

Blooming Dales School, Sector 15 ,Hisar

Session – (2025 – 2026)

Class 8 Science (NCERT)

Chapter-wise Concepts and Pedagogical Plan (ACPP)

Chapter No.	Chapter Name	Learning Objectives (What students will learn)	Suggested Activities/Projects	Assessment Methods
1	Crop Production and Management	Understand basic agricultural practices; differentiate between Kharif and Rabi crops; appreciate the need for proper storage.	Project: Create a model of an irrigation system (drip/sprinkler). Activity: Visit a local farm or a seed store.	Quizzes on farming terms, practical test on seed sorting, chart on steps of crop production.
2	Microorganism: Friends and Foe	Identify types of microorganisms; explain their role in medicine and food; understand disease transmission.	Activity: Observe curd formation under a microscope. Project: Prepare a poster on common human diseases caused by microbes.	Lab report on observation of yeast/fungi, concept map of Nitrogen Cycle, case study analysis of a pandemic.
3 & 4	Coal and Petroleum	Explain the formation of fossil fuels; list the uses of coal, petroleum, and natural gas; advocate for conservation of natural resources.	Project: Research and present on the impact of fossil fuel usage (pollution). Activity: Discuss the concept of 'sustainable development'.	Short answers on refinery products, group discussion on energy conservation measures, graph analysis of global oil reserves.
5	Combustion and Flame	Define combustion and its necessary conditions; understand the structure of a flame; explain fire control methods.	Activity: Demonstrate the conditions necessary for combustion using a candle. Project: Design a simple fire safety plan for the school/home.	Identifying the zones of a flame in a diagram, definition and examples of ignition temperature, practical demonstration of fire extinguisher working.
6	Reproduction in Animals	Describe sexual and asexual reproduction;	Project: Chart/model showing the life cycle of	Labelling diagrams of reproductive

		differentiate between internal and external fertilisation; explain the process of metamorphosis.	a frog (metamorphosis). Activity: Collect information on viviparous and oviparous animals.	organs, defining key terms (Zygote, Foetus), comparative analysis of reproduction types.
7	Reaching the Age of Adolescence	Define adolescence and puberty; explain the role of hormones; discuss reproductive health and hygiene.	Project: Create an awareness pamphlet on 'Adolescent Health and Nutrition'. Activity: Role-play a conversation about maintaining personal hygiene.	Essay on the impact of hormonal changes, identifying endocrine glands on a model, questions on balanced diet for teenagers.
8	Force and Pressure	Define force and pressure; classify forces (contact and non-contact); explain atmospheric pressure with examples.	Activity: Demonstrate atmospheric pressure using a plunger. Project: Design a simple hydraulic system model.	Problem-solving questions on calculating pressure, identifying types of forces in daily life examples, experiment to show effect of surface area on pressure.
9	Friction	Explain the cause and types of friction; understand why friction is a necessary evil; list methods to increase and decrease friction.	Activity: Experiment to compare static, sliding, and rolling friction. Project: Research on the design of sports shoes or tire treads.	Practical demonstration of how lubricants reduce friction, multiple-choice questions on factors affecting friction, explaining the need for friction (e.g., walking).
10	Sound	Explain how sound is produced; define amplitude, frequency, and pitch; discuss the structure of the human ear and noise pollution.	Activity: Make simple musical instruments. Project: Measure sound levels (in dB) in different areas and prepare a report on noise pollution.	Labelling the parts of the human ear, numerical problems on frequency and time period, report on controlling noise pollution.
11	Chemical Effects of Electric Current	Differentiate between good and poor conductors of electricity; describe the chemical effects of current	Activity: Test the conductivity of various liquids. Project: Research the industrial applications of electroplating.	Drawing a circuit diagram for testing conductivity, explaining the principle of electroplating,

		(electrolysis, electroplating).		identifying electrolytes and non-electrolytes.
12	Some Natural Phenomena	Explain the phenomena of lightning and earthquakes; understand the charging of objects by friction; list safety measures.	Activity: Demonstrate charging by rubbing. Project: Design an earthquake-safe house model or a disaster management plan.	Explanation of how lightning occurs, drawing a diagram of an electroscope, identifying seismic zones of India on a map.
13	Light	State the laws of reflection; understand regular and diffused reflection; explain the structure and working of the human eye.	Activity: Construct a simple periscope. Project: Research common eye defects and their correction.	Practical lab work on laws of reflection, labelling parts of the human eye, understanding the function of the retina and cornea.
14	Stars and the Solar System	Identify celestial objects; explain the phases of the moon; list the components of the Solar System; appreciate the role of artificial satellites.	Activity: Model the phases of the moon using a ball and a light source. Project: Prepare a presentation on one planet or a famous constellation.	Identifying planets in order of distance from the Sun, defining terms like 'constellation' and 'light year', drawing a labelled diagram of the solar system.