Review Question #1 + 2

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

2. Convert 1895 C into joules.

Review Question #3 + 4

3. How much energy in joules, is release when 432 grams of steam condenses into water?

4. Copy down the 2 correct math expressions

C of Cu > C of H_2O $H_V = H_F$

H_V < H_F C of Cu < C of H_2O

C_{ICE} < C_{WATER} C_{ICE} > C_{WATER}

Review Question #5 + 6

5. How much energy in joules, is required to raise the temperature of 75.0 grams of water from 34.5°C to 45.8°C?

6. Copy down the 2 correct math expressions

$H_V > H_F$ $\qquad\qquad\qquad$ $H_V = H_F$

$H_V < H_F$ $\qquad\qquad\qquad$ $KE > PE$

$C_{ICE} = C_{WATER}$ $\qquad\qquad$ $C_{ICE} < C_{WATER}$

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°C to 55.8°C?   (C_{Cu} = 0.391 J/g·K)

8.   Convert the number of joules in your answer to question #7 into kilojoules and into calories (small "c")

Review Question #9 + 10

9. At what temperature in CENTIGRADE would aluminum melt?

10. The H_F for aluminum is 403 J/g, which is why you can't melt aluminum in your mouth. A soda can might mass at 48.2 grams. How much energy in joules is needed to melt that can into liquid (*assume ΔT = 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_{Fe} = 0.45 J/g·K. When 2005 Joules is able to change the temperature of iron by 67.5 Kelvin, what is the mass of this iron?