

REVIEW

Chapter 3 : Lesson 3A

1. Select the best definition of a Measurement?

- A) A comparison of an unknown quantity to a known standard unit
- B) A method to calculate the volume of a substance
- C) A way to determine the color of a chemical
- D) A process to identify the chemical composition of a substance

2. What 2 parts does a Measurement consist of ?

3. Which system of measurement is used globally by scientists?

- A) The British Imperial System
- B) The US Customary System
- C) The Metric System (SI)
- D) The Roman System

4. How many fundamental units are there in the SI system?

- A) 5
- B) 7
- C) 20
- D) 22

5. How many derived units are there in the SI system?

- A) 5
- B) 7
- C) 20
- D) 22

6. Match up the Dimensions on the left with the correct Unit on the right by connecting each pair with a line.

| | |
|---------------------|-----|
| Time | m |
| Length | kg |
| Light Intensity | s |
| Mass | K |
| Temperature | A |
| Number of Particles | cd |
| Electrical Current | mol |

7. Drag & Drop each of the following items into the correct box :

| | | | |
|-----------|-----------------|---------|--------------------|
| Frequency | Length | Volume | Temperature |
| Mass | Light Intensity | Energy | Electrical Current |
| Time | Force | Density | Pressure |

| SI Derived Units |
|------------------|
| |

| SI Fundamental Units |
|----------------------|
| |

8. What is the SI unit for mass?

- A) Meter
- B) Gram
- C) Kelvin
- D) Ampere

9. What is the SI unit for temperature?

- A) Meter
- B) Gram
- C) Kelvin
- D) Ampere

10. What is the SI unit for electrical current?

- A) Meter
- B) Gram
- C) Kelvin
- D) Ampere

11. Which of the following is a derived unit in the SI system?

- A) Meter
- B) Kilogram
- C) Joule
- D) Candela

12. Which of the following is a fundamental unit in the SI system?

- A) Pascal
- B) Kilogram
- C) Joule
- D) Newton

13. What does the prefix 'kilo-' represent in the SI system?

- A) 10^3
- B) 10^{-3}
- C) 10^6
- D) 10^{-6}

14. What does the prefix 'milli-' represent in the SI system?

- A) 10^3
- B) 10^{-3}
- C) 10^6
- D) 10^{-6}

15. What does the prefix 'centi-' represent in the SI system?

- A) 10^2
- B) 10^{-2}
- C) 10^4
- D) 10^{-4}

16. What does the prefix 'mega-' represent in the SI system?

- A) 10^6
- B) 10^{-6}
- C) 10^4
- D) 10^{-4}

17. What is the correct equivalence expression to use when converting meters to centimeters within the SI system?

- A) $1\text{ m} = 10\text{ cm}$
- B) $1\text{ m} = 100\text{ cm}$
- C) $1\text{ m} = 1000\text{ cm}$
- D) $1\text{ m} = 0.1\text{ cm}$

18. What is the correct equivalence expression to use when converting inches to millimeters between the SI and Imperial systems?

- A) $1\text{ inch} = 2.54\text{ mm}$
- B) $1\text{ inch} = 25.4\text{ mm}$
- C) $1\text{ inch} = 254\text{ mm}$
- D) $1\text{ inch} = 0.254\text{ mm}$

19. Convert 7,500 g into kg.

- A) 0.075 kg
- B) 0.75 kg
- C) 7.5 kg
- D) 75 kg

20. Convert 10 km into cm.

- A) 0.0001 cm
- B) 0.1 cm
- C) 1,000 cm
- D) 1,000,000 cm

21. Convert 1,000,000 μm into m.

- A) 0.0001 m
- B) 0.1 m
- C) 1 m
- D) 1,0000 m

22. The Volume of a block of wood is 4,505,033 cm^3 . Convert this into m^3 .

- A) 0.0004505033 m^3
- B) 0.4505033 m^3
- C) 4.505033 m^3
- D) 4,505.033 m^3

23. Convert 137 inches into m.

- A) 0.00035 m
- B) 0.34798 m
- C) 3.5 m
- D) 3,479.8 m