3. Fill in the blanks in the following statements:

   (a) When carbon dioxide is passed through lime water, it turns milky due to the formation of _____.

   (b) The chemical name of baking soda is _____.

   (c) Two methods by which rusting of iron can be prevented are _____ and _____.

   (d) Changes in which only _____ properties of a substance change are called physical changes.

   (e) Changes in which new substances are formed are called _____ changes.

4. When baking soda is mixed with lemon juice, bubbles are formed with the evolution of a gas. What type of change is it?  Explain.

5. When a candle burns, both physical and chemical changes take place. Identify these changes.  Give another example of a familiar process in which both the chemical and physical changes take place.
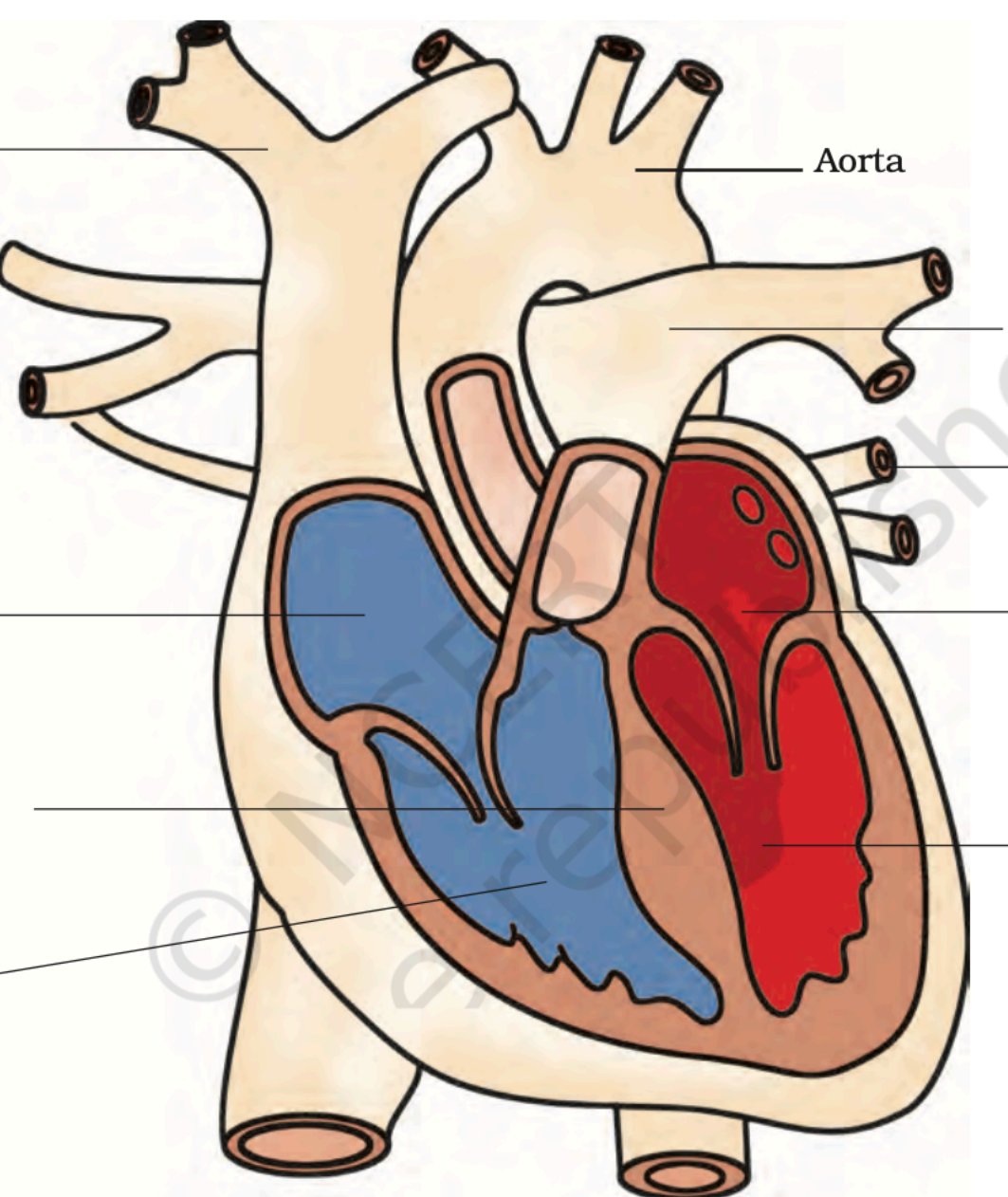
**Aorta**

**Fig. 7.4** *Sections of human heart*

2. Fill in the blanks.

   (i)    The blood from the heart is transported to all parts of the body by the _____ .

  (ii)    Haemoglobin is present in _____ cells.

 (iii)    Arteries and veins are joined by a network of _____ .

 (iv)    The rhythmic expansion and contraction of the heart is called _____ .

  (v)    The main excretory product in human beings is _____ .

 (vi)    Sweat contains water and _____ .

 (vii)    Kidneys eliminate the waste materials in the liquid form called _____ .

(viii)    Water reaches great heights in the trees because of suction pull caused by _____ .

12. Why is it necessary to excrete waste products?

9. Why is blood needed by all the parts of a body?
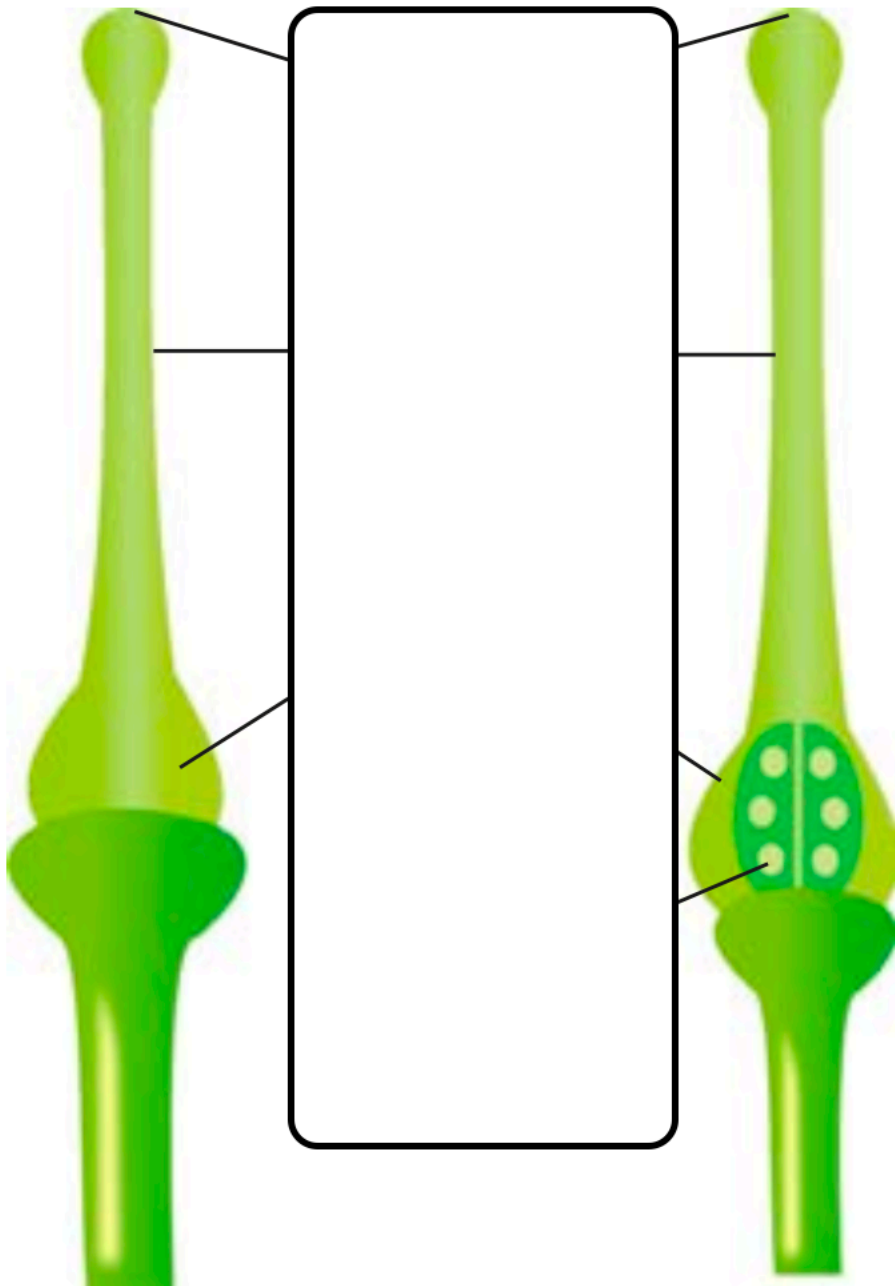
(b) Pistil

Fig. 8.9 Reproductive parts

1. Fill in the blanks:

    (a) Production of new individuals from the vegetative part of parent is called_____.

    (b) A flower may have either male or female reproductive parts. Such a flower is called_____.

    (c) The transfer of pollen grains from the anther to the stigma of the same or of another flower of the same kind is known as

    _____.

    (d) The fusion of male and female gametes is termed as _____.

    (e) Seed dispersal takes place by means of _____, _____ and _____.

| Column I | Column II |
|---|---|
| (a) Bud | (i) Maple |
| (b) Eyes | (ii) *Spirogyra* |
| (c) Fragmentation | (iii) Yeast |
| (d) Wings | (iv) Bread mould |
| (e) Spores | (v) Potato |
| | (vi) Rose |

3. A simple pendulum takes 32 s to complete 20 oscillations. What is the time period of the pendulum?

4. The distance between two stations is 240 km. A train takes 4 hours to cover this distance. Calculate the speed of the train.

5. The odometer of a car reads 57321.0 km when the clock shows the time 08:30 AM. What is the distance moved by the car, if at 08:50 AM, the odometer reading has changed to 57336.0 km? Calculate the speed of the car in km/min during this time. Express the speed in km/h also.

6. Salma takes 15 minutes from her house to reach her school on a bicycle. If the bicycle has a speed of 2 m/s, calculate the distance between her house and the school.

8. Fill in the blanks:

(a) Longer line in the symbol for a cell represents its _____ terminal.

(b) The combination of two or more cells is called a _____ .

(c) When current is switched 'on' in a room heater, it _____ .

(d) The safety device based on the heating effect of electric current is called a _____ .

1. Fill in the blanks:

   (a) An image that cannot be obtained on a screen is called _____.

   (b) Image formed by a convex _____ is always virtual and smaller in size.

   (c) An image formed by a _____ mirror is always of the same size as that of the object.

   (d) An image which can be obtained on a screen is called a _____ image.

   (e) An image formed by a concave _____ cannot be obtained on a screen.

11. A virtual image larger than the object can be produced by a

    (i)    concave lens            (ii)    concave mirror

    (iii)    convex mirror          (iv)    plane mirror

12. David is observing his image in a plane mirror. The distance between the mirror and his image is 4 m. If he moves 1 m towards the mirror, then the distance between David and his image will be

    (i)    3 m                   (ii)    5 m

    (iii)    6 m                 (iv)    8 m

13. The rear view mirror of a car is a plane mirror. A driver is reversing his car at a speed of 2 m/s. The driver sees in his rear view mirror the image of a truck parked behind his car. The speed at which the image of the truck appears to approach the driver will be

    (i)    1 m/s                (ii)    2 m/s

    (iii)    4 m/s             (iv)    8 m/s