



- 1. Plants and Animals:** Students can be asked questions about different types of plants and animals, their life cycles, habitats, and adaptations.
Phet Links:
[Diversity of Life](#)
[Diversity of Plants](#)
[Diversity of Animals](#)
- 2. States of Matter:** Basic concepts of solids, liquids, and gases, and how they change from one state to another.
Phet Links:
[States of Matter: Basics](#)
[Gases Intro](#)
LabXchange Links:
[Properties of Water](#)
[Energy and Phase Changes](#)
- 3. Earth and Space:** Questions related to the Earth's rotation, seasons, day and night, the moon, and stars.
Phet Links:
[My Solar System](#)
[Gravity and Orbits](#)
LabXchange Links:
[Astronomy: The Earth](#)
[Astronomy: The Sun](#)
[Earth's Motion: How Rotation and Revolution Cause The Seasons](#)
[Total Solar Eclipses](#)
[Moon Observation and Orbit](#)
- 4. Weather and Seasons:** Understanding different weather conditions and how seasons change.
LabXchange Links:
[Why Do We Have Different Seasons?](#)
- 5. Human Body:** Basic knowledge about the human body's organs, senses, and the importance of healthy habits.
LabXchange Links:
[Interactive Human Body](#)
[An Introduction to the Human Body](#)
[The Body's Systems](#)
- 6. Magnets and Electricity:** Introducing the concept of magnets, static electricity, and simple circuits.
Phet Links:
[John Travoltage](#)
[Balloons and Static Electricity](#)
[Circuit Construction Kit: DC-Virtual Lab](#)
[Circuit Construction Kit: DC](#)
LabXchange Links:
[Introduction to Magnetism](#)
[Magnets](#)
[Magnets: How Do They Work?](#)
[Magnets and Magnetic Fields](#)
[Electric Circuits](#)
[Magnetic Fields](#)
[Magnetism](#)
- 7. Simple Machines:** Familiarising students with simple machines like levers, pulleys, wheels, and inclined planes.
Phet Links:
[Balancing Act](#)
LabXchange Links:
[Work, Energy, and Simple Machines](#)
- 8. Sound and Light:** Exploring how sound is produced, how it travels, and basic properties of light.
Phet Links:
[Waves Intro](#)
[Bending Light](#)
[Geometric Optics: Basics](#)
[Wave Interference](#)
LabXchange Links:
[Sound](#)
[Light](#)
[Waves](#)
- 9. Environmental Awareness:** Educating students about the importance of protecting the environment, recycling, and conserving resources.
Phet Links:
[Greenhouse Effect](#)
LabXchange Links:
[Conservation Biology and Biodiversity](#)
[Conservation and Biodiversity](#)
[Human Impact on Ocean Ecosystems](#)
- 10. Scientific Inquiry:** Introducing the scientific method and basic experimental concepts.
LabXchange Links:
[Experimental Thinking](#)
[The Scientific Method](#)
[Reasoning, Planning, and Solving Problems](#)
- 11. Matter and Its Properties:** Understanding the properties of matter, such as mass, volume, and density.
Phet Links:
[Density](#)
LabXchange Links:
[Matter and Change](#)
[Properties of Water](#)
[Building Blocks and States of Matter](#)
- 12. Basic Chemistry:** Introducing the idea of elements and compounds, as well as basic chemical reactions like mixing acids and bases.
Phet Links:
[Concentration](#)
LabXchange Links:
[Acids and Bases](#)
[Chemical Bonding](#)
- 13. Force and Motion:** Concepts related to force, motion, and how objects move.
Phet Links:
[Forces and Motion: Basics](#)
[Energy Skate Park: Basics](#)
[Projectile Motion](#)
[Pendulum Lab](#)
LabXchange Links:
[Forces and Vectors](#)
[Dynamics: Force and Newton's Laws of Motion](#)
- 14. Observations and Patterns:** Encouraging students to make observations and recognize patterns in the natural world.
LabXchange Links:
[Patterns in the Sky: Eclipses](#)
[Reasoning, Planning, and Solving Problems](#)
- 15. Astronomy:** Basic concepts about planets, the solar system, and space exploration.
Phet Links:
[My Solar System](#)
[Gravity and Orbits](#)
LabXchange Links:
[The Origin of Stars and Planets](#)
[Galaxy Formation and Evolution](#)
[Space Gear: How Spacesuits Keep Astronauts Safe](#)
[Space Harvest: Building a Garden in the Stars](#)