Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_ Score \_\_\_\_\_\_/10

**CB: UNIT 2 – QUIZ 1: Energy and Heat (A)**

\_\_\_\_\_ 1. The ability to do work or produce heat is known as:

 a. Specific Heat

 b. Energy

 c. Friction

\_\_\_\_\_\_ 2. All of the following are examples of kinetic energy EXCEPT:

 a. Heat Energy

 b. Sound Energy

 c. Chemical Potential Energy

\_\_\_\_\_ 3. Which of the following would contain particles with the greatest amount of heat energy?

 a. A cup of hot chocolate

 b. A snowball held in your gloved hand

 c. Water vapor from your breath on a freezing night.

 30°C 50°C 50°C

  

 A B C

\_\_\_\_\_ 4. Which of the following statements is true about the beakers above?

 a. Beakers B and C have the same temperature and therefore contain the same amount of heat.

 b. Beaker C has the highest temperature and the most heat energy.

 c. Beakers B and C have the same temperature but different amounts of heat energy.

|  |  |
| --- | --- |
| **Substance** | **Specific Heat (J/goC)** |
| Aluminum | 0.900 |
| Silver | 0.240 |
| Ice | 2.010 |
| Glass | 0.840 |

\_\_\_\_\_ 5. Use the table at the right for this question. If these four substances were all placed in an oven, which would increase in temperature the fastest?

 a. Aluminum

 b. Ice

 c. Silver

6. (5 points) If 150. g of water is to be heated from 21.0°C to 88°C to make a cup of heat. How much heat must be added? Water has a specific heat of 4.18 J/g°C.

Q=

C=

m=

ΔT=

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_ Score \_\_\_\_\_\_/10

**CB – UNIT 2, QUIZ 1: Energy and Heat (B)**

\_\_\_\_\_ 1. The ability to do work or produce heat is known as:

 a. Specific Heat

 b. Friction

 c. Energy

\_\_\_\_\_\_ 2. All of the following are examples of kinetic energy EXCEPT:

 a. Chemical Potential Energy

 b. Sound Energy

 c. Heat Energy

\_\_\_\_\_ 3. Which of the following would contain particles with the greatest amount of heat energy?

 a. A glacier in the Atlantic Ocean

 b. Steam in the bathroom after you take a shower.

 c. A snowball held in your gloved hand

 30°C 50°C 50°C

  

 A B C

\_\_\_\_\_ 4. Which of the following statements is true about the beakers above?

 a. Beakers A and B have different temperatures but the same amount of heat energy.

 b. Beakers B and C have the same temperature but different amounts of heat energy.

 c. Beakers B and C have the same temperature and therefore contain the same amount of heat.

|  |  |
| --- | --- |
| **Substance** | **Specific Heat (J/goC)** |
| Nickel | 0.440 |
| Concrete | 0.880 |
| Ice | 2.010 |
| Brass | 0.380 |

\_\_\_\_\_ 5. Use the table at the right for this question. If these four substances were all placed in an oven, which would increase in temperature the fastest?

 a. Nickel

 b. Concrete

 c. Ice

6. (5 points) If 405 g of mercury is to be heated from 21.0°C to 88.0°C in a thermometer, how much heat must be added? Mercury has a specific heat of 0.140 J/g°C.

Q=

C=

m=

ΔT=