Comparison of different Igneous rock samples

**Aim:** To compare the properties of different igneous rocks

**Materials:** Igneous rock kit, hand lens

**Risks**

|  |  |
| --- | --- |
| **What are the risks in doing this experiment** | **How can you manage these risks to stay safe?** |
| Some of the samples may be composed of material that is toxic if ingested | Wash your hands regularly and after you have completed the investigation |
| Breakage of the glass lens | Take appropriate care with the laboratory equipment |

**Method**

1. Firstly pull out samples and look to compare against different colours of rocks

2. Sort the igneous rocks into categories of felsic (light coloured) and mafic (dark coloured)

3. Using the hand lens compare the crystal size of the minerals present in the rock. Record whether they are large or smaller.

4. List whether there are holes in the rock sample. If they have holes place in water to see if the rock floats or sinks

**Results**

1. Draw this table into your book

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sample** | Colour (felsic= light; mafic = dark) | Crystal size  (large = can see crystals) | Holes present  (if yes does this rock float) | Extrusive or intrusive rock |
|  |  |  |  |  |

2. When you have finished comparing the rock samples write which rocks have similar **properties** to one another.

**Extension**

1. Using the books and internet can you research the uses of each of the rocks that you have encountered. Are any of these similar?