Name Kaitlin Ponder

Lesson Plan

Learning Segment Focus Earth Systems: Processes that shape the earth Lesson 1 of 4

Course & topic addressed Earth Science: The Water Cycle Date 9/18/2020
Grade 2nd

Student Outcomes

Specific learning **objectives** for this lesson.	Students will learn the what evaporation, condensation, precipitation, and accumulation are in the context of the water cycle and will identify examples of all four that they can observe in the world around them. They will learn the purpose of the water cycle, how it works, why it is important, and how it affects the earth. They will identify water in all different forms and where it can be found in the world through their knowledge of the water cycle.
Justify how learning tasks are appropriate using examples of **students' prior academic learning**.	Students will have previously learned that water is important to the life of humans, animals, and plants, and that it can change the shape of the land. They will also have identified and discussed the different states of water and the different bodies of water found on the earth.
Justify how learning tasks are appropriate using examples of **students' personal, cultural, linguistic, or community assets**.	All students will be familiar with water and its three different states from their everyday lives. They all also have witnessed the different stages of the water cycle. Due to nature, weather, and the daily incorporation of water in every home, culture, and community, all students will be able to understand and relate to the process of the water cycle.

State Academic Content Standards

List the **state academic content standards** with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.

Key Vocabulary

What **vocabulary terms/content specific terminology** must be addressed for students to master the content?	Evaporation, condensation, precipitation, accumulation, cycle

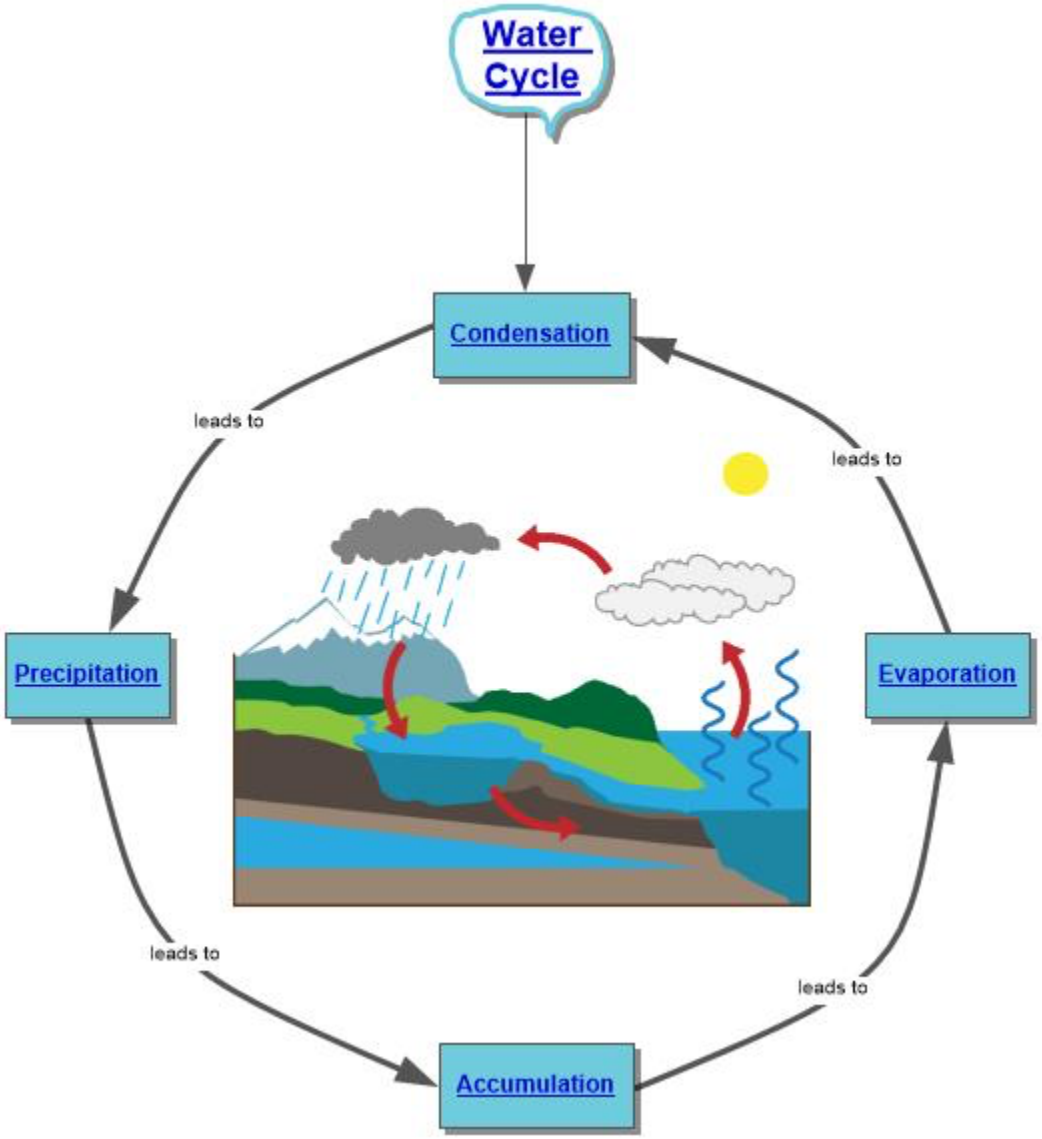
Academic Language Support

What are the **Academic Language Function(s)** (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan? What planned **Academic Language Supports** will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three **Academic Language Demands (vocabulary, syntax, and discourse)?**	To understand the terms evaporation, condensation, precipitation, and accumulation, videos describing each have been linked in the Inspiration diagram/web. By watching these videos and discussing examples of all four as a class, students will obtain and real world understanding of the terms and be able to better apply and understand their role in the water cycle.

Materials

Materials needed by **teacher** for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)	Water cycle diagram/web and picture (see below), computer, projector or Smart Board

Materials needed by **students** for this lesson. (computers, journals, textbook, etc.)	Water cycle diagram/web and picture (see below), "Scientific Discovery" Journal, science textbook



Lesson Timeline with Instructional Strategies & Learning Tasks

Amount of Time	Teaching & Learning Activities (This should be a BULLETED LIST)	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)
5 minutes	**Introduction**: • Students journal thoughts about the answers to questions on the board	I will ask students where all they see water in the world and in their everyday life, why water is important to the earth and to themselves, and where they think water comes from. I will verbally ask these questions as well as write them on the board. Students will be instructed to think on the questions and to journal or list their thoughts and

Amount of Time	Teaching & Learning Activities (This should be a BULLETED LIST)	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)
		ideas about them in their journal. They will also be instructed to leave space to go back and write in their new thoughts, knowledge, and observations after they have learned the lesson.
30 minutes	**Instruction:** • Read science textbook section over the water cycle • Watch water cycle video • Look at water cycle diagram/web and picture • Teach students further on the water cycle and how it works using the diagram/web • Watch videos over the individual stages of the water cycle • Discuss examples of the water cycle that they have seen in real life • Discuss how students think the water cycle impacts the earth and all living things	Students will follow along in their textbooks as I read the section over the water cycle. I will then pull up the video explaining the water cycle that is linked in the Inspiration water cycle diagram/web. Next, I will pull up the water cycle diagram/web on the Smart Board, which also includes a picture diagram of the water cycle. Students will be given a printed-out copy of the water cycle diagram/web. I will go over the stages of the cycle and connect the information they heard in the video to the diagram/web, further teaching them about the water cycle and how it works. I will then play the videos describing each stage of the water cycle in more detail, which are also linked in the water cycle diagram/web. After the videos, we will have a class discussion about examples of the water cycle that we see every day in real life and how the water cycle impacts the earth, ourselves, and all other living things.
5 minutes	**Closure:** • Students journal new observations, thoughts, and answers to the original questions	Students will have time to go back to their journal and add new facts they learned, observations they made, or the correct answers to the original three questions that were put on the board. They will be able to document all the discoveries that they made during the lesson, cross out or erase anything they originally wrote down that they no longer think is true, and add in any missing information that they were not sure of at the beginning of the lesson. By doing this, students feel accomplished in learning something new and they get to apply what they learned to what is relevant to them personally.

Accommodations/Modifications

How might I **modify** instruction for: *Remediation?* *Intervention?* *IEP/504?* *LEP/ESL?* (All students who have plans mandated by federal and state law.)	Remediation: I would utilize models and outdoor activities and observations if possible, instead of videos. This would be more of a hands-on approach and may improve understanding of struggling students. Intervention: I would use either one-on-one instruction or small group activities. These would include group discussion and project based learning. IEP/504: For hearing impaired students, I would be sure to use subtitles on any videos and for visually impaired students, I would read all printed information aloud. LEP/ESL: I would provide the Inspiration diagram/map with both English and the student's first language on the labels. For videos I would use subtitles in their first language, while still playing the video in English, so that they can follow along

	and look at the subtitles for help, but also hear the new vocabulary and terms in English.

Differentiation

How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) **to ensure all student needs are met?** (All students who are not on specific plans mandated by federal and state law.)	I used relevant color coding on the Inspiration diagram/map and included a visual of the water cycle to make it as clear as possible. The use of the Scientific Discovery Journal assists in scaffolding by helping students be independent and to apply what they have learned in ways that are important and relevant to them personally. It allows for further thoughts and inferences as well as creativity.

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).	☐ Formative /☐ Summative	A blank version of the Inspiration diagram/web will be given as a quiz along with short answer questions about the four stages of the water cycle, the different phases of water, and why the water cycle is important to the earth.
	☐ Formative /☐ Summative	
	☐ Formative /☐ Summative	

Research/Theory

Explain **connections to theories and/or researc**h (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using **principles of the connected theories and/or research.**	According to Dr. Todd Finley's article from www.edutopia.org entitled "The Importance of Student Journals and How to Respond Efficiently", the use of a journal in a science class would be very effective. This article, which cites further research, claims that journals are great for helping students think more maturely and to form their own thoughts and questions, as well as improving the amount that they grasp the content after journaling about it.

Lesson Reflection/Evaluation

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

Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*adapted from: http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us; http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx; http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx;https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf; https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf; https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf; https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx; https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx;

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