



- 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](#)
- 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](#)
- 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](#)
- Weather and Seasons:** Understanding different weather conditions and how seasons change.  
**LabXchange Links:**  
[Why Do We Have Different Seasons?](#)
- 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](#)
- 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](#)
- 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](#)
- 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](#)
- 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](#)
- Scientific Inquiry:** Introducing the scientific method and basic experimental concepts.  
**LabXchange Links:**  
[Experimental Thinking](#)  
[The Scientific Method](#)  
[Reasoning, Planning, and Solving Problems](#)
- 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](#)
- 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](#)
- 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](#)
- 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](#)
- 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](#)