## Calorimetry - Thermal Equilibrium (Final Temperature)

Below are six calorimeters with water of different mass and initial temperature. A sample of ice of 273 Kelvin is placed in each calorimeter. Rank the calorimeter according to the greatest to least final temperature of the system.


A


D


B


E


C


F
Greatest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ 6 $\qquad$ Leas $\dagger$
Are there any calorimeters that have the same final temperature? $\qquad$
Please carefully explain your reasoning.

## Calorimetry - Change in Temperature of the Metal

Evaluation: On a scale of 1-10, how sure are you of your ranking?

Below are six calorimeters with water of different mass and initial temperature. A sample of different metals with the same mass and each has an initial temperature of $75^{\circ} \mathrm{C}$, are placed in each calorimeter. Rank the calorimeter according to the greatest to least change in temperature of the metal.


A


D


B


E


C


F

Greatest 1 $\qquad$ 2 $\qquad$ 3 $\qquad$ 4 $\qquad$ 5 $\qquad$ 6 $\qquad$ Leas $\dagger$

Are there any calorimeters that have the same final temperature? $\qquad$ Please carefully explain your reasoning.

Evaluation: On a scale of 1-10, how sure are you of your ranking?

