Virtual Density Lab

Access the website <http://academic.brooklyn.cuny.edu/geology/leveson/core/graphics/density/density_sim3.html>

(Our classroom computers have a shortcut set up. Click DENSITY LAB)

You will be finding the density of 9 unknown minerals.

1. To begin, click on the mineral #12 on the far left side.
2. For each step, CAREFULLY read the on-screen directions.
3. To the left of the instructions, you will see the water level in the graduate before putting the mineral in. Record this measurement in the table below.
4. Click “Immerse the Mineral” The second graduated cylinder reading will appear to the right of the instructions. Record this measurement in the chart below.
5. Click “WEIGH THE MINERAL”. Read the measurement on the balance below. Record this number in the chart below.
6. Repeat steps 1-4 for each of the remaining minerals.
7. AFTER you have found all of the measurements, return to your desk to do the math. Find the Volume of the object and the Density of the object. Round all answers to the hundredths place.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Mineral # | Starting Volume | Ending Volume | Mass (g) | Volume of Object (ml) | Density (g/mL) =  Mass/Volume |
| 12 |  |  |  |  |  |
| 6 |  |  |  |  |  |
| 9 |  |  |  |  |  |
| 21 |  |  |  |  |  |
| 13 |  |  |  |  |  |
| 24 |  |  |  |  |  |
| 19 |  |  |  |  |  |
| 113 |  |  |  |  |  |
| 112 |  |  |  |  |  |

1. Which mineral had the GREATEST density?
2. Which mineral had the LEAST density?
3. List all of the minerals that would FLOAT in water.
4. List all of the minerals that would SINK in water.

EXTRA CREDIT:

Every mineral has its own unique density. Use the Internet (and your own time) to discover the identity of each mineral.

#12=

#6=

#9=

#21=

#13=

#24=

#19=

#113=

#112=