

Heat of Phase Change (teamwork) A

Tables of values on page 372 and 379 of the Purple Text book

(If you round these values, be aware that your answer will not be exactly the same as the ones listed here, but the computer allows answers within 5%, so some rounding is tolerated for quizzes)

1. How much energy is required to change a 30g ice cube from ice at -10°C to steam at 110°C ?
2. How much energy is required to melt 20g of lead that is initially at room temperature (25°C) so it can be used to make a lead sinker for fishing?

Answers to part B

1. 61900 J
2. 1900 J

Heat of Phase Change (teamwork) B

Tables of values on page 372 and 379 of the Purple Text book

(If you round these values, be aware that your answer will not be exactly the same as the ones listed here, but the computer allows answers within 5%, so some rounding is tolerated for quizzes)

1. How much energy is required to change a 20g ice cube from ice at -20°C to steam at 120°C ?

2. How much energy is required to melt 30g of lead that is initially at room temperature (25°C) so it can be used to make a lead sinker for fishing?

Answers to part A

1. 91600 J

2. 1260 J