ACTIVITY 1: VIDEO REFLECTION

Directions:

Watch <u>video</u> on cartesian divers and answer the questions below.

1. How are cartesian divers different from submarines?

2. What happens to the cartesian diver when pressure is applied to the sealed bottle?

3. What happens when an object has greater density than the water around it?

4. How do submarines increase their density?



ACTIVITY 2: Plastic Egg "Submarine" Visual Instructions



<u>Directions:</u>

The goal of this challenge is to submerge most of the plastic egg without sinking it to the bottom! Follow the visual instructions below.

For this challenge you will need a plastic egg, marbles, and a clear container of water.



Open the egg and add marbles for weight.



Close the egg when you are ready to see if your egg submarine floats or sinks. Then gently place egg in the container of water.



Look through the side of the container to see if your egg floats or sinks.



If your egg floats, try adding some more marbles. If your egg sinks try taking some marbles out.

Success! What can you do to allow the egg to rise to the surface? How is this similar to how submarines submerge and rise out of the water?





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