

WATER POLLUTION RUBRIC	2	1	0
Pre-Activity Discussion			
<i>Student makes real-world connections during the discussion</i>	Student uses appropriate prior knowledge and real-world examples related to water filtration during the discussion	Student participates in the discussion but is not able to make strong connections to real world applications.	Student does not participate in the discussion.
<i>Student responds to the ideas of their classmates</i>	Student responds to the ideas of others respectfully and appropriately	Student is not able to build off the ideas of other students and respond appropriately to questions posed by their classmates	Student is very disrespectful to other students or does not participate in the discussion
<i>Student uses scientific thinking</i>	Student responses and questions show scientific thinking	Student responses and questions show some scientific thinking but demonstrate a lack of true understanding about certain scientific ideas	Student does not participate in the discussion.

WATER POLLUTION RUBRIC	3	2	1
Design			
<i>Design shows effort and scientific logic</i>	Student is able to convey the process they used to design their filtration system using prior knowledge, correct vocabulary, and referencing scientific ideas in a logical way. This can be communicated verbally, in writing, visually, or in any form of communication most comfortable to the student.	Student may have trouble articulating their process, but their explanation demonstrates thought and the final design does show a connection to scientific principles.	Design shows little thought and student is unable to clearly articulate their process using any form of communication
<i>Student works well with their group</i>	Student listens to the ideas of others and contributes their own ideas.	Student contributes their own ideas but does not always listen to the ideas of others.	Student either dominates the group conversation or does not contribute very much at all.
<i>Student forms a hypothesis</i>	Student clearly predicts (verbally, visually, etc.) which filter layer will be most effective and why they think this. Their prediction is based on prior experience and scientific logic.	Student predicts (verbally, visually, etc.) which filter layer will be most effective and why they think this. Their prediction is based on some prior experience and scientific logic but the logic is somewhat faulty.	Student makes a prediction but does not back their prediction up with any sort of reasoning.

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Filtration			
<i>Student makes and records relevant observations</i>	Student makes observations related to the cleanliness of the water, the effectiveness of each layer, the amount of water remaining, etc. Student clearly records these observations using words, pictures, etc.	Student makes some relevant observations, but misses others OR The student makes observations but does not record them in a clear, understandable way.	Student makes no observations
<i>Student reflects on their hypothesis</i>	Student is able to identify whether their hypothesis and reasoning was correct and if it was not correct, state how they would change it.	Student is able identify if their hypothesis is correct, but cannot communicate why or why not.	Student does not reflect on their hypothesis.
<i>Student uses data to suggest ways to improve future filters</i>	Student suggestions are based on the data collected during the activity as well as the pre-activity discussion	Student makes suggestions, but these suggestions are not related to the results of the activity.	Student does not make suggestions for improvement