

MODELLING THE KINETIC MOLECULAR THEORY

STATION A: CONSTRUCTING A MODEL

Using **objects** around the room, **construct a model** that represents as many aspects of kinetic molecular theory as you can. Be respectful to other students as you go around the classroom, and return all objects to where you got them from.

1. Summarize/draw the model you have created. Make sure to include the materials you used.
2. Which parts of the kinetic molecular theory did your model do a good job of representing?
3. Which parts of the kinetic molecular theory did your model not do a good job of representing? What inaccuracies can you identify in your analogy?

STATION B: AN ANALOGY FOR THE KMT

An **analogy** is a comparison with an idea or a thing that is different from, but that helps to explain the initial idea. Your job is to come up with an analogy for the KMT that can account for as many aspects of the theory as possible. Brainstorm with your group and develop your favourite one, then answer the following questions in your hand-out. (Stuck? Try one of the following: soldiers/cadets in an army, students at a school dance, students in a school).

4. Describe your analogy in as much detail as possible. Make sure to be clear which parts are relevant to solids, liquids, and gases.
5. Which parts of the kinetic molecular theory did your analogy do a good job of representing?
6. Which parts of the kinetic molecular theory did your analogy not do a good job of representing? What inaccuracies can you identify in your analogy?