

Lesson Plan Template

Lesson Segment Focus: Types of Fossils and how they are formed **Lesson:** 1 of 5

Course & topic addressed: Science/Fossils **Date:** 11/12/19 **Grade:** 4th

Student Outcomes

Specific learning objectives for this lesson.	<ul style="list-style-type: none"> - Students will be able to explain the steps of fossilization - Students will be able to identify the different types of fossils and describe their characteristics
Describe the connection to previous lessons. (Prior knowledge of students this builds upon)	<ul style="list-style-type: none"> - Students have been prior knowledge of fossils and how to analyze and interpret their data from third grade. -
Knowledge of students background (personal, cultural, or community assets)	<ul style="list-style-type: none"> - Students most likely have not seen an actual fossil in person before, but have a basic understanding of what they are.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	<ul style="list-style-type: none"> - 4.ESS.1.1: Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time. - 4-ESS2-1 Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.
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Academic Language Support

<p>What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning?</p> <p>What will you do to provide varying supports for students at different levels of academic language development?</p>	<ul style="list-style-type: none"> - I will provide large, visible posters with key vocabulary for students to refer back to anytime during the lesson. - I will provide handouts with the instructions for the activity so that they have a visual/reading source of information in addition to my verbal explanation, leaving space for writing learners to take notes.
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Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the lesson?	<ul style="list-style-type: none"> - Fossil, Erosion, Sediment/Sedimentary, Organism, Decomposition, Lithification, Permineralization, Tectonic, Bedrock, Exposure, Extraction, Imprint, External, Internal, Paleontology/Paleontologist
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Materials

Materials needed by teacher for this lesson.	- Examples of fossils, graphic organizers, classroom set of E-books
Materials needed by students for this lesson.	- Individual copies of E-book, graphic organizer

Lesson Timeline with Instructional Strategies & Learning Tasks (**This should be VERY DETAILED**)

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
5-10 minutes	<u>Introduction:</u>	<ul style="list-style-type: none"> - I will begin the lesson by playing “I Am a Paleontologist” by They Might Be Giants on YouTube. After the video, I will ask the students if they can tell me what a Paleontologist is, and make a list on the board of any types of fossils they can name.
30-45 minutes	<u>Instruction:</u>	<ul style="list-style-type: none"> - I will then provide them with the E-book and we will go through it together, allowing them to ask any questions they may have for further clarification. - I will then provide them with graphic organizers and explain that I have many different fossils that will be passed around the room. They will work in groups using their E-books to fill out their graphic organizer with any characteristics they can determine of each fossil, and whether they think that specific fossil was formed through the type of fossilization process depicted in the E-book. (This is for me to determine whether or not the students understand that, for example, a True Form Fossil does not go through this process because it was encased in amber and preserved.) They will then discuss with each other to come to the conclusion of which type of fossil it belongs to. - While the students are discussing, I will walk around the room and assist any groups that are having trouble by providing guided questions that will direct them closer to the answer themselves.
15-20 minutes	<u>Closure:</u>	<ul style="list-style-type: none"> - After each group has had a chance to analyze each type of fossil provided, we will discuss as a group what they thought and what they learned that they didn't know before. - We will then go over the answers as a class and discuss any misunderstanding the student may have.

Accommodations/Modifications

How might I modify instruction for: Remediation? Intervention? IEP/504? LEP/ESL?	<ul style="list-style-type: none"> - Working in groups, having me available to assist, and going over the answers and misconceptions after the lesson serves to help students involved in remediation, intervention, IEP, and ESL students as well. ESL students also will be provided with more specific and in-depth handout instructions as well as a printed out version of the large posters with key vocabulary for them to have at their desk with them.
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Differentiation:

How might you provide a variety of instructional methods/tasks/instructional strategies to ensure all student needs are met?	<ul style="list-style-type: none"> - Resources provided for different types of learning (posters, handout, fossils, verbal discussion) - Informal assessments while watching students work, discussion of answers and allowing time for questions or clarification.
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Assessments: Formative and/or Summative

Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective/s (include type of assessment & what is assessed).	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	

Research/Theory

Identify theories or research that supports the approach you used.	
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Lesson Reflection/Evaluation

What went well? What changes should be made? How will I use assessment data for next steps?	<i>TO BE FILLED IN AFTER TEACHING</i>
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