redbricks | school

Upcoming Theme's Overview: Class 4

Theme Name and Number: Project 2- Machines

Theme Dates: 16th January to 18th February 2023

Central Idea: We need different kinds of simple and complex machines to make our life easier.

Lines of Inquiry:

- Machines work on different principles (work, force, motion and friction) (Function)
- Machines are invented and created for various uses (Causation)
- Impact of machines on human life (Change)
- How Simple machines are used to develop complex machines (Connection)
- Work, force and energy are related (Connection)
- Sources of energy (Form)

English Text Name : Nick And Tesla's High Voltage Danger Lab - Steve Hockensmith and Bob Pflugfelder

| Week No. | EVS | English | Maths | Hindi | ICT |
|-------------|---|--|--|--|--|
| Week 1 | Introduction of the topic- Machines Purpose of machines Different types of machines | Warmer: Introduction of the project Pre-teach vocabulary (Chapter 1-6) Predicting the text | Number Sense- Word problems of HCF and LCM, division Geometry- Coordinates, measuring angles using protractor | Introduce to the chapter -Isaac Newton Hard words from the chapter | The Internet: Being a good digital citizen Staying safe online |
| Week 2 | Characteristics of simple machines Introduction of simple machines- 1st class lever Introduction of simple machines-2nd and 3rd class lever | Begin reading Chapter 1 Reading Chapter 2 and 3 Comprehension questions Independent reading tasks (Chapter 4,5,6) | Number Sense-multiplicatio n of fractions, addition and subtraction of fractions Geometry- identify types of angles | Read the Chapter and make some sentences according to the chapter Write questions and answers in notebook | Online educational games: <u>http://www.abc</u> ya.com/nouns_a nd_verbs.htm |
| Week 3 | Introduction of simple machines-Wheel and axle Introduction of simple machines-inclined | Pre-teach vocabulary (Chapter 7-12) Reading Chapter 7-10 Independent reading tasks | Number Sense- Rounding off numbers to nearest 10, 100 Measurement- Perimeter and area Geometry- | Project work on given topic like-Gurutvakars han bal, bhaap ka engine etc.(Group activity) Continue- | Online educational games: <u>http://www.abc</u>ya.com/antony <u>ms_synonyms</u> <u>homonyms.htm</u> |

| | plane, screw, wedge • Introduction of simple machines-pulley | (Chapter 11-12)Comprehension questions | Coordinates | Project work on a given topic like-Gurutvakars han bal, bhaap ka engine etc. (Group activity) | |
|--------|--|--|---|--|--|
| Week 4 | Maintenance of machines and invention in machines Complex machines Concept of work, force and energy | Pre-teach vocabulary Chapter 13-16 Reading Chapter 13-16 Comprehension questions Summarise chapter wise the important details Tenses | Number Sense-Patterns, addition/ subtraction of mixed fractions, finding patterns Performance task- Timeline on machines Revision and rigour for angles, area and perimeter | Exercise of workbook Discuss the workbook | Online educational games: <u>https://www.chesss.com/play/computer</u> |
| Week 5 | Reflection of learning Preparation of project display Culmination | Tenses Synonyms Performance task: Students will research and write biographies on some great inventors and scientists | • Revision | • Revision | • Revision |

| List of Vocabulary for - Machines | | | |
|-----------------------------------|--|--|--|
| EVS Vocabulary | | | |
| Machines | | | |
| Simple | | | |
| Complex | | | |
| Lever | | | |
| Pulley | | | |
| Wheel | | | |
| Axle | | | |
| Inclined Plane | | | |
| Screws | | | |
| Wedge | | | |
| Force | | | |
| Work | | | |
| Gravity | | | |
| Friction | | | |
| Newton | | | |
| Energy | | | |
| Fulcrum | | | |
| Screwdriver | | | |
| English Vocabulary | | | |
| Subdued | | | |
| Keepsake | | | |
| Trombone | | | |
| Ominously | | | |
| Reclusive | | | |

| Inspire | |
|---------------|--|
| Cautiously | |
| Wonderment | |
| Warily | |
| enunciating | |
| Eccentric | |
| Pudgy | |
| Dubious | |
| Exiled | |
| Voracious | |
| sullenly | |
| Sneered | |
| Imposing | |
| Skeptically | |
| Reluctantly | |
| Noncommittal | |
| Surreptitious | |
| Wheezed | |
| Veered | |
| Void | |
| Careening | |
| Triumphantly | |
| Skullduggery | |
| Glowered | |

| Sarcastic |
|----------------------|
| Menace |
| Improvised |
| Jabbering |
| Grim |
| Intensity |
| Disposable |
| Unconvinced |
| Gruff |
| Instinctively |
| harsh |
| Impressed |
| Anonymously |
| Traumatized |
| Maths Vocabulary |
| Factorization |
| Equivalent fractions |
| Simplest form |
| LCM |
| Liter |
| Milliliter |
| HCF |
| Area |
| Perimeter |
| Angles |
| |

A note for parents: You can reinforce the above vocabulary for children by ensuring that they understand the meaning of these words and its usage meaningfully, in different contexts. Children may be able to also read and write most of these words - although they are not expected to know the spellings of all of the words from the list.

| Section | II - | Holistic | Development |
|----------------|------|----------|-------------|
| | | | |

| Holistic Development Area | To be covered |
|------------------------------------|--|
| Art and Design | Texture making with different techniques and observing texture from your surroundings Landscape making with different textures Ball painting and straw painting in integration with EVS PROJECT |
| Sports | Athletics: Game discipline, fitness activities, running, long jump, Students will learn about "Fit India Test" Importance fitness test: Testing is an important part of the screening process as it gives one an accurate picture of fitness. (students will know about their fitness level) Karate: Judo techniques, punches and kicks, defense techniques with KUMITE Training Football: Defending, Dribbling - practice of finishing, redirecting the ball, push pass and instep pass Stages of development in fitness |
| Interest Centers - Performing Arts | Project Title: Dance Performance and Production for School's Annual Day Learning the Choreography on the song for Annual Day. Discussions on costumes, props, and makeup for the performance Improvising and practicing the choreography Introduction to the new project |

| Self-Enrichment | Explore the processes of being a good listener to become active listeners in classrooms and other settings Reflect and understand the meaning and importance of Diversity |
|---|---|
| Assembly, Events, Celebrations, House Activities | Assembly: Class Presentations by Classes 3A, 3B, 3C Special Whole School Assembly on: Uttarayan Celebration Republic Day House Activity: Activities related to STEAM Activities on International Mother Language Day |