

Introduction to Science Geological Lesson

This geological lesson is to show students that some of the basics of science are about organizing information in a way that makes sense and in a way people can understand.



For this particular exercise I had a whole bunch of random stuff, which was all very similar to one another in one form or another. You can use whatever you have around as demonstration objects but the 16 objects I used were (pictures above) a Football thingy, an Aerobie, a Wobble thingy (the yellow and green thing) that is 2 ovals attached to each other, a Boomerang, a Roomerang (a boomerang made of foam so it can be thrown indoors), a Circle throwing thingy (I wish I knew the name of some of this stuff), a Racquetball, a Squash Ball, a Tennis Ball, a Ping Pong Ball, a Golf Ball, a My dog's ball, a Foam globe, a Giant Foam Die, a Regular die, and a 20 sided die.

The directions for this assignment are:

1. In a group, organize the objects above in whatever way you feel best.
2. Describe how you organized them.

When explaining the assignment afterwards, I discuss the different methods that these objects can be grouped together:

Color
Shape
Function
Material
Size

I then describe how different groups are better than others. Color and size are not good groups because the same objects can be different colors and sizes, which would place them in different groups (like the racquetball and the tennis ball above). Function is probably not one of the best groupings either because there is the possibility that you don't know the function of an object, so it gets placed in the *other* category (like my dog's blue ball was often placed). Shape is a good one, but is it the best one? The best one, in my opinion, is material. Because no matter the color, function, size, or shape the materials can be placed in definitive categories. This is how minerals are grouped, by their elemental components.

Overall, this lab was meant as introductory exercise to break the tension of the first day and give non-science majors small steps into the scientific mindset.