

Garden Education from the Salmon Center

Decomposition Observation Bags Activity

Ages 8+



Overview: When a plant, animal, or insect dies, it is broken up into smaller pieces with the help of living things called decomposers. Once this material is broken down, it eventually becomes a part of the soil. This entire process is called decomposition. Decomposers can be worms, bacteria, or fungi. When decomposers eat dead things, they help the planet by getting rid of waste. The little pieces that are left over after they're finished eating also turns into soil. This gives soil lots of nutrients which other plants can use to grow and become strong.

Decomposition happens naturally on our forest floors and in our backyards, but we can also build a synthetic observation bag to observe decomposition taking place first-hand!

Essential Questions: How can once-living materials turn into soil? What helps aid in decomposition? What are the benefits of decomposition?

Materials:

- Clear plastic bag
- Kitchen scraps or garden debris
- Soil
- Optional: hay, wood shavings, paper shavings, cardboard

Start the Activity:

1. Begin with a brief explanation of decomposition (refer to overview).
2. Take pieces of plant materials, soil, and kitchen scraps that you collected and ask your student "What do you think will happen to all this material if we leave it to sit inside this plastic bag?"
3. Have your student help you place the materials into the bag and hang it somewhere where your student can easily view it over the weeks. Encourage your student to look at the bag daily and to write down or discuss their observations.
4. Throughout the weeks, ask your student "What kind of change do you notice?; Have you noticed this type of change before?; What do you think is creating this change?"
5. Watch and observe until most of the plant material is fully decomposed. Ask your student if they notice any material that did not break down completely. If so, ask them why they think this occurred.
6. Finish the activity by putting your newly decomposed soil into your garden or backyard!