

Physical Properties Stations

For each station:

Perform the indicated tests and record your observations in the space provided.

Safety!!!

Do not taste any of the unknown materials.

Only touch or smell the materials that you are instructed to.

Station #1

- Circle the best description of the substance's **CLARITY**: (clear, cloudy, opaque)
- What **STATE** is the substance in? (solid, liquid, gas)
- What **COLOUR** is the material? _____
- Describe the **ODOUR** of this substance: (strong, sweet, odourless)
- Hypothesize!! What do you think the unknown substance is? _____

Station #2

- What is the **VOLUME** of each pop can?
- Place the cans in the water tub. Which type floats? _____
- Why do you think that this type of pop floats and the other does not?
HINT: What property has to do with floating?



Station #3

- What **STATE** is this substance in? (solid, liquid, gas)
- Is the substance **MALLEABLE** (bendable)? (Yes, No)
- Place a piece of this material between the clips.
Does it **CONDUCT ELECTRICITY**? (Yes, No)
- What **COLOUR** is the material? _____
- Hypothesize!! What do you think the substance is? _____

Station #4

- What **STATE** are the substances in? (solid, liquid, gas)
 - Circle the best description of the substances' **CLARITY**: (clear, cloudy, opaque)
 - GENTLY** mix the container
 - Circle the best description of the substance **CLARITY** now: (clear, cloudy, opaque)
 - Hypothesize!! Without touching the material, identify the substances.
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Station #5

Simultaneously (at the same time), drop a paper clip into each cylinder to determine in which material the paper clip takes the longest to reach the bottom.



- What **STATE** are the substances in? (solid, liquid, gas)
- In which substance does the paper clip fall the slowest? (A, B)
- Which substance is more **VISCOUS** (thicker)? (A, B)
- Hypothesize!! What do you think the more viscous substance is? _____

Station #6

- What **STATE** are the substances in? (solid, liquid, gas)
- Describe the **SHAPE** of the substance. _____
- Circle the best description of the substance's **TEXTURE**: (coarse, smooth)
- What is the relationship between the numbers on the sandpaper and their texture?

Station #7

- Look at each substance.
- Substance A looks like (crystals, flakes, bubbles)
- Substance B looks like (crystals, flakes, bubbles)
- Substance C looks like (crystals, flakes, bubbles)

Station #8

- The copper penny scratches the (iron nail, rock)
- The iron nail scratches the (copper penny, rock)
- The rock scratches the (iron nail, copper penny)
- Which of the following is the **HARDEST**? (iron nail, copper penny, rock)?



Station #9

- Describe 2 similarities between each of the material's physical properties:

- Describe 2 differences between each of the material's physical properties:
