#### Lesson Plan Model<sup>1</sup>

Lesson Title/#: Types of Rocks

Grade Level: Fifth Grade

### **Learning Central Focus**

	Learning central rocus
Central Focus	Students will learn about three types of rocks and how they are formed.
What is the central focus for the content in the learning segment?	
Content Standard	5-ESS2-1 Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or
What standard(s) are most relevant to the learning goals?	atmosphere interact. ESS2.A: Earth Materials and Systems & Earth's major systems are the geosphere (solid and molten rock, soil, and sediments), the hydrosphere (water and ice), the atmosphere (air), and the biosphere (living things, including humans).
Student Learning Goal(s)/ Objective(s)	Students will be able to locate, define, and describe the three major types of rocks.
Skills/procedures What are the specific learning goal(s) for student in this lesson?	
Concepts and reasoning/problem solving/thinking/strategies <sup>2</sup> What are the specific learning goal(s) for students in this lesson?	
Prior Academic Knowledge and Conceptions	Students should have basic knowledge of what a rock is, their shapes, and where they are found.
What knowledge, skills, and concepts must students already know to be successful with this lesson?	
What prior knowledge and/or gaps in knowledge do <b>these</b> students have that are necessary to support the learning of the	

<sup>&</sup>lt;sup>1</sup> The lesson plan template is intended to be used as a **formative** process prior to a candidate's submission of edTPA materials. The template offers an opportunity for candidates to practice documenting their thinking when planning lessons leading up to the learning segment they will teach for edTPA. Lesson plans with this level of detail are not necessary and should not be submitted as part of edTPA. It is intended to prepare candidates to articulate their thinking and justification for plans when responding to the Planning Task commentary prompts

<sup>&</sup>lt;sup>2</sup> The prompt provided here should be modified to reflect subject specific aspects of learning. Language here is mathematics related. See candidate edTPA handbooks for the "Making Good Choices" resource for subject specific components.

skills and concepts for this lesson?	
Common Errors,	
Developmental	
Approximations,	
Misconceptions, Partial	
Understandings, or	
Misunderstandings	
What are common errors or misunderstandings of students related to the central focus of this lesson?	
How will you address them for <b>this group</b> of students?	

# Instructional Strategies and Learning Tasks Description of what the teacher (you) will be doing and/or what the students will be doing.

Launch5 Minutes  How will you start the lesson to engage and motivate students in learning?	I will begin by asking students what they already know about rocks and list their responses by using the inspiration template. Then I will ask the students what do they want to know about rocks and list those responses as well. I will be using the template from inspirations, KWL, to fill out with the students as we begin and then end the lesson.
Instruction20 Minutes	I will start off by telling them the names of the rocks: Igneous, Sedimentary, and metamorphic. I will give explanations about each rock, how their formed, and show and name examples of each one.
What will you do to engage students in developing understanding of the	I will show them examples on the projector and have some that I can pass around for them to see and feel. I will use this website to help with pictures and questions <a href="https://geology.com/rocks/">https://geology.com/rocks/</a>
lesson objective(s)?	The students will get to ask questions as we go through each one.
How will you link the new content (skills and concepts) to students' prior academic learning and their personal/cultural	I will ask them questions like: Can you identify the rock you are holding as Igneous, Sedimentary, or metamorphic? Since we live in Arkansas and we are known for diamonds- are they rocks? If so what kind? After they collaborate and make a conclusion- I will inform them that is a mineral that is found in igneous rocks.

and community assets? What will you say and do? What questions will you ask? How will you engage students to help them understand the concepts? What will students How will you determine if students are meeting the intended learning objectives? Guided practice, interactive modeling and Independent work time will be used. Structured First we will engage by using hands-on materials to demonstrate how each rock could be formed. Get an ice tray, fill with Practice and water and freeze it (maybe have the water freezing before you even start the lesson). After an hour, pull the tray out, this **Application** 30 Minutes will show the students how igneous rocks are like ice cubes. Second, I will show the students an omelet. When the egg is mixed with various ingredients, then cooked, the heat hardens the egg. Just like a metamorphic rock is formed. Third, I How will you give could display a layered cake (opportunity to have food in the class). Telling them this is how sedimentary rocks are students the formed after enduring heat the layers come together. opportunity to practice so you can provide feedback? After that, I will place different rocks on a table and ask the students to identify each rock as igneous, sedimentary, and metamorphic. Each student will fill out the All About Me: Rocks Addition (see work sheet at the bottom). How will students apply what they have learned? How will vou determine if students are meeting the intended learning objectives? If the students do posters and/or "sandwiches", let each group show and tell about theirs. Return to the KWL from Closure

	,
15 Minutes	beginning of class. Ask the class what they have learned and fill out the learned portion together.
How will you end the lesson?	
Differentiation/	Whole Class:
Planned	
Support	
How will you provide students access to learning based on individual and group needs?	Groups of students with similar needs:
	Individual students:
How will you support students	marviada stadents.
with gaps in the prior knowledge that is necessary to be	
successful in this lesson?	Students with IEP's or 504 plans:
	Strategies for responding to common errors and misunderstandings, developmental approximations, misconceptions, partial understandings, and/or misunderstandings:
Student	Students could pair up to make sandwiches using construction paper. Tell them to describe igneous and metamorphic
Interactions	rocks on the slices of "bread" and sedimentary in the middle.
	Students could also make posters to describe, draw and share the types of different rocks.
How will you	
structure	
opportunities for students to work	
with partners or in	
groups? What	
criteria will you use when forming	
groups?	
What Ifs	I may not have all samples in hand so I would just use pictures from the internet. If the internet goes down, I would have

What might not go as planned and how can you be ready to make adjustment?	the students look in text books for rocks to identify.
Theoretical Principles and/or Research- Based Best Practices Why are the learning tasks for this lesson appropriate for your students?	
Materials  What materials does the teacher need for this lesson?  What materials do the students need for this lesson?	<ul> <li>Pictures of various rocks</li> <li>Actual various rocks</li> <li>Pencils</li> <li>Ice cubes, or water to freeze</li> <li>Sample omelet or picture of one</li> <li>Layered cake or picture of one</li> <li>Construction paper</li> <li>Computer, smart board and internet access</li> </ul>

**Academic Language Demand(s):** 

What language function do you	
want students to develop in this	
lesson? What must students	
understand in order to be	
intellectually engaged in the	
lesson?	
What content specific terms	
(vocabulary) do students need to	
support learning of the learning	
objective for this lesson	

What specific way(s) will students	
need to use language (reading,	
writing, listening and/or	
speaking) to participate in	
learning tasks and demonstrate	
their learning for this lesson?	
What are your students' abilities	
with regard to the oral and written	
language associated with this	
lesson?	
How will you <b>support</b> students so	
they can understand and use the	
language associated with the	
language function and other	
demands in meeting the learning	
objectives of the lesson?	

#### **Assessments:**

Describe the tools/procedures that will be used in **this lesson** to monitor students' learning of the lesson objective(s). Attach a copy of the assessment and the evaluation criteria/rubric in the resources section at the end of the lesson plan.

Type of assessment	Description of assessment	Modifications to the assessment so	Evaluation Criteria - What evidence of
(Informal or Formal)		that all students could demonstrate	student learning (related to the learning
		their learning.	objectives and central focus) does the
		-	assessment provide?

# **Analyzing Teaching**

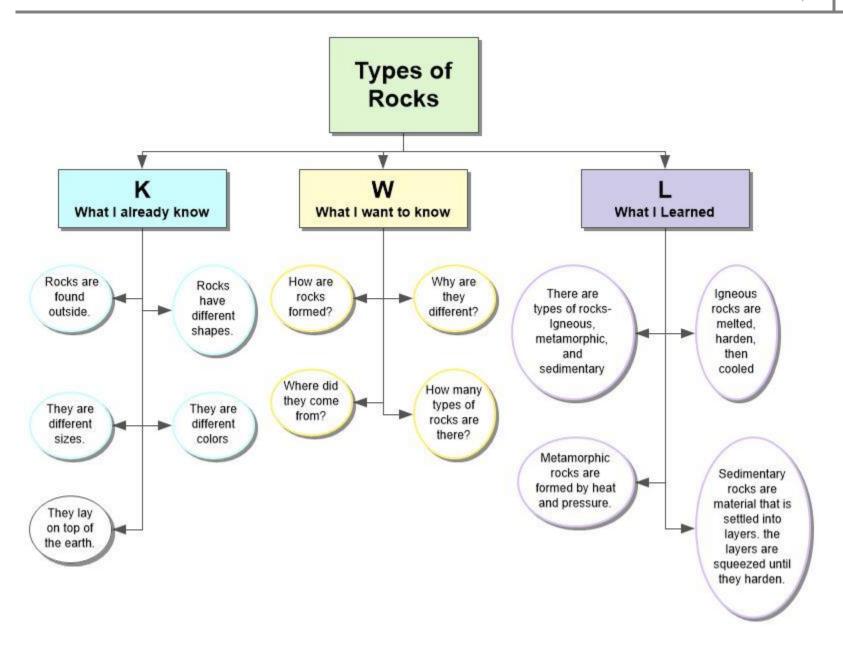
To be completed after the lesson has be taught

What worked? What didn't? For whom?	
Adjustments  What instructional changes do you need to make as you prepare for the lesson tomorrow?	
Proposed Changes.	Whole class:
If you could teach this lesson again to this group of students what changes would you make to your instruction?	Groups of students:  Individual students:
Justification  Why will these changes improve student learning?  What research/ theory supports these changes?	

## **Resources:**

www.education.com https://geology.com/rocks/

Attach each assessment and associated evaluation criteria/rubric.



All About Me: Rocks Edition!
Research and find out the following information about your type of rock.
Name:
Type:
Color:
Size:
Where is it found?
How is it formed?
What are some uses?
What is it made of?

Draw a picture