

Name: _____ Grade: _____ Date: _____

Heat & Temperature

1. The diagrams below show two beakers **A** and **B** containing the same amount of water at different temperatures.



How are the molecules in beaker B different from the molecules in beaker A?

- The molecules in B have more energy and move slower than A.
 - The molecules in B have more energy and move faster than those in A.
 - The molecules in B have the same energy and speed as those in A.
 - The molecules in B have less energy and move faster than those in A.
2. Heat will always pass from one object to another if the objects have different
- Temperatures
 - Masses
 - Volume
 - Surface area
3. Look at the diagrams below and **tick** the one of the pair that has the most energy in it. Explain your answers.

(a) Large bowl of soup at 30°C.



Small bowl of soup at 30°C.



(b) Small pan of soup at 80°C.



same size pan of soup at 50°C.



4. Using the words "heat" and "temperature", explain why a hot cup of coffee gets cool when it is left on a table.
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