

| Grade | Subject | Sr No | Lesson Name | Learning Objectives/Subtopic | Methodology | Pedagogical methods | Learning outcome | Teaching Aid | Teaching Place | No. of lectures required | Class Activities / Diagrams | Activity Suggested—Tr Name |
|-------|---------|-------|------------------------------|---|--|---|--|--------------------------|-----------------|--------------------------|----------------------------------|---|
| IX | Science | 1 | Matter in Our Surroundings | Understand states of matter, properties, and changes. | Discussion, demonstration, questioning | Teacher explains particle nature with experiments; students observe evaporation and condensation. | Students will differentiate between solids, liquids, and gases and explain changes of state. | Models and lab apparatus | Science Lab | 3-4 | Group experiment on melting ice. | Observe surroundings and list examples of matter. |
| IX | Science | 2 | Is Matter Around Us Pure | Learn about mixtures, solutions, and separation techniques. | Activity-based learning | Demonstrate filtration and distillation; students perform simple separation tasks. | Students classify substances as pure or mixtures. | Charts and lab equipment | Science Lab | 4 | Separate sand and salt activity. | Home assignment on types of mixtures. |
| IX | Science | 3 | Atoms and Molecules | Understand laws of chemical combination and molecular mass. | Lecture with problem solving | Explain Dalton's theory; numerical practice in pairs. | Students calculate molecular mass and apply chemical laws. | Molecular model kit | Classroom | 5 | Worksheet on chemical formulas. | Create models of molecules. |
| IX | Science | 4 | Structure of the Atom | Learn about electrons, protons, neutrons and atomic models. | Visual learning | Use animations and diagrams to explain atomic structure. | Students describe atomic models and isotopes. | Smart board, charts | Smart Classroom | 4 | Draw Bohr models. | Research activity on scientists. |
| IX | Science | 5 | The Fundamental Unit of Life | Understand cell structure and functions. | Microscope observation | Show plant and animal cells; label diagrams. | Students explain cell organelles. | Microscope, slides | Lab | 5 | Diagram practice. | Prepare a cell chart. |
| IX | Science | 6 | Tissues | Differentiate plant and animal tissues. | Comparative teaching | Create tables comparing tissues. | Students identify tissues and their functions. | Charts | Classroom | 4 | Group chart making. | Collect plant samples. |
| IX | Science | 7 | Motion | Understand speed, velocity, and acceleration. | Numerical practice | Solve motion problems; graph interpretation. | Students analyze motion using equations. | Graph sheets | Classroom | 6 | Plot distance-time graph. | Record daily motion examples. |
| IX | Science | 8 | Force and Laws of Motion | Learn Newton's laws and applications. | Experiment-based | Demonstrate inertia using objects. | Students explain real-life applications. | Lab kit | Lab | 5 | Ball inertia activity. | Write examples of action- |
| IX | Science | 9 | Gravitation | Understand gravity and buoyancy. | Concept mapping | Explain Archimedes' principle with activity. | Students solve numerical problems on gravitation. | Water container, objects | Lab | 5 | Density experiment. | Project on satellites. |

