

CLASS 8th – SCIENCE

1. Crop Production And Management

- Agricultural Practices
- Basic Practices of Crop Production
- Preparation of Soil
- Sowing
- Adding Manure and Fertilizers
- Irrigation
- Protection from Weeds
- Harvesting
- Storage
- Food from Animals

2. Micro-organisms: Friends And Foe

- Microorganisms
- Where do Microorganisms Live?
- Microorganisms and Us
- Harmful Microorganisms
- Food Preservation
- Nitrogen Fixation
- Nitrogen cycle

3. Synthetic Fibres And Plastics

- What are Synthetic Fibres?
- Types of Synthetic Fibres Rayon
- Characteristics of Synthetic Fibres
- Plastics
- Plastics as Materials of Choice

- Plastics and the Environment

4. Materials: Metals And Non-Metals

- Physical Properties of Metals and Non-metals
- Chemical Properties of Metals and Non-metals
- Uses of Metals and Non-metals

5. Coal And Petroleum

- Coal
- Petroleum
- Natural Gas
- Some Natural Resources are Limited

6. Combustion And Flame

- What is Combustion?
- How Do We Control Fire?
- Types of Combustion
- Flame
- Structure of a Flame
- What is a Fuel?
- Fuel Efficiency

7. Conservation Of Plants And Animals

- Deforestation and Its Causes
- Consequences of Deforestation
- Conservation of Forest and Wildlife
- Biosphere Reserve
- Flora and Fauna
- Endemic Species
- Wildlife Sanctuary
- National Park
- Red Data Book
- Migration

- Recycling of Paper
- Reforestation

8. Cell — Structure And Functions

- Discovery of the Cell
- The Cell
- Organisms show Variety in Cell Number, Shape and Size
- Cell Structure and Function
- Parts of the Cell Membrane
- Comparison of Plant and Animal Cells

9. Reproduction In Animals

- Modes of Reproduction
- Sexual Reproduction
- Asexual Reproduction

10. Reaching The Age Of Adolescence

- Adolescence and Puberty
- Changes at Puberty Increase in Height
- Secondary Sexual Characters
- Role of Hormones in Initiating Reproductive Function
- Reproductive Phase of Life in Humans
- How is the Sex of the Baby Determined?
- Hormones other than Sex Hormones
- Role of Hormones in Completing the Life History of Insects and Frogs
- Reproductive Health

11. Force And Pressure

- Force – A Push or a Pull
- Forces are due to an Interaction
- Exploring Forces
- A Force can Change the State of Motion

- Force can Change the Shape of an Object
- Contact Forces Muscular Force
- Non-contact Forces
- Pressure
- Pressure Exerted by Liquids and Gases
- Atmospheric Pressure

12. Friction

- Force of Friction
- Factors affecting Friction
- Friction : A Necessary Evil
- Increasing and Reducing Friction
- Wheels Reduce Friction
- Fluid Friction

13. Sound

- Sound is Produced by a Vibrating Body
- Sound Produced by Humans
- Sound Needs a Medium for Propagation
- We Hear Sound through Our Ears
- Amplitude, Time Period and Frequency of a Vibration
- Audible and Inaudible Sounds
- Noise and Music
- Noise Pollution

14. Chemical Effects Of Electric Current

- Do Liquids Conduct Electricity?
- Chemical Effects of Electric Current
- Electroplating

15. Some Natural Phenomena

- Lightning
- Charging by Rubbing

- Types of Charges and Their Interaction
- Transfer of Charge
- The Story of Lightning
- Lightning Safety
- Earthquakes

16. Light

- What makes Things Visible
- Laws of Reflection
- Regular and Diffused Reflection
- Reflected Light Can be Reflected Again
- Multiple Images
- Sunlight — White or Coloured
- What is inside Our Eyes?
- Care of the Eyes
- Visually Impaired Persons Can Read and Write
- What is the Braille System?

17. Stars And The Solar System

- The Moon
- The Stars
- Constellations
- The Solar System
- Some Other Members of the Solar System

18. Pollution Of Air And Water

- Air Pollution
- How does Air Get Polluted?
- Case Study— The Taj Mahal
- Greenhouse Effect
- What can be Done?

- Water Pollution
- How does Water Get Polluted?
- What is Potable Water and How is Water Purified ?
- What Can be Done?