

# Investigate - What's In Matter?

## Observe:

1. In your lab book, make observations about each of the substances that you were given.

2. Now attempt to divide each material given to you into the smallest piece that you can. Remember, we are trying to determine the absolute smallest particle that we can make from each substance.

3. Once you have acquired the tiniest piece that you can create of each substance, make observations in your lab book about each one.

Pay special attention to any difference that you may notice between the original sample and the new smaller particle.



## Theorize:

Of course you know that each particle you made could be divided into an even smaller one with more time and better equipment.

In your lab book, draw pictures representing what each micro-particle would look like if you were able to see it. Draw a picture for each substance. Next to each picture, predict the properties of each micro-particle. Specifically include shape, size, color, density, etc.

## Conclude:

1. Are the micro-particles that you predicted divisible? Explain your answer.

2. Do all of your particles look the same? If not, explain why they might look different.

3. Do you think that all of the particles in each substance are the same? For example, do you believe that all of the clay particles look the same as one another?

4. Do you believe there is any matter not made of small particles like the one you predicted? Explain your answer.