

Science (Class-VIII)

Learning Outcomes	Sources/Resource	Week-wise Suggestive Activities (to be guided by Parents with the help of teachers)
<p>Learner</p> <ul style="list-style-type: none"> • classifies materials such as, natural and human made fibres; • differentiates different types of synthetic fibres based on their properties/ characteristics; biodegradable and non-biodegradable materials etc. • conducts simple investigations to measure strength of different fibres • draws flow charts to depict types of synthetic fibres , their characteristics and uses. • applies learning of scientific concepts in day to-day life such as why synthetic fibres should be avoided near fire, why to become fibre wise etc. • discusses and appreciates stories of scientific discoveries such as discovery of Nylon makes efforts to protect environment e.g., using plastic and its products judiciously; becoming fiber wise, develop 	<p>NCERT/State developed Textbook Theme-Synthetic Fibres</p> <ul style="list-style-type: none"> • Synthetic fibres • Types of synthetic fibres • Characteristics of synthetic fibres • Plastic Learners, Teachers and Parents may use the following materials: • E-Resources developed by NCERT, which are available on NROER and also attached as QR Code in textbooks of NCERT. • Live telecast of various science concepts at Swayam Prabha Channel https://www.youtube.com/channel/UCT0s92hGjqLX6p7qY9BBrSA • Laboratory Manual in Science for Class VI-VIII http://www.ncert.nic.in/exemplar/labmanuals.html • Exemplar Problems in Science for Class VIII http://www.ncert.nic.in/exemplar/index.html#view3 • Synthetic Fibres and Plastics 	<p>WEEK 1</p> <p>Theme- Material</p> <ul style="list-style-type: none"> • Synthetic fibres • Types of synthetic fibres <p>Task <i>The learner may be asked to</i></p> <ul style="list-style-type: none"> • Collect some samples of cloth materials made up of natural and synthetic fibres. • Compare their texture and strength. • Make an album/ scrap book by pasting these pieces and write differences you observed among them. • Ask elders about the names of various fabrics of cloth materials. <p>Task</p> <ul style="list-style-type: none"> • Write a story on discovery of Nylon • Make an audio clip on discovery of Nylon and share it in group created by your teacher. <p>WEEK 2</p> <p>Theme- Material</p> <ul style="list-style-type: none"> • Characteristics of synthetic fibres • Plastic <p>Task</p> <ul style="list-style-type: none"> • Identify the articles/cloth materials made up of synthetic fibres and observe their characteristics such as strength, action of water, action of heat under supervision of elders. • Observe household articles made of plastic. • Write a note on use of plastic in our daily lives. • Discuss your opinion on the use of plastic with your family members and friends. Do you think its use can be avoided? • Discuss about alternatives of plastics with peers on group made by your teacher.

<p>environment friendly habits by following 5 Rs</p>	<p>http://ncert.nic.in/ncerts/1/heep103.pdf</p> <ul style="list-style-type: none"> Material: Metals and Non-Metals http://ncert.nic.in/ncerts/1/heep104.pdf Learning Outcomes at Elementary Stage http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tilops101.pdf 	<ul style="list-style-type: none"> Discuss about Biodegradable and non-biodegradable materials with peers on group made by your teacher. Write slogans to create an awareness about 5Rs (Reduce, Reuse, Recycle, Recover and Refuse)
<p>Learner</p> <ul style="list-style-type: none"> differentiates materials such as, metals and non-metals. classifies materials based on their properties/ characteristics, e.g., metals and non- metals conducts simple investigations to seek answers to queries e.g. effect of air and water on different metallic and non-metallic substances, nature of metallic and non-metallic oxides, etc. relates processes and phenomenon with causes, e.g. why does iron get rusted etc, explains processes and phenomenon such as rusting of iron, loss of gold during cleaning of gold jewelry etc Writes word equation for chemical reactions, e.g., reactions of metals 	<p>Theme- Materials: Metal & Non-metals</p> <ul style="list-style-type: none"> Physical properties of Metals and Non-metals Chemical properties of Metals and Non-metals Uses of Metals and Non-metals Students, Teachers and Parents may use the following materials: E-Resources developed by NCERT, which are available on NROER and also attached as QR Code in textbooks of NCERT. Live telecast of various science concepts at Swayam Prabha Channel (https://www.youtube.com/channel/UCT0s92hGjqLX6p7qY9BBrSA) Laboratory Manual in Science for Class VI-VIII 	<p>WEEK-3</p> <p>Theme- Material Physical properties of Metals and Non-metals</p> <p>Task</p> <ul style="list-style-type: none"> Identify items in your house which contain metals. Try to identify the metals in them. Listen to the audios mentioned and try to understand the properties of metals and explore physical properties of metals in your surroundings such as malleability, ductility, sonorous etc. How metals are https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/59f0242e16b51c59f65dfa89 Dazzling Flame https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/59f0240716b51c59f65dfa43 Discuss about physical appearance of metals on the basis of your observations with your friends on the group created by your teacher Attempt quiz on the link given: https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/5d38488a16b51c0173e679a2 Make a comic script on properties of metals and non-metals

<p>and non-metals with air, water and acids, etc.</p> <ul style="list-style-type: none"> draws labelled diagram of activities , simple investigations related to metals and non-metals ,experimental set ups, etc. applies learning of scientific concepts in day to-day life, e.g., purifying water; using appropriate metals and non-metals for various purposes , loss of gold during cleaning by jewelers etc makes efforts to protect environment, e.g making controlled use of fertilisers and pesticides; exhibits values of honesty, objectivity, cooperation, freedom from fear and prejudices 	<p>http://www.ncert.nic.in/exemplar/labmanuals.html</p> <ul style="list-style-type: none"> Exemplar Problems in Science for Class VIII http://www.ncert.nic.in/exemplar/index.html#view3 Synthetic Fibres and Plastics http://ncert.nic.in/ncerts/1/heep103.pdf Material: Metals and Non-Metals http://ncert.nic.in/ncerts/1/heep104.pdf Learning Outcomes at Elementary Stage http://www.ncert.nic.in/publication/Miscellaneous/pdf_files/tilops101.pdf 	<p>WEEK 4</p> <p>Themes:</p> <ul style="list-style-type: none"> Chemical properties of Metals and Non metals Uses of Metals and Non-metals <p>Task</p> <ul style="list-style-type: none"> Watch the video on given link https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/58a3fd42472d4a68b79527f2 <i>Try to answer the following:</i> <ul style="list-style-type: none"> Name some metals used in daily life. Why metal sheets can be prepared? Metals are ductile. Comment on it. Listen to the audio on the links given below and try to understand the reaction of sodium metal with water: Sodium rap https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/59f024ca16b51c59f65dfb62 Listen to the audio on the link given below and try to understand the reaction of non-metal with air. Write its word equation. Jal gaya sulphur https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/59f0243616b51c59f65d faa0 Listen to the audio and watch the video on the links given below: (Munni kyon udaas hai) Audio link: https://nroer.gov.in/55ab34ff81fccb4f1d806025/file/59f0246316b51c59f65d fafe Video link: https://www.youtube.com/watch?v=BNExO7BapKc Try to understand the reaction of metal with air and water. Write word equation for the reaction. Explore about the amount of loss occur due to rusting of iron every year in our country. Comment on what measures can be taken to prevent rusting of articles. Collect some rust from rusted articles in your house and investigate its nature by using any available natural indicator Create a rap song on uses of metals and non-metals and share it in your group.
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