

6th Science Lesson 1 Questions in English

1. Measurement

1. The comparison of unknown quantities with some known quantities is known as

- a) Weight
- b) Force
- c) Quantity
- d) **Measurement**

Explanation

The comparison of unknown quantities with some known quantities is known as measurement. Measurement of a quantity has two parts: a number and its unit.

2. The distance between one end and the other desired end is called as

- a) Point
- b) **Length**
- c) Distance
- d) None of the above

Explanation

The distance between one end and the other desired end is called as length. It may be the distance between the edges of a book or a table or the corners of a football ground or even from your home to school.

3. The standard unit of length is

- a) mm
- b) cm
- c) **m**
- d) dm

Explanation

The standard unit of length is 'Metre'. It is represented by letter 'm'. Very small lengths can be measured in mm and cm. Still larger measures, say height of a building, a banner or a lamp post are all measured in metre.

4. Convert this 1m=

- a) 1000mm
- b) 100cm
- c) 10mm
- d) **Both a and b**

Explanation

Know the unit of length 1 km (kilometre) = 1000 m (metre) 1 m (metre) = 100 cm (centimetre) 1 cm (centimetre) = 10 mm (millimetre).

5. The need for SI system of units

- a) **For the purpose of uniformity**
- b) To compare with others
- c) To find error in other units
- d) None of the above

Explanation

The sake of uniformity, scientists all over the world have adopted a common set of units to express measurements. This system is called as the International System of Units or SI Units.

6. SI unit of time is

- a) Hour
- b) Minute
- c) **Seconds**
- d) Second hour

Explanation

SI unit for length is Metre SI Unit for mass is Kilogram SI Unit for time is Second.

7. SI unit for volume of solid

- a) m^2
- b) w^2
- c) **m^3**
- d) None of the above

Explanation

Area of Surface = m^2 Volume of Solid = m^3

8. The submultiple for milli meter is

- a) **1/1000**
- b) 1/10
- c) 1/100
- d) 1/100000

Explanation

Prefix	Abbreviation	Submultiple/ Multiple	For Metre
Deci	d	Submultiple: 1/10	10 decimetre = 1 metre
Centi	c	Submultiple: 1/100	100 centimetre = 1 metre
Milli	m	Submultiple: 1/1000	1000 millimetre = 1 metre
Nano	n	Submultiple: 1/1000000000	1000000000 nano metre = 1 metre
Kilo	k	Multiple: 1000	1000 metres = 1 Kilometre

9. _____ is a displacement or difference in the apparent position of an object viewed along two different lines of sight.

- a) Syntax
- b) Giopex
- c) **Parallax**
- d) Both a and c

Explanation

Parallax is a displacement or difference in the apparent position of an object viewed along two different lines of sight.

10. For avoiding Parallax error eye must be exactly in front of _____ above the point where the measurement has to be taken.

- a) **Vertical**
- b) Horizontal
- c) Anglicized
- d) None of the above

Explanation

Correct position of the eye is also important for taking measurement. Your eye must be exactly in front of vertically above the point where the measurement has to be taken.

11, Using Length which of the following can be found

- a) Area
- b) Volume
- c) Width
- d) **Both a and b**

Explanation

Length is a fundamental quantity. That means, it cannot be expressed in any other quantities. Using length, we can find out other measurements like Area and Volume. Area is obtained by using two lengths. So, Area = Length × Breadth.

12. Volume is a

- a) Basic
- b) Derived**
- c) Both a and b
- d) None of the above

Explanation

Volume is also a derived quantity and it can be measured from measuring lengths.

13. Which of the following is not required to calculate the volume ?

- a) Length
- b) Breadth
- c) Height
- d) None of the above**

Explanation

To know the volume of a box we need to know the length (l), breadth (b) and height (h). With a measuring scale measure the three parameters in cm. The volume of the box = $l \times b \times h$. Unit of volume would be obviously $\text{cm} \times \text{cm} \times \text{cm} = \text{cubic cm or cm}^3$.

14. Shape of liquid is

- a) Oval
- b) Rectangular
- c) Shape of container**
- d) None of the above

Explanation

Measuring the volume of a liquid is quite easy. Liquids take the shape of the container in which they are kept. A liquid whose volume is to be found can simply be poured into a graduated container.

15. Which of the cannot be used to measure the volume of the liquids?

- a) Graduated beakers
- b) Graduated pipettes
- c) Graduated burettes
- d) None of the above**

Explanation

Graduated cylinders, beakers, pipettes and burettes are available for measuring exact volumes. The volume of liquid is usually measured in litres.

16. Which of the following method can be used to measure the volume of irregular objects?

- a) Stoning method
- b) Water spilt method
- c) **Water displacement method**
- d) None of the above

Explanation

As the stone is immersed, we can observe that water level increases. Why? The stone displaces the water to occupy the space inside the measuring cylinder. How much water would be displaced? It would be equal to the space taken up by stone. So the amount of water displaced will be the volume of the stone. This method is called as water displacement method.

17. Convert the following 1ml=

- a) 10 cm^3
- b) 25 cm^2
- c) **1 cm^3**
- d) None of the above

Explanation

1ml = 1 cubic cm

18. What happens when you compress a gas

- a) It will not compress
- b) **Occupies lesser space**
- c) Both a and b
- d) None of the above

Explanation

Gases expand to fill the container into which they are placed. When you compress, a gas you can make the same gas to occupy lesser space. (as in LPG gas cylinder). Therefore it is not easy to talk about the volume of gas in the same way as a volume of a stone or a liquid.

19. Convert the following $1 \text{ mm}^3 =$

- a) 1 kilolitre
- b) 1 millilitre
- c) **1 microlitre**
- d) None of the above

Explanation

SI unit for Volume of solid is cubic metre. Liquids and gases are usually measured in litres. But also can be measured in m^3 or cubic metre. Similar to the length, $1 \text{ m}^3 = 1 \text{ kilolitre (kl or kL)}$ $1 \text{ cm}^3 = 1 \text{ millilitre (ml or mL)}$ $1 \text{ mm}^3 = 1 \text{ microlitre (}\mu\text{l or }\mu\text{L)}$.

20. Weight=

- a) Mass x 9.81
- b) Mass x gravity
- c) **Both a and b**
- d) None of the above

Explanation

Mass is the measure of the amount of matter in an object. Weight is the gravitational pull experienced by the mass.

21. What will happen when you are in moon?

- a) Mass gets reduced
- b) **Weight gets reduced**
- c) Both will get reduced
- d) None of the above

Explanation

The weight is directly proportional to the mass on earth's surface. On moon where the gravitational force is lesser than earth, the weight will reduce but the mass will remain same.

22. The moon's gravitational pull is _____ of the earth's pull.

- a) $1/5^{\text{th}}$
- b) **$1/6^{\text{th}}$**
- c) $2/5^{\text{th}}$
- d) $3/6^{\text{th}}$

Explanation

The moon's gravitational pull is one sixth of the earth's pull. Thus objects weigh six times lighter on the Moon than on the Earth.

23. Convert the following 1000 kg =

- a) 10 tonnes
- b) **1 tonne**
- c) 2 tonnes
- d) None of the above

Explanation

Bigger weights are measured in tonne or Metric Tonne. 1000 milligram = 1 gram 1000 gram = 1 kilogram 1000 kilogram = 1 tonne.

24. We use beam balance to measure

- a) Weight
- b) **Mass**
- c) Gravity

- d) None of the above

Explanation

We use beam balances to measure mass. A beam balance works by comparing the mass of an object to that of known mass (called a standard mass).

25. What can be used to calculate rough time?

- a) Food
- b) Plants
- c) **Pulses**
- d) None of the above

Explanation

You can also use your pulse to measure 'rough' time. Count the number of pulses. That can tell you the time elapsed. In your normal speed of speaking, say "one little second"; "two little seconds" to count the passage of time.

26. Earlier days people used which of the following to measure rough time?

- a) Sundial
- b) Sand clock
- c) Dogs
- d) **Both a and b**

Explanation

In earlier days people used sand clock and sundial to measure the passage of time during the day. The shadow cast by a stick can be used to estimate time. One can also use a vessel with a small hole for computing time. Take a vessel or bottle with a small hole in it and fill it with water. The time taken for water to drain can also be used as a measuring device.

27. ____ is a device used for indicating distance travelled by an automobile.

- a) Speedometer
- b) **Odometer**
- c) Dualometer
- d) None of the above

Explanation

An odometer is a device used for indicating distance travelled by an automobile.

28. The metric system or standard set of units was created by the _____ in 1790.

- a) British
- b) **French**
- c) Danish
- d) Dutch

Explanation

The metric system or standard set of units was created by the French in 1790.

29. A ruler or scale, used now a days to measure length was invented by a _____ in 16th century.

- a) William gladdy
- b) William gluefy
- c) **William bedwell**
- d) None of the above

Explanation

A ruler or scale, used now a days to measure length was invented by a William Bedwell in 16th century.

30. A standard metre rod made of an alloy of _____ is placed at the Bureau of weights and measures in Paris.

- a) **Platinum and iridium**
- b) Galium and iridium
- c) Stantium and germanium
- d) None of the above

Explanation

A standard metre rod made of an alloy of platinum and iridium is placed at the Bureau of weights and measures in Paris.

31. International Bureau of Weights and Measures is present in

- a) **France**
- b) Italy
- c) Bern
- d) None of the above

Explanation

One kilogram is equal to the mass of a certain bar of platinum-iridium alloy that has been kept since 1889 at the International Bureau of Weights and Measures in Sèvres, France.