorter amount of time (less than an hour), some scientists use a sugar release instead of a sound signal to collect their equipment.

Create a sugar release to retrieve your scientific equipment!

Materials:

- Lifesavers®
- Thread
- Metal nut (this will be your anchor)
- Packing peanut (this will be your float)
- Paperclip (this will be your expensive piece of equipment that you will retrieve)
- Large pitcher of water
- Watch or timer
- Pencil
- Paper

To Make Your Equipment:

1. Cut a piece of thread that is about 5 inches long.
2. Put one end through the hole in the packing peanut and tie a double knot. Tie the other end to the paperclip (this is your equipment).
3. Cut another piece of thread that is about 5 inches long.

4. Tie one end to the metal nut (this is your anchor) and tie the other end to the Lifesaver[®].
5. Cut another piece of thread that is about 5 inches long.
6. Tie one end to the paperclip and tie the other end to the Lifesaver[®].
7. Now your equipment is ready to go!

To Test Your Equipment:

1. Make a hypothesis (guess) about how long it will take for the Lifesaver[®] to dissolve.
2. Write your hypothesis on your piece of paper.
3. Place your equipment into the pitcher of water and watch it sink.
4. Use your watch or timer to time how long it takes the Lifesaver[®] to dissolve in the water.
5. Collect your equipment when it floats to the surface!
6. How long did it take for the Lifesaver[®] to dissolve? Was your hypothesis correct?
7. Conduct experiments with different types of water (warmer or colder) to see if the time changes.