Physical Science
Assignment 17-2

Name _____

Class Period _____

Date _____

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Read section 17-2 (pages 431-434). Then, based on the information in your textbook, answer the following questions :

1. If a weather forecaster in Canada predicts a high of $35^{o}C$ for the day, about what temperature range would that be in Fahrenheit?

   Please explain how you decided on your answer.

   a. 60-70 degrees

   b. 70-80 degrees

   c. 80-90 degrees

   d. 90-100 degrees

2. Define ***temperature***.

3. Define ***kinetic energy***

4. Explain why some scientists find the ***Kelvin scale*** more useful than other temperature scales.

5. Describe the motion of molecules at ***absolute zero*** compared to 0° Celsius.

6. At what temperature does nitrogen gas become a liquid?

7. In which pot of water would most of the water molecules be moving faster – a pot at $90^{o}C$ or one at $70^{o}C$?

   Please explain how you decided on your answer.

Please continue on the other side.

8. Explain why the red liquid in the thermometers rises when the thermometer is placed in a warmer substance.

9. Explain why 1,000 grams of water at 100°C will melt more ice than 100 grams of water at the same temperature.

10. Explain what is meant by *hypothermic arrest* and how it can be beneficial to humans in certain circumstances.