

MATTER

SUBJECT-PHYSICS

CHAPTER NO- 1

Meaning and composition of matter.

PERIOD-1

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

- Students will be able to
- Define matter
- Know the examples of matter
- Familiarize with the composition of matter
- Sensitize the discovery of atoms and molecules



WARM UP ACTIVITY

- What are the things around us like water, soil, plants, minerals, animals etc called?

What do you mean by matter?

- **Matter** is anything that occupies space and has mass. All physical objects are composed of **matter**, and an easily observed property of **matter** is its state or phase. The classical states of **matter** are solid, liquid and gas.

- **Panchatatva**
- (panch + tatva) means five elements or the "panchamahabhutas". These are:
Prithvi(**Earth**), Jal
(Water), **Agni (Fire)**, **Vayu** (Air) and Akash
(Space). The entire universe is created by these
five elements

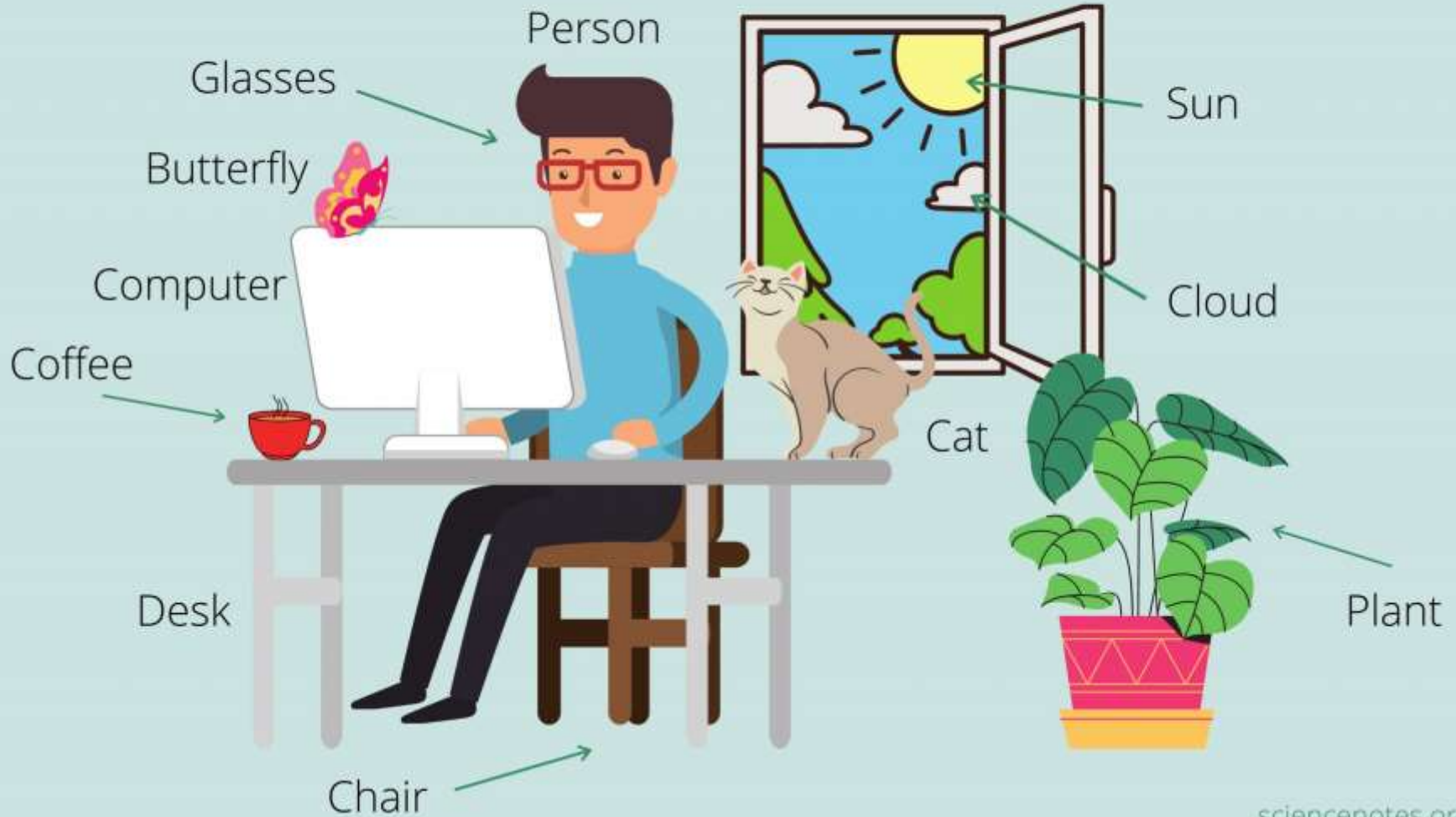
- Each of the **five elements** represents a state of **matter** in nature
- Solid **matter** is classified as the 'earth' element,
- water as liquid,
- air as everything that is gas and
- fire that transforms one state of **matter** into another,
- and space is the mother of all other elements

Explain the concept of matter by showing a video.

<https://youtu.be/QQsybALJoew>

Examples of Matter

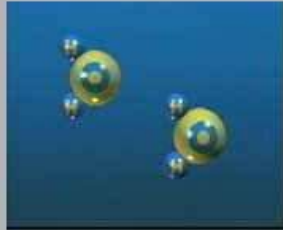
Matter is anything that has mass and takes up space.



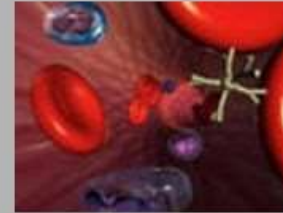
MATTER HAS MASS AND IT OCCUPIES SPACE

- <https://youtu.be/FxS-pzysJJA>

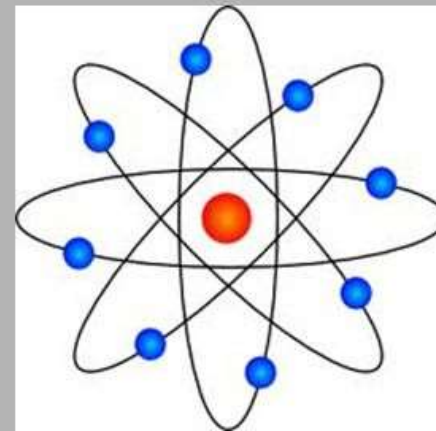
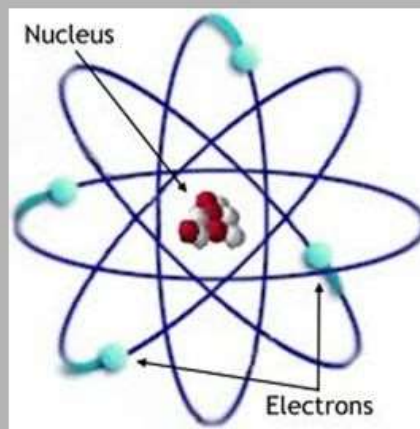
COMPOSITION OF MATTER



ATOMS



- ALL MATTER IS MADE OF **ATOMS**
- Definition: ATOMS ARE THE **SMALLEST PIECE OF MATTER** and **CANNOT** BE BROKEN DOWN INTO A SIMPLER SUBSTANCE.

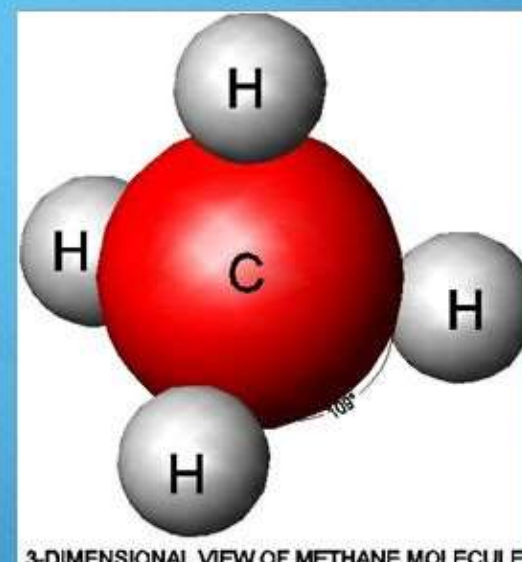
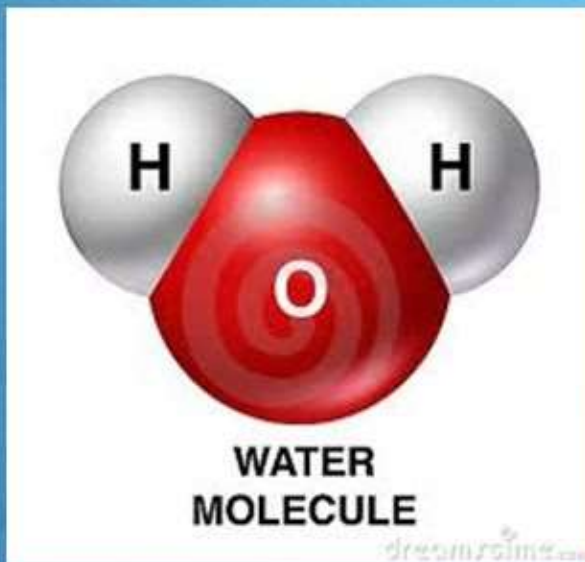


What are molecules?

A group of atoms which are joined together are called molecules. The chemical formula for water is H_2O because a molecule of water consists of two hydrogen atoms joined to an oxygen atom.

The formula For methane is CH_4 . It has this formula because a molecule of methane

Consists of an atom of carbon joined to four atoms of hydrogen.



Methane
molecule

Explain the composition of matter
by showing a video

<https://youtu.be/CnHooxcd71o>

HOME ASSIGNMENT

- Exercise- B 1,2
- Q. Elaborate the composition of matter
- Q. Define matter

THANKING YOU
ODM EDUCATIONAL GROUP