Change of state: melting curves

Change of state

ice \rightarrow water \rightarrow steam

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

Draw a graph of temperature ...

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

Time

. against the length of time it has been heated

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

> warming ice

Time

Really cold ice from the freezer

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

melting ice

Time

The temperature stays the same as the ice melts

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)



Time

Pure water melts at 0°C

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

 $\left(\right)$

warming water

Time

The temperature goes up as the water is warmed

Change of state

boiling

water

ice \rightarrow water \rightarrow steam

Temperature (°C)

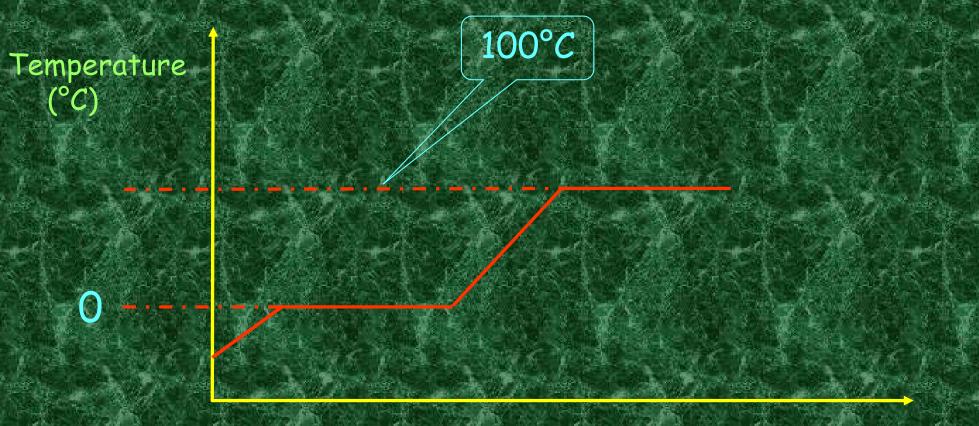
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Time

The temperature stays the same while the water boils

Change of state

ice \rightarrow water \rightarrow steam



Time

Pure water boils at 100°C

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

100

 \bigcirc

Time

Pure water melts at 0°C and boils at 100°C

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

100

 \bigcirc

heating steam

Time

Steam can give you a far worse burn than boiling water

Change of state

ice \rightarrow water \rightarrow steam

Temperature (°C)

Time

Pure water melts at°C and boils at°C