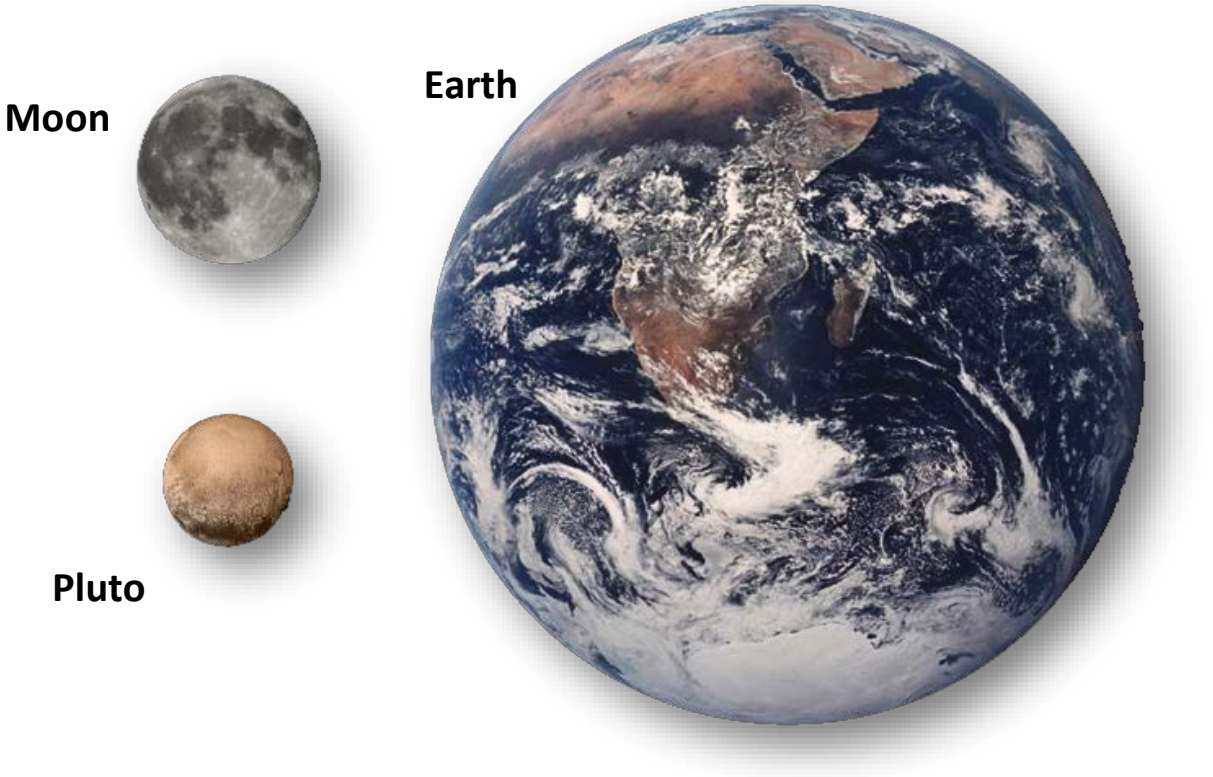
Name_____

Mapping Pluto

In July, 2015 a NASA spacecraft named “New Horizons” flew really close to the dwarf planet Pluto. It flew so close that it was able to take really good photographs of the surface of the planet. Since humans can’t yet go to Pluto, scientists rely on photographs to help them figure out what the surface of the planet is like (are there mountains? ice? oceans? rocks? plants?). Below is a comparison between the size and surface features of the Earth, the moon, and Pluto. Take a minute and describe features you see on Earth – I’m sure you are familiar with them!



Now, you are going to use a real photo taken by the New Horizons spacecraft to create a map of the surface of Pluto – the same way scientists are mapping it. In order to do this, you will need to pay very close attention to the slightly different colors, textures, and shapes that you see.

Mapping Pluto

1. Look at the colors, textures, and shapes you see on the surface of Pluto. Using your pen or pencil, trace out areas that look the same – meaning areas that have the same color, texture, and shapes. You will probably have 3-5 different areas.
2. Label the areas 1-5. For each area list a few (2 or 3) observations that you made. Do you have a guess as to what the area might be based on your observations (mountains? rivers? ice? clouds? oceans? sand? trees?) go ahead and guess and write this down.
3. Places where meteors hit the surface are called 'craters'. Craters are usually circular in shape. See if you can find any small circular features on Pluto – if so, draw an arrow towards them.