



Paleontologists and Fossil Digs

Created by: Miss deBoth

Date: November 4th, 2015

Length: 40 Minutes

<p>Content: (Topic)</p> <ul style="list-style-type: none">● Developing an understanding of paleontology as a career.● Why paleontologists are important.● What do fossils tell us?● Examples of fossils in Saskatchewan.	<p>Instructional Strategies: (Specific)</p> <ul style="list-style-type: none">● Close Procedure● Hands on Activities
<p>Outcome(s):</p> <ul style="list-style-type: none">● RM4.3 Analyze how weathering, erosion, and fossils provide evidence to support human understanding of the formation of landforms on Earth.	<p>Indicator(s):</p> <ul style="list-style-type: none">● N/A
<p>Cross Curricular Competencies:</p> <ul style="list-style-type: none">● Developing Thinking: Thinking Contextually	
<p>Interdisciplinary Connections:</p> <ul style="list-style-type: none">● N4.2 Demonstrate an understanding of addition of whole numbers with answers to 10 000 and their corresponding subtractions (limited to 3 and 4-digit numerals) by:<ul style="list-style-type: none">○ using personal strategies for adding and subtracting○ estimating sums and differences○ solving problems involving addition and subtraction.	
<p>Prerequisite Learning:</p> <ul style="list-style-type: none">● Types of fossils● Fossils are from the earth	



Paleontologists and Fossil Digs

Created by: Miss deBoth

Date: November 4th, 2015

Length: 40 Minutes

Adaptive Dimension:

- Students will get an opportunity to work hands on in the role of a paleontologist. For obvious reasons, students will use chocolate chip cookies as the ground to extract their fossils from. The tools for the fossil dig will be a plastic knives, a toothpick and a paintbrush. The students will receive a worksheet that provides an opportunity for students to write down what they are learning and the results that they collect. There will be opportunities for students to work hands on, to listen in their desk and to read written material.

Preparation: (Equipment/materials/set-up)

- A Box of peanut free chocolate chip cookies
- Tooth picks
- Small paintbrushes
- Plastic knives
- Pre-made record sheet
- Pre-loaded Paleontologist video <https://www.youtube.com/watch?v=B7zo2zY1Zqg>

Set: (10 Minutes)

- Who can tell me the four different types of fossils? (Trace, Cast, Mold, True Form)
- Where do fossils come from? Do we get them at the grocery store? (Fossils come from the ground)
- Who collects and uncovers fossils? (Paleontologists)

Student Engagement/Classroom Management Strategies:

-



Paleontologists and Fossil Digs

Created by: Miss deBoth

Date: November 4th, 2015

Length: 40 Minutes

- Why are paleontologists important?
(Help us understand the past and what creatures, animals and artifacts were around previously)
- Paleontologists help us discover what was here before us through fossils.

Development: (25 Minutes)

- Handout worksheet
- Examples of Saskatchewan Fossils
 - Plesiosaurus (Unity, SK)
 - Tyrannosaurus Rex - Scotty the T-Rex (Eastend, SK)
 - Woolly Mammoth (Qu'appelle Valley)
 - Terminonaris - Big Bert the Crocodile (Carrot River, SK)
- Play Paleontologist Video
- Lets practice being paleontologists
 - Hand out paint brushes, toothpicks and plastic knives
 - Give the students 5-10 minutes to excavate their cookie
- Glue True form Fossil excavation
- Ensure that students fill out the back of their worksheet.



Paleontologists and Fossil Digs

Created by: Miss deBoth

Date: November 4th, 2015

Length: 40 Minutes

- | | |
|---|--|
| <ul style="list-style-type: none">● Explain that each students will now have an opportunity to excavate their true form fossil that they made last week. Remember to be very careful so that you do not break the fossil. | |
|---|--|

Closure: (5 Minutes)

- | | |
|--|--|
| <ul style="list-style-type: none">● Did you enjoy that activity?● Why do we need fossils? | |
|--|--|

Resources:

http://esask.uregina.ca/entry/fossil_record.html

<http://www.scholastic.com/teachers/article/digging-fossils>

<http://www.fossilsites.com/STATES/SK.HTM>

Cookie Fossil Dig Record Sheet

New Words:

- **Paleontologist** – someone who studies fossils
- **Archeologist** – some who studies human remains and artifacts
- **Excavate** – To remove a something from the ground very carefully with a tool.

1. Estimate how many chocolate chips you think will be in your cookie. Please write your estimate in a sentence.
-

2. Use your picks (toothpick and plastic knife) and your brush (paint brush) to help you excavate the fossils (Chocolate chips) out of your ground (cookie). Your goal is to successfully excavate as many chocolate chips as you can from your cookie without breaking them.

3. Count how many chocolate chips you had in your cookie by breaking them into groups of two. How many groups of 2 chocolate chips, were excavated from your cookie? How many groups of three chocolate chips can you make? Please write your answers below.