

Review Question #1 + 2

1. How much energy in joules, is required to melt 145 grams of solid ice at 273 K into water?
2. Convert 1895 C into joules.

Review Question #3 + 4

3. How much energy in joules, is released when 432 grams of steam condenses into water?
4. Copy the 2 of 6 that are true/correct.

$$C \text{ of Cu} > C \text{ of H}_2\text{O}$$

$$H_V = H_F$$

$$H_V < H_F$$

$$C \text{ of Cu} < C \text{ of H}_2\text{O}$$

$$C_{\text{ICE}} < C_{\text{WATER}}$$

$$C_{\text{ICE}} > C_{\text{WATER}}$$

Review Question #5 + 6

5. How much energy in joules, is required to raise the temperature of 75.0 g of water from 34.5 to 45.8°C?
6. Copy the 2 of 6 that are true/correct.

$$H_V > H_F$$

$$H_V = H_F$$

$$H_V < H_F$$

$$KE > PE$$

$$C_{ICE} = C_{WATER}$$

$$C_{ICE} < C_{WATER}$$

Review Question #7 + 8

7. How much energy in joules, is required to raise the temperature of 75.0 grams of copper from 44.5 to 55.8°C? ($C_{Cu} = 0.391 \text{ J/g}\cdot\text{K}$)
8. Convert the number of joules in your answer above in #7 into kilojoules and into cal

Review Question #9 + 10

9. At what temperature in CENTIGRADE would aluminum melt?
10. The H_F for aluminum is 403 J/g. A soda can's mass is 48.2 grams. How much energy in joules is needed to melt that can into liquid?
(*assume $\Delta T = 0$*)

Review Question #11 + 12

11. When 454 g Bismuth ☺ changes temperature from 273 K to 296 K, it takes 1284 Joules. What is the C of Bi ☺?
12. The $C_{\text{Fe}} = 0.45 \text{ J/g}\cdot\text{K}$. When 2005 J is able to change the temperature of iron by 67.5 Kelvin, what is the mass of this iron?