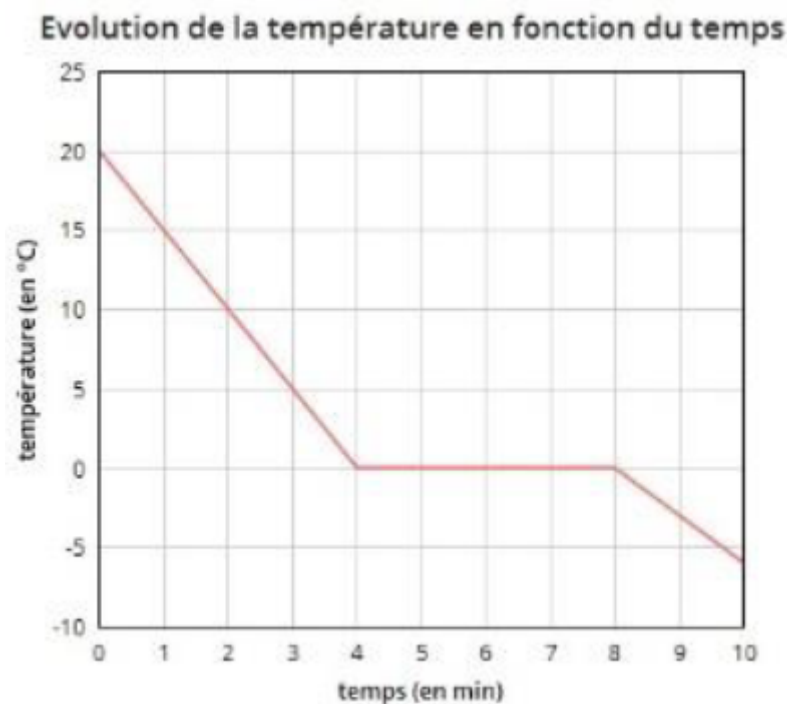


Activity 1



One story for one graph:

Activity 1: choose the good story

- 1. Story A:** The temperature of the water decreases regularly till getting the temperature of the freezer (-6°C)
- 2. Story B:** The temperature of the water decreases till 0°C . At this temperature, all of the water change from the liquid state to the solid state instantaneously. When all of the water is becoming solid, the temperature begins to decrease again.
- 3. Story C:** The temperature of the water decreases till 0°C . Then, it remains at 0°C for a while: the time for changing from the liquid state to the solid state. When all of the water is becoming solid, the temperature begins to decrease again.

Activity 2

The curve is made of three segment with different slopes.

1 corresponds to the segment between 0min. and 4 min.

2 corresponds to the segment between 4min. and 8 min.

3 corresponds to the segment between 8min. and 10 min.

Write the numbers 1, 2 and 3 on the right segment of the graph.

Fill in the table :

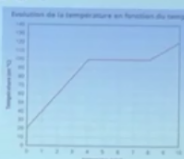
Part of the curve	1	2	3
Temperature changes (yes/no)			
What is the state of water			

Activity 3

Une histoire pour un graphique :

Activité 2 :

- Histoire A :** Emma chauffe l'eau. Puis, elle arrête de la chauffer un petit moment. Enfin, elle reprend le chauffage.
- Histoire B :** Emma chauffe l'eau. L'eau se met à bouillir : elle change d'état. A la fin, il ne reste plus que de la vapeur d'eau au-dessus de la casserole qui continue à chauffer.
- Histoire C :** Emma refroidit de l'eau. L'eau se met à geler : elle change d'état. A la fin, il ne reste plus que de la glace dans le récipient qui continue de refroidir.



see translation below

One story for one graph:

Activity 2:

1. Story A: Emma warms water up. Then, she stops to warm it up for a while. Finally, she starts the heating again.

2. Story B: Emma warms water up. Water boils: its state changes. At the end, only vapour remains upon the pot that keeps on warming up.

3. Story C: Emma cools water down. Water freezes: its state changes. At the end, nothing else but ice remains in the container that keeps on cooling down.

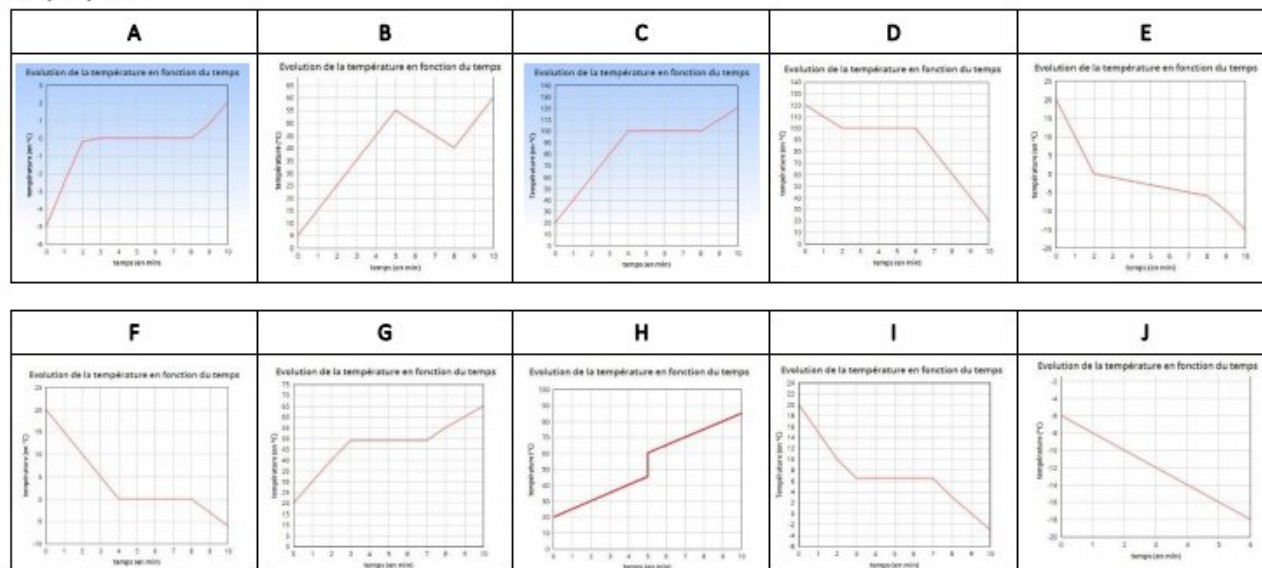
Activity 4

Which graph for which story ?

Fill in the following table

Graph	A	B	C	D	E	F	G	H	I	J
Story										

Graphiques :



1. Emma measures the temperature of the salted water state change. The water comes from a puddle on the road that has been salted for winter. She realizes that the state change temperature is not constant: it decreases a bit.	2. Emma places a thermometer in the pressure cooker which has just heated up: it contains steam. She let water cooling down and takes the temperature of the water each minute with a sealed system so that steam does not escape.
3. Emma put in the freezer a container with liquid water. She takes the temperature each minute.	4. Emma decreases the temperature of her fridge from -6°C to -18°C .
5. Emma doesn't remember the liquid in a glass: it is an uncoloured liquid. In order to discover which liquid it is, she cool down the liquid. She sees that the change of state from liquid to solid is not 0°C : it's not water!	6. Emma doesn't remember the liquid in a glass: it is an uncoloured liquid. In order to discover which liquid it is, she heats up the liquid. She sees that the change of state from liquid to gas is not 100°C : it is not water!
7. Emma heats up liquid water which comes from the fridge. She stops heating. Later on she starts again heating up the water.	8. This graph is just plain wrong. How could water be at two different temperatures at once?
9. Emma heats up liquid water in a pan. The water is boiling. When all liquid water is changed into steam, the temperature of steam increases.	10. Write your own story!