

1. b) kg/m^3
2. a) $9.46 \times 10^{15} \text{ m}$
3. a) Lowering the centre of gravity.
4. b) non-metals.
5. c) electron
6. d) flower
7. b) nitrogen
8. b) periodontitis
9. a) vibrio cholera
10. d) photographer.

11. one astronomical unit is defined as the average distance between the earth and sun

$$1 \text{ AU} = 1.496 \times 10^{11} \text{ m}$$

12.
 - a) mass - amount of a substance
 - b) Length - rope
 - c) Density - g/cm^3
 - d) volume - measuring jar.

13. Speed of the bicycle = 4 m/s.

Time takes by Geetha to reach school from the house = 15 min

$$= 15 \times 60 \text{ sec.}$$

$$= 900 \text{ Second.}$$

$$\text{Speed} = \frac{\text{distance}}{\text{time}} = \frac{900}{4}$$

$$\text{Distance} = \text{Speed} \times \text{time}$$

$$= 900 \times 4$$

$$= 3600 \text{ m}$$

$$= 3.6 \text{ km}$$

Distance between Geetha house and school, = 3.6 km

14.

The centre of gravity of an object is the point through which the entire weight of the object appears to act.

15.

a) Distance

b) Knob.

16.

$(N)(N)$ - molecule of element.

$(Na)(Cl)$ - molecule of compound.

17.

Hydrogen - H_2

Sulphur - S_8

18.

Atomicity is the total number of atoms present in one molecule of an element.

- 26.
- a) Typhoid - Salmonella
 - b) Rabies - Hydrophobia
 - c) Tuberculosis - Mycobacterium
 - d) Hepatitis - yellow urine.

- 27.
- (i) cholera
 - (ii) Typhoid.

28. Don't throw trash (garbage) on the ground. Keep our city clean.

29. (i) Brush your teeth two times a day, it will prevent the formation of tartar and plaque on teeth and gums.

(ii) When we floss, it will remove food particles, plaque and bacteria which build up between our teeth.

30. (i) The 2D images have only two dimensions - length and height. But 3D images have length, height and width.

(ii) 3D images appear in front of our eyes like it happens in the real world.