

Name.....class.....Number.....

### Exercise 2.1

#### 1. Fill in the blanks.

##### 1.1) Heat and the expansion and contraction of substances

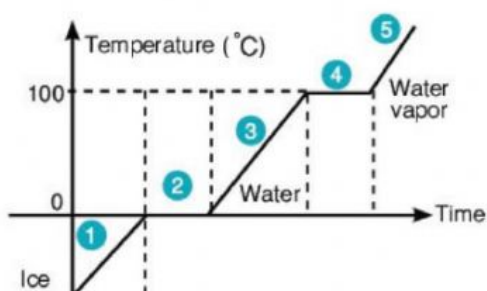
An iron sheet will .....when heated and will ..... when left to cool. Copper has a higher coefficient of thermal expansion than iron. If a copper sheet is heated, it will..... more than .....the iron sheet.

##### 1.2) Heat and changes in the state of substances

The three states of substances are ..... Substances can change in state when heated. When a solid turns into a liquid, this is called

..... When a liquid turns into a gas, this is called ..... When a gas turns into a liquid, this is called ..... When a liquid turns into a solid, this is called ..... The heat that changes the state of a substance to another state but the temperature of which is constant is called .....

2. Look at the graph showing the processes of ice turning into water and water turning into water vapor (given that the specific heat of water is  $1 \text{ cal/ g. } ^\circ\text{C}$ ). Then, answer the following questions.



2.1) Which numbers are the phases where only the state changes when heated?

.....

2.2) Which numbers are the phases where only the temperature changes when heated?

.....