

Formative Task - SHC LH Video Explanation

ATL(s) being taught and assessed:

Communication - Organise and depict information logically

Task

In an experiment to determine the specific latent heat of fusion of ice, an ice cube is dropped into water that is contained in a well-insulated calorimeter of negligible specific heat capacity. The following data are available.

Mass of ice cube	=	25 g
Mass of water	=	350 g
Initial temperature of ice cube	=	0 °C
Initial temperature of water	=	18 °C
Final temperature of water	=	12 °C
Specific heat capacity of water	=	4200 J kg ⁻¹ K ⁻¹

Using the data, estimate the specific latent heat of fusion of ice.

Make a 1 minute video to explain the steps you have taken in solving this problem, including any assumptions made.

Formative assessment criteria:

Not there yet	Meeting expectations	Beyond expectations
	- Explanation leads to a conclusion that the viewer can follow - Conservation of energy is correctly mentioned - Mathematics is structured and clear - Explanation is concise, visual aides help the viewer understand the process - Video is 1 minute or less	