## TARWATER ELEMENTARY SCHOOL STEM LAB

Activity ID: F-2

**Activity Name: Cookie Excavation** 

# **MATERIALS:**

#### Materials Provided in Bin:

Item:	Quantity:	Notes:
Lesson Plan	1	
Paper towels	1 roll	
Toothpicks	1 box	
Optional: Cookie Excavation	1 copy in bin	Please see Materials
Grid Worksheet		Teacher/Parents section

## Materials in STEM lab or Classroom (Common Items):

Item:	Quantity:	Notes:
None		

#### Materials Teacher/Parents Need to Provide:

Item:	Quantity:	Notes:
Cookies	Per person	
Cookie Excavation Worksheet	Per person	
Grid		

## WHAT ARE WE DOING?

Cookie Excavation

## **VIDOES / LINKS:**

none

### **SAFETY NOTES:**

- Obtain permission from a responsible adult before giving any child a cookie.
- Offer oatmeal raisin cookies as an alternative to chocolate.
- Use only store-bought cookies and make sure they are relatively soft (e.g. Keebler Chips Deluxe Soft 'n Chewy)
- Cut out the list of ingredients on the cookie package and post it prominently.

### **SCIENCE TERMS:**

**Excavation** means removing soil to discover tools and other things used by people who lived a long time ago.

**Archaeologists** are both scientists and detectives. They use scientific methods like excavation to discover clues that help them solve the mysteries of the past.

Artifacts are things archaeologists find.

## STEPS:

- Step 1. Place your cookie in the middle of Grid A.
- Step 2. Note the coordinates of the top, bottom, left side, and right side of the cookie. Use them to sketch the perimeter of the cookie on Grid B.
- Step 3. Before excavating, note the coordinates of any chocolate chips you can see. Use them to sketch the chips onto Grid B.
- Step 4. Use a toothpick to excavate your cookie. As you find chocolate chips, note their coordinates and sketch them onto Grid B.

# **QUESTIONS TO ASK STUDENTS:**

- **1.** Did some areas of the cookie have more chocolate chips/raisins than others?
- 2. What was the biggest challenge as you were excavating?
- 3. What would you have done differently?
- 4. What did you learn about the excavating process?

## **CLEAN-UP:**

Into the Bin = Lesson, extra paper towels, extra toothpicks, copy of cookie excavation grid.

Trash/Recycle = all items that have been used.

IF RUNNING OUT OF A SUPPLY IN THE BIN, PLEASE CONTACT LAURIE JONES IN THE OFFICE (X4307)

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