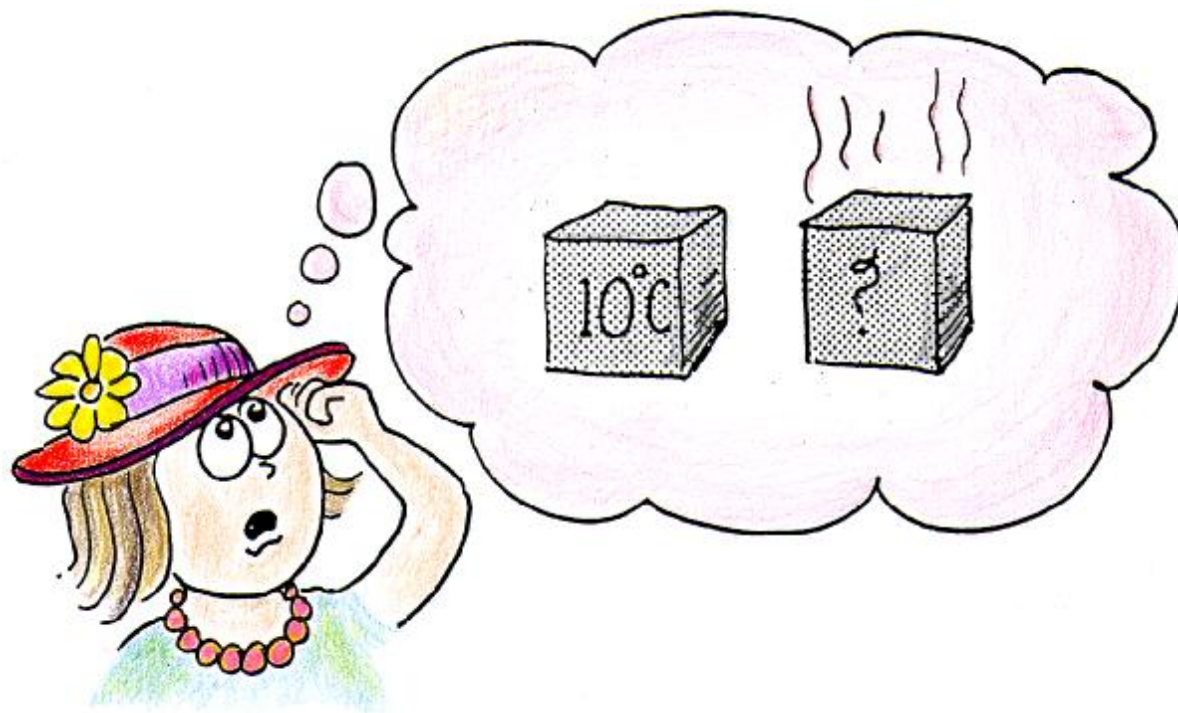


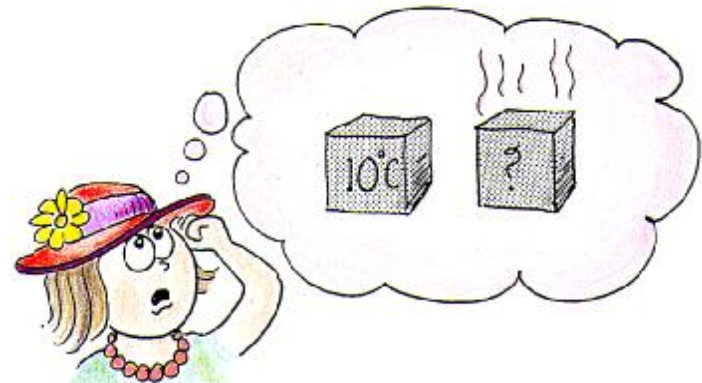
NEXT-TIME QUESTION

A piece of iron has a temperature of 10°C . A second identical piece of iron is twice as hot. What is the temperature of the second piece of iron?



NEXT-TIME QUESTION

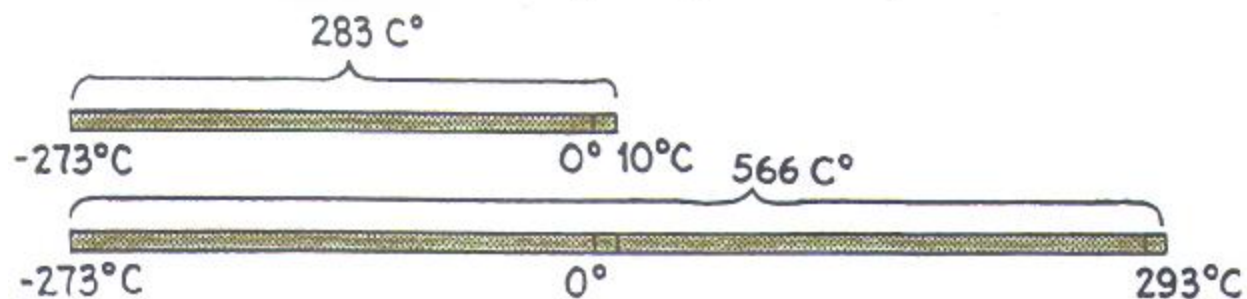
A piece of iron has a temperature of 10°C . A second identical piece of iron is twice as hot. What is the temperature of the second piece of iron?



Answer:

The twice as hot iron is 293°C .

Consider a stick that is $273 + 10$ units long. This is like a thermometer that extends from absolute zero (-273°C) to 10°C . Can you see that a stick twice as long is $2 \times 283 = 566$ units long? (Or temperature-wise, 566 K ?)



Subtract the 273 part and you have $566 - 273 = 293$ units—likewise for the twice-as-hot 10°C iron.