

Name: \_\_\_\_\_

# Waste & Our World

Date: \_\_\_\_\_

## What Makes Waste Biodegradable?



Explore: Which Materials are Biodegradable?

### Question

How do we know that waste is biodegradable?

### Hypothesis

---

Below in the chart, predict which items are biodegradable and which are non-biodegradable?



### Skill Builder

How to write a hypothesis.

If you need to use this Skill Builder, access it from the online course.

### Resources

---

- trowel
- Popsicle stick
- box lid or tray
- magnifying glass
- data chart
- piece of each of the following:
  - Styrofoam
  - plastic shopping bag
  - cardboard
  - cotton fabric
  - lettuce
  - aluminum foil
  - apple
  - glass
  - paper

## Instructions

---

Before digging, ask an adult where to find a good location to bury your items for this experiment. **Do not dig up a flower bed without permission!**

- 1 Predict which items are biodegradable and which are non-biodegradable. Record your predictions on the **Data Chart** provided on the next page.
- 2 Find an area in your backyard where you can bury the waste items. If you constructed a vermicomposting bin earlier, you can use it for burying the items.
- 3 Dig a hole about 10 cm deep.
- 4 Place the waste items in the hole so that they are not on top of each other.
- 5 Cover the items with soil by filling the hole.
- 6 Put the Popsicle stick into the ground to mark the spot.

After two weeks:

- 1 Dig up the waste items very carefully.
- 2 Put the items on the tray so that you can examine them more closely.
- 3 Use the magnifying glass to examine each item for signs of decomposition.
- 4 Record your observations on the **Data Chart**.
- 5 Dispose of the items.

## Observations

---

### Data Chart

Waste sample	Prediction: Is the sample biodegradable or non-biodegradable?	Observations:	Did the sample show signs of being biodegradable?
Styrofoam			
plastic shopping bag			
cardboard			
cotton fabric			

lettuce

aluminum foil

apple

glass

paper

## Conclusion

---

Were your predictions correct about which items were biodegradable and which ones were non-biodegradable?