

#### **Directions:**

Bury several kinds of trash and food scraps in a small ( $\approx$ 5ft x 5ft) area. After two to three months, dig up the area to investigate what types of materials biodegraded, composted or remained the same.

Suggested Materials: (Assorted trash and pieces of food (ex. save your lunch trash!)		
Tomato	Styrofoam Container	Plastic Baggie
Lettuce	Cigarette Butt	String (~40ft) to mark area
Carrot	Plastic Utensil	Shovel
Bread	Paper / Cardboard	☐ Notepad & Pen
☐ Plastic Straw	Metal Scrap	Disposable Gloves

#### **Vocabulary/Definitions**

**Biodegradable** - Anything that undergoes degradation resulting from the action of naturally occurring microorganisms such as bacteria, fungi, and algae. (i.e. plants, papers, boxes, bags, etc.)

**Decompose** - Decay by progressive natural changes

**Compostable** - Organic matter that is capable of disintegrating into natural elements in the environment.

Organic Matter - Matter from a recently living organism, is capable of decay, or the product of decay.

Inorganic Matter - Matter not having the structure or organization characteristic of living bodies.

\*\* Compostable material is biodegradable, not all biodegradable material is compostable

## **Safety Issues**

Handling garbage is unsanitary. Make sure to wear gloves and wash hands after handling Be careful when handling shovels. Instruct them in the correct way to dig up small amounts of soil at a time.

## **Troubleshooting Tips**

It helps to loosen the soil in the designted plot before having kids help.

Locate the test plot in a garden area to make moving the soil easier.

Bury as many types of organic and inorganic materials as possible.

Include several organic items to aid decompostion.

Conducting experiment in warmer months helps organic matter to decay faster and reduces the waiting period.



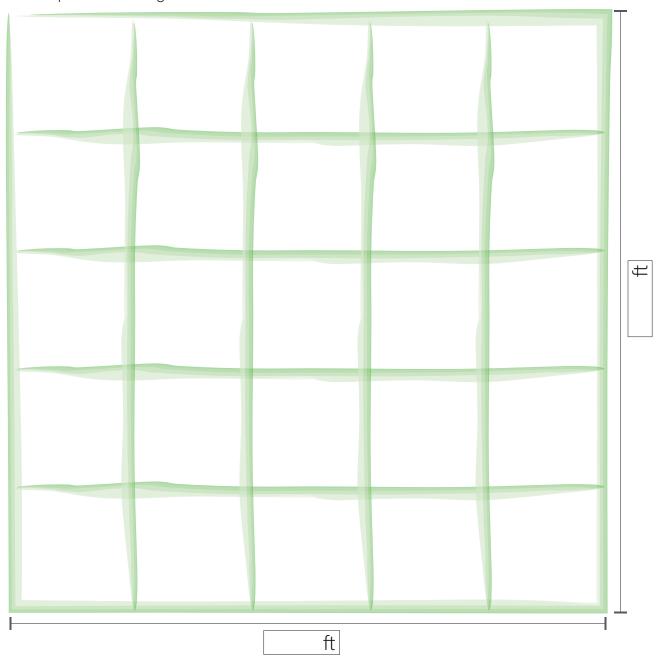
1. Predict for each selected material whether or not it will biodegrade, compost or remain the same over at the end of the experiment. Record your predictions below: GARBAGE ITEM **PREDICTIONS** RESULTS 2. **PART 1**: Record on grid (page 3) where each item is buried in the plot. 3. **PART 2**: Two to three months later (longer if the experiment is performed during the winter months) bring worksheets, shovel and gloves outside. Use grid to record results (page 4). 4. **PART 3:** Answer questions below: What items decomposed? -Why do you think they were able to decompose? Which types of garbage did not decompose? -Why do you think they were not able to decompose? Which types of trash were not recognizable? -What happened over the last several months that made those pieces of trash change?



## PART 1 Directions:

**Date** ( \_\_/\_ /2020)

Imaging the grid is your plot. Record the length and width. Use the grid and label what organic or inorganic item is placed in the ground.







# UNEARTH YOUR TRASH

Date (	′ /	/2020)
Date	/	/ 2020)

## PART 2 Directions:

Using the grid below, as items are discovered, guess what each item is. Then describe what the item now knoww looks like. Has it decomposed, biodegraded or remained hthe same?

