Lesson 1-1: Is It Matter, Energy or Force?

*adapted from Paige Keeley, Uncovering Student Ideas in Science*

Listed below is a list of things that are considered **matter (M)**, **force (F)**, and/or **energy (E)**. Put the appropriate letter(s) next to each of the items below. Some may be left blank and some may have more than one letter.

___ baby powder  
___ salt  
___ stars  
___ milk  
___ Jupiter  
___ gravity  
___ light  
___ steam  
___ magnetic pull  
___ dust  
___ rotten apples  
___ dissolved sugar  
___ cells  
___ light bulb  
___ electricity  
___ atoms  
___ heat  
___ sun  
___ fire  
___ ocean waves  
___ spring attached to  
___ smoke  
___ water  
___ a 5g mass  
___ motion  
___ bacteria  
___ brake on a car  
___ battery  
___ temperature  
___ gasoline  
___ stretched rubber band  
___ a rock at the top of  
___ sound  

1. Explain the reasoning you used to decide whether something was **matter, a force, and/or energy**.
2. For all the things on the list for which you listed as energy plus matter, describe how you know the matter had energy. What is the indicator of the energy in the object?

3. For all the things that you listed as force and energy, explain why both are listed. What do you think is the difference between force and energy for these things?

4. For all the things on the list that you listed as ONLY energy, are any of these things observable?