Chapter 6: Thermal Energy

Find the change in thermal energy of a 20-kg wooden chair that warms from 15° to 30° if the specific heat of wood is 700 J/(kg°).

A) 140,000 J
B) 210,000 J
C) 490,000 J
D) 1,090,800 J



A) 140,000 J
B) 210,000 J
C) 490,000 J
D) 1,090,800 J

Find the change in thermal energy of a 20-kg bowl of jello that warms from 15° to 20° if the specific heat of jello is 700 J/(kg°).

0	A)	28,000 J
0	B)	210,000 J
0	C)	140,000 J
0	D)	490,000 J

Find the change in thermal energy of a 20-kg lap cat that warms from 25° to 35° if the specific heat of cat is 700 J/(kg^o).

- C A) 140,000 J
- B) 210,000 J
- © C) 363,600 J
- © **D**) 490,000 J

Find the change in thermal energy of a 20-kg wooden stool that warms from 30° to 45° if the specific heat of wood is $700 \text{ J/(kg^{\circ})}$.

A) 140,000 J
B) 210,000 J
C) 490,000 J
D) 1,090,800 J

The air in a living room has a mass of 72 kg and a specific heat of $1010 \text{ J/(kg^\circ)}$. What is the change in thermal energy of the air when it warms from 15° to 30° ?

A) 140,000 J
B) 210,000 J
C) 490,000 J
D) 1,090,800 J

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The air in a living room has a mass of 72 kg and a specific heat of 1010 J/(kg^o) . What is the change in thermal energy of the air when it warms from 20° to 55°?

A) 210,000 J
B) 490,000 J
C) 1,090,800 J
D) 2,545,200 J

The air in a living room has a mass of 72 kg and a specific heat of $1010 \text{ J/(kg^\circ)}$. What is the change in thermal energy of the air when it warms from 15° to 20°?

A) 140,000 J
B) 210,000 J
C) 363,600 J
D) 1,090,800 J

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The air in a living room has a mass of 72 kg and a specific heat of 1010 J/(kg°). What is the change in thermal energy of the air when it warms from 25° to 35° ?

A) 140,000 J
B) 210,000 J
C) 363,600 J
D) 727,200 J

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The air in a living room has a mass of 72 kg and a specific heat of $1010 \text{ J/(kg^{\circ})}$. What is the change in thermal energy of the air when it warms from 30° to 45°?

A) 1,090,800 J
B) 490,000 J
C) 210,000 J
D) 140,000 J

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