

**Part 2 Lesson Plans**

There are two segments to this section:

Segment A) Analyze an existing lesson plan using the template below:

<b>Information about the Lesson</b>			
<b>Learning Theory</b>	<b>Bloom's Cognitive Domain</b>	<b>Gardner's Multiple Intelligences</b>	<b>Lesson Type</b>
<input type="checkbox"/> Behaviorism	<input checked="" type="checkbox"/> Remember	<input checked="" type="checkbox"/> Verbal/Linguistic	<input checked="" type="checkbox"/> Present and Explain
<input type="checkbox"/> Cognitivism	<input checked="" type="checkbox"/> Understand	<input checked="" type="checkbox"/> Logical/Mathematical	<input type="checkbox"/> Direct Instruction
<input type="checkbox"/> Constructivism	<input checked="" type="checkbox"/> Apply	<input checked="" type="checkbox"/> Visual/Spatial	<input type="checkbox"/> Concept Lesson
<input checked="" type="checkbox"/> Experiential	<input checked="" type="checkbox"/> Analyze	<input type="checkbox"/> Bodily/Kinesthetic	<input checked="" type="checkbox"/> Inquiry-Based Lesson
	<input checked="" type="checkbox"/> Evaluate	<input type="checkbox"/> Musical/Rhythmic	<input checked="" type="checkbox"/> Cooperative Learning
	<input checked="" type="checkbox"/> Create	<input checked="" type="checkbox"/> Interpersonal/Social	<input checked="" type="checkbox"/> Project /Problem-Based Learning
		<input type="checkbox"/> Intrapersonal/Self-aware	<input checked="" type="checkbox"/> Classroom Discussion
		<input checked="" type="checkbox"/> Naturalist/Environmentally aware	

I am very content with the layout of this lesson. I think the amount of check marks above showcases the broad spectrum of domains, intelligences and lesson types that this activity utilizes. This will be the underlying theme when answering the questions to come. My reason for teaching this lesson is because it reaches beyond the classroom walls; it is applicable in the real-world. Students come back to me with stories of how they have applied what they learned or the connections they have made to the lesson. This should be a prime example of how effective of a lesson this truly is for students' learning. To have a student move on from the lesson physically, but still think about it when they have left the classroom, should be noted as a success for any teacher. The flexibility in the structure of this lesson offers many unique opportunities to differentiate. Being that this is inquiry and problem-based, students can create their own answers and ways of think; therefore, there is no wrong answer, only improvements to be made.

Segment B) Use the template below to show your newly created Lesson plan. NOTE\* what is listed on the lesson plan are only your changes. For example:

- a) Does your new lesson plan attend to a higher level of Bloom's or another of Gardner's Intelligences?
- b) Are different materials needed?
- c) Are there changes to your objectives?
- d) Do your guiding questions change?
- e) Do you need to change your formative and summative assessments?

**New Lesson Plan**

<b>Instructor: Benjamin Fowler</b>	<b>Class: 5<sup>th</sup> Grade Science</b>	<b>Day: 4-5</b>	<b>Date: 5/6/2020</b>
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<b>Learning Theory</b> __ Behaviorism __ Cognitivism __ Constructivism <input checked="" type="checkbox"/> Experiential	<b>Bloom's Cognitive Domain</b> _x_ Remember _x_ Understand _x_ Apply _x_ Analyze _x_ Evaluate _x_ Create	<b>Gardner's Multiple Intelligences</b> _x_ Verbal/Linguistic _x_ Logical/Mathematical _x_ Visual/Spatial __ Bodily/Kinesthetic __ Musical/Rhythmic _x_ Interpersonal/Social __ Intrapersonal/Self-aware _x_ Naturalist/Environmentally aware	<b>Lesson Type</b> _x_ Present and Explain __ Direct Instruction __ Concept Lesson _x_ Inquiry-Based Lesson _x_ Cooperative Learning _x_ Project /Problem-Based Learning _x_ Classroom Discussion
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**Materials Needed:** sandwich-sized bag, cotton ball, plastic spoon, pipette, felt, nylon, sponge, coffee filter, yarn, rubber band, craft stick, aluminum container, rocks, dish soap, brown paper bag, water, oil

**Lesson Content and Design**

**Central Focus / Big Idea:** Cleaning an Oil Spill

**Objective(s):**

- Connect prior knowledge of the engineering design process
- Use your understanding of various tools on how to contain or remove oil
- Assess your clean-up process and its effectiveness to save the ecosystem
- Improve your design and communicate your results

**Guiding Question(s):**

- Applying your prior knowledge of ecosystems, how can you contain and remove an oil spill, while causing minimal negative impacts to the surrounding ecosystem.

**Assessment:** Assessing will be taken throughout the activity. It will be based on the grading criteria of 4 C's: collaboration, communication, creativity and critical thinking.

**Formative:** Students will be observed throughout their inquiry

**Summative:** Students will present their findings to the class, using the structure of the engineering design process.

**Standard(s):**

- 5-ESS3-1: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

**List those elements that would be changed to your preexisting lesson**

Elements	Minutes	Short Description
<b>Ask</b> <b>Imagine</b> <b>Plan</b>	<u><b>Preparation:</b></u> 25-30 minutes  <u><b>Lesson:</b></u> 50-55minutes	<ul style="list-style-type: none"> <li>• Review steps of the engineering design process</li> <li>• Discuss evaluation rubric and standards</li> <li>• Explain lesson activity structure and layout</li> <li>• Model "Ask, Imagine and Plan" steps of the engineering design process for students</li> </ul>
<b>Create</b>	<u><b>Preparation:</b></u> 20-25 minutes  <u><b>Lesson:</b></u> 55-60 minutes	<ul style="list-style-type: none"> <li>• Create model ecosystem</li> <li>• Implement clean up plans (containing and removing oil from model ecosystem)</li> <li>• Calculate scores based on student rubrics</li> </ul>

<b>Improve</b>	<b><u>Preparation:</u></b> 20-25 minutes  <b><u>Lesson:</u></b> 55-60 minutes	<ul style="list-style-type: none"><li>• Discuss improvements to your previous plan</li><li>• Present your findings to the class as a group</li></ul>