

## ***Biodegradable Packing Materials***

Perform an experiment on packaging materials to find out which ones are Biodegradable. Discuss your conclusions with your counselor.

Packing materials such as shredded newspaper or foam peanuts sometimes end up as litter along roadsides, or take up space in landfills. In this experiment for requirement 3.F.3, you can find out which packing materials are biodegradable.

### **Materials**

• Sand	• Garden soil
• Small shovel or garden trowel	• Strips of newspaper
• Foam packing peanuts	• Popped popcorn
• Small piece of plastic bubble wrap	• Labels and marking pen
• Tap water	• Four plastic bags and twist ties
• Ruler	• Measuring cup
• Magnifying glass	• Sheets of newspaper

### **Procedures**

1. Label the plastic bags 1, 2, 3, and 4.
2. Pour a cup of sand into each plastic bag. Then add a cup of garden soil to each bag. Carefully mix the sand and soil by squeezing the mixture in each bag.
3. In bag 1, place six small strips of newspaper.
4. In bag 2, place six foam-packing peanuts.
5. In bag 3, place six pieces of popped popcorn.
6. In bag 4, place a small piece of plastic bubble wrap.
7. Fill each bag almost to the top with garden soil. (Leave enough space to allow the bag to be closed with a twist tie.)
8. Pour half a cup of tap water into each plastic bag.
9. Close each bag with a twist tie. Place all four bags in a sunny window.
10. After two days, open the plastic bags stir the soil, add half a cup of tap water, and reclose the bags.
11. Wait 3 days, then empty each bag onto a sheet of newspaper and look for the packing materials in each. Use a magnifying glass to examine each material.

