1. Which Kelvin temperature is equal to –73°C?
   1) 100 K       2) 173 K       3) **200 K**       4) 346 K

2. Which kelvin temperature is equivalent to –24°C?
   1) 226 K       2) **249 K**    3) 273 K       4) 297 K

3. Energy is being added to a given sample. Compared to the Celsius temperature of the sample, the Kelvin temperature
   1) **will always be 273° greater**
   2) will always be 273° lower
   3) will have the same reading at 0°
   4) will have the same reading at 273°

4. The temperature of a sample of water is changed from 10°C to 30°C. The same change in Kelvin would be
   1) **20**       2) 100 K       3) 273 K       4) 303

5. The temperature of a sample of a substance changes from 10.°C to 20.°C. How many Kelvin does the temperature change?
   1) **10.**       2) 20.       3) 283       4) 293

6. What is the equivalent of 0 Kelvin on the Celsius scale?
   1) –100°       2) 100°       3) **–273°**   4) 273°

7. Which graph best shows the relationship between Kelvin temperature and average kinetic energy?

   1) [Graph 1]
   2) [Graph 2]
   3) [Graph 3]
   4) [Graph 4]

8. Which kelvin temperature is equal to 56°C?
   1) -329 K       2) -217 K       3) 217 K       4) **329 K**

9. A sample of gas is held at constant pressure. Increasing the kelvin temperature of this gas sample causes the average kinetic energy of its molecules to
   1) decrease and the volume of the gas sample to decrease
   2) decrease and the volume of the gas sample to increase
   3) increase and the volume of the gas sample to decrease
   **4) increase and the volume of the gas sample to increase**

   **Chemistry Rocks!**
Answer Key
Celsius to Kelvin Conversions

1. 3
2. 2
3. 1
4. 1
5. 1
6. 3
7. 1
8. 4
9. 4