



Little White School MUSEUM

We Have Fossils!

Overview:

Have you heard of *Tentaculites oswegoensis*? This 400 million year old fossil was discovered in 1852 right here in Oswego! Learn more about this fossil while practicing excavating like a real archaeologist in this new school program.

Social Studies Standards:

- SS.G.1.2:** Construct and interpret maps and other representations of both familiar and unfamiliar places.
- SS.G.2.4:** Analyze how the cultural and environmental characteristics of places in Illinois change over time.
- SS.G.4.5:** Compare the environmental characteristics of the United States to other world regions.

- SS.H.1.1:** Create a chronological sequence of multiple events.
- SS.H.1.2:** Summarize changes that have occurred in the local community over time.
- SS.H.1.3:** Create and use a chronological sequence of events.
- SS.H.3.2:** Explain how different kinds of historical sources (such as written documents, objects, artistic works, and oral accounts) can be used to study the past.
- SS.H.3.4:** Explain probable causes and effects of events and developments in Illinois history.

Vocabulary:

- Archaeology:** the study of the ancient and recent human past through material remains.
- Artifacts:** objects that are made, used, or modified by humans and give us information about life in the past.
- Coordinates:** the letter and number pair that describes a particular box in the grid.
- Excavate:** the act or process of digging, especially when something specific is being removed from the ground.
- Extinct:** the dying out or disappearance of a species from earth.
- Fossil:** the remains or traces of prehistoric life.
- Perimeter:** the distance around the outside of a shape.



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Oswego's Own Fossil

Tentaculites oswegoensis is a small animal of unknown origin, classified with mollusks or hard-bodied marine worms. These small creatures only measure about 1 inch long.

The first **fossil** of this creature was reportedly discovered in 1852 by Dr. Mordecia Davis in the limestone near the mouth of the Waubonsie Creek in Oswego, Illinois. The specimen was sent to Washington, D.C., where it was named after the community where it was first discovered.

Since then, specimens have been discovered from southern Oswego to Kankakee River State Park in Will County. All *Tentaculites* became **extinct** at the end of the Devonian Period 359 million years ago.



This grouping of *Tentaculites oswegoensis*, on display at the Little White School Museum, was collected by Oswego author and naturalist Dick Young.



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Cookie Excavation

Adapted from "Cookie Excavation" in Beyond Artifacts, Florida Public Archaeology Network.

Grades: 1st-5th

Time Required: 10-15 minutes (longer if optional grid worksheet is used)

Intended Outcomes:

Participants will simulate the process of archaeological excavation as they “excavate” the chocolate chips or raisins in cookies. They will discover how excavation is both destructive and scientific. Older participants can also practice coordinate graphing skills by mapping the results of their excavations.

Materials:

- Chocolate chip or oatmeal raisin cookies
- Paper towels
- Toothpicks
- Optional: Cookie excavation grid worksheet (next page)

Instructions:

1. Give each participant a cookie, paper towel, and toothpick. If desired, give older participants the cookie excavation grid worksheets.
2. Encourage participants to “**excavate**” their cookies with the toothpicks. They should be careful not to damage any “**artifacts**”. For an added challenge, remind them that they should not pick up their cookies because archaeologists cannot pick up sites!
3. Encourage older participants to map their results on the grid worksheets. Explain that **archaeologists** create similar maps to discover patterns that tell about the people who created the site. Ask participants if their maps reveal any patterning in the distribution of chocolate chips. If so, can they propose hypotheses that might explain it?

Tips:

- Use only store-bought cookies, and make sure they are relatively soft (e.g., Keebler Chips Deluxe Soft ‘n Chewy).

Cookie Excavation

Grid A

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														

Instructions

1. Place your cookie in the middle of Grid A
2. Note the **coordinates** of the top, bottom, and sides of the cookie. Use them to sketch the **perimeter** of the cookie on Grid B.
3. Before **excavating**, note the coordinates of any chocolate chips you can see. Sketch them on Grid B.
4. Use a toothpick to excavate your cookie. As you find more chocolate chips, coordinate and sketch them onto Grid B.

Grid B

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
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Notes
