• **Science** is the study of the natural world through observation, investigation, and experimentation. It helps us understand how things work and why things happen around us.

• **Science** is all around us. By observing, asking questions, and experimenting, we learn how the world works. Being curious, careful, and honest are important qualities of a good scientist.

• **Importance of Science**

- Helps us solve daily life problems.
- Leads to new discoveries and inventions.
- Improves health, communication, and transportation.
- Helps us understand our environment better.

• **Scientific Method**

The scientific method is a step-by-step way of finding answers to questions. It includes:

- Asking a Question
- Making Observations
- Forming a Hypothesis (an idea or explanation)
- Performing Experiments
- Collecting and Analyzing Data
- Drawing a Conclusion
- Sharing Results

• **Observation vs Inference**

- **Observation:** What we see, hear, touch, taste, or smell.
- **Inference:** A conclusion or guess based on observations.

• **Branches of Science**

- **Physics:** Study of matter, energy, force, and motion.
- **Chemistry:** Study of substances and how they change.
- **Biology:** Study of living things like plants, animals, and humans.
- **Environmental Science:** Study of the Earth, nature, and how we affect it.

• **Safety in Science Experiments**

- Always follow instructions
- Wear safety gear like gloves or goggles
- Handle chemicals and glassware carefully
- Never taste or smell unknown substances
- Keep the workspace clean

- **Tools Used in Science**
  - **Magnifying glass:** To see small things clearly
  - **Measuring tape:** To measure length
  - **Thermometer:** To measure temperature
  - **Beaker:** To hold and measure liquids
  - **Balance:** To measure weight or mass

- **Fun with Science**
  - Make a rainbow with a glass of water and sunlight
  - Use a balloon to create static electricity
  - Grow a plant and observe its daily growth
  - Mix baking soda and vinegar to see bubbles