

What is matter project

1. Explain what matter is to your classmates
 - a. Key concepts
 - i. **5-PS1-1. Develop a model to describe that matter is made of particles too small to be seen. [Clarification Statement: Examples of evidence supporting a model could include adding air to expand a basketball, compressing air in a syringe, dissolving sugar in water, and evaporating salt water.] [Assessment Boundary: Assessment does not include the atomic-scale mechanism of evaporation and condensation or defining the unseen particles.]**
 - ii. Properties
 1. Micro-viewpoints with in-depth detail is a 4 (labeling the atoms)
 2. Marco-viewpoints with property changes are a 3 (showing atoms without labels and listing the property changes that would occur)
 3. Marco-viewpoints are a 2 (Showing atoms without labels)
 4. Showing three states of matter is a 1 (drawing objects)
 - iii. Proven evidence
 - iv. Observations and experiments
 - b. Products (Short Research project) - submit through teams as an assignment.
 - i. Sway - written (2-3 slides)
 - ii. Drawing - visual (one poster)
 - iii. Video - visual and kinesthetic (5 minute)
2. Read articles
 - a. What is Matter? - Read Works
 - b. Three states of Matter - Flocabulary
 - c. What is Matter? - Newsela

Lesson outline -

- Brainstorm what matter is - Ask students to think about matter. What is the meaning of the word? What does it have to do with Science? Why do we care?
- Read the first article as a class and discuss
- Assign students a project to create a product to explain what happens to water as it shifts between solid, liquid, and gas forms.
- They will get two more resources to use. One is another article. The other is a vocabulary video.
- After all students have had a chance to present, have a class discussion about what was presented.
 - o Most students choose to draw a picture of the water molecules in the different states of matter. They also listed some of the properties of each state as it effects water.

The above is my brainstorm for this lesson. I did this lesson with my students last school year. It was a short lesson and simple lesson. I presented it on Monday and they presented their products that Friday. I didn't want to write too much because I was afraid that I would end up altering the lesson. I want to let you see the lesson as I presented it to the students. I would like to make this lesson better and make the product of the lesson be a creation piece. The idea is to still allow students to choose how they would like to present their understanding. I could allow students to create a dance, I am not sure that we would be satisfying any standard in particular, but we would be able to use this opportunity to learn about dance choreography while we learn about matter. This would bring movement in as an assessment option for my kinetic learners to express their understanding of the concept. I could also allow student to just create a type of art

piece (models, mobiles, or other art forms) and then we could do a gallery walk. There could even be a chance for parents to come in and see their students work. This would work for my students that like to create (VA:Cr1.1.5a, VA:Cr1.2.5a, VA:Cr2.3.5a, VA:Re.7.1.5a, and possibly VA:Cn 11.1.5a). I could also have the students create a theatrical production. This may be a little bit of a stretch and would also depend on the time. I will have to choose one of these to add to the lesson but will note them all as extensions or adjustments. As I was searching for a lesson I began to realize that I already do a lot of art in my projects. I always offer it as an option but usually only with visual art. I would like to try to get other art forms to become a part of my class on a more regular bases.