



  
**Kids' Time**



# Science

Teacher's Guide

3&4



# Introduction

This Teacher's Guide aims to complement Kids' Time Science Books 1 to 4 and Activity Books 1 to 4. Various fun-filled activities are included to help teach and reinforce scientific concepts. By incorporating experiments and extra knowledge into the contents, children may find it easier to learn and remember what has been taught.

Science plays an important part in our daily life. It is closely connected to everything that exists or happens around us. Through scientific developments, our lives will become better and easier.

In order to reinforce children's scientific concepts, teach them to question, observe, infer and predict. Inculcate and nurture an inquiring mind in their learning process.



## Teaching Suggestions for Kids' Time Science Book 3 and Activity Book 3

<b>Topic</b>	Things to Wear – Clothes
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, a raincoat, rain boots, an umbrella, a hat, a scarf, a bucket of water and gloves
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Ask children why we need to wear clothes, (e.g. to protect our bodies from the strong heat of the sun and from cold weather.)</li> <li>• Prepare a raincoat, rain boots, an umbrella, a hat and a scarf. Ask the children to identify which are worn when we feel cold or when we are out in the rain.</li> <li>• Prepare a bucket of water and gloves. Ask the children to wear the gloves, then immerse their hands in the bucket of water. Ask the children, "Do our hands get wet when we wear plastic gloves?"</li> <li>• Tell the children that a raincoat, rain boots and an umbrella can protect our body from getting wet in the rain.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 2 of Activity Book 3.</li> </ul>	

<b>Topic</b>	Things to Wear – What are clothes made of?
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, socks, T-shirt, shorts, scarf, mittens and knitted hat, manila card, batik cloth, scissors and glue, video clip
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Play a video clip showing how different types of clothes are made. Then get the children to talk about it.</li> <li>• Prepare socks, a cotton T-shirt, cotton shorts, scarf, mittens and a knitted hat. Tell children that some clothes are made of cotton and some clothes are made of wool. Let the children touch the clothes and tell how each feels. Ask them, "What is different between the cotton and woollen clothing?"</li> <li>• Tell the children that some clothes are made from animal skins, e.g. leather clothing is made from a crocodile's, cow's, or goat's skin.</li> <li>• Prepare a manila card, a batik cloth, scissors and glue. Ask the children to draw a sock, T-shirt, shorts, etc. on the batik cloth and cut them out. Then glue them on the manila card.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 3 of Activity Book 3.</li> </ul>	

<b>Topic</b>	Things to Wear – Mirror
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, a mirror, a sheet of paper, pencil
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Prepare a mirror. Ask the children to stand in front of the mirror. Ask them if they can see themselves in the mirror.</li> <li>• Prepare a sheet of paper. Ask the children to show different facial expressions in front of the mirror such as smile, look sad or angry, make a funny face, etc.</li> <li>• Ask the children to draw their different mirror facial expressions on the paper.</li> <li>• Ask the children to stand in front of the mirror and perform some movements or pose. Get them to tell what they can see in the mirror.</li> <li>• Guide the children in carrying out 'Let's do this!' on page 4 of Book 3.</li> <li>• Refresh the children's memory of what they have learnt by completing the revision exercise on page 5 of Book 3.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercises on pages 4 to 5 of Activity Book 3.</li> </ul>	

<b>Topic</b>	My Birthday – Water
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, a cup of water, a bucket of water, 5 different shapes of containers and a funnel, food colouring
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Prepare a cup of water. Ask the children, "What is the thing inside the cup? What is the colour of water? What does water taste like? Does it have any taste?"</li> <li>• Prepare a bucket of water, 5 different shapes of containers and a funnel. Ask the children to pour the water into the different containers.</li> <li>• Ask them, "Does water have a shape of its own?" Tell them that water has no shape of its own.</li> <li>• Prepare food colouring. Ask the children to add several drops of liquid food colouring to each container and stir the mixture.</li> <li>• Ask the children to observe, then talk about how the water has changed after adding food colouring. Tell them that water has no colour or taste.</li> <li>• Prepare a cup of plain water. Share with the children that water helps to keep our body hydrated. We need to drink 6 to 8 glasses of water every day. Discuss the consequences of not drinking enough water.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 6 of Activity Book 3.</li> </ul>	

<b>Topic</b>	My Birthday – Uses of water
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, potatoes, mushrooms, onions, carrots, a bucket of water, rice, rice cooker
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Ask the children to think of how we use water. Tell them that water is very important and useful to all living things. Without water all living things will die.</li> <li>• Divide the children into three different groups. Every group is given a different task. Prepare potatoes, mushrooms, onions, carrots and a bucket of water. Ask the first group to wash the vegetables. Teacher will cut the vegetables into small pieces. Ask them what they had used to wash the vegetables.</li> <li>• Prepare rice. Ask the second group of children to wash the rice. After that, put it in the rice cooker. Ask them what they had used to wash the rice.</li> <li>• Next, ask the second group of children to add the clean vegetables to the rice. Then pour enough water to cook the rice. Ask the children what they had used to cook the rice.</li> <li>• Lastly, prepare plates, cups, and a jug of water. Ask the third group of children to put the cups on the table and then pour water into each cup for drinking. Tell the children that we use water for drinking.</li> <li>• Ask the children to talk about how life will be like if there is no water.</li> </ul>	
<b>Activity Book</b>	
• Guide the children in doing the exercise on page 7 of Activity Book 3.	

<b>Topic</b>	My Birthday – Water, ice and steam
<b>Content Standard</b>	• Researching the World of Matter
<b>Learning Standard</b>	• Explain the changing states of water: (i) from water to ice, and vice versa. (ii) from water to steam, and vice versa.
<b>Teaching Materials</b>	Book 3, Activity Book 3, ice cubes, a few cups of water, a transparent plate and a bowl of hot water, a refrigerator
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Ask the children, “What happens to water when it becomes very cold? What happens to ice when it is not cold enough? What does water change to when it becomes very hot?”</li> <li>• Prepare some ice cubes. Bring the children outdoors. Ask them to hold an ice cube and tell how it feels. Ask them to observe how the ice changes when it is under the hot sun.</li> <li>• When back in the classroom, prepare a few cups of water. Ask the children to keep them in the freezer.</li> </ul>	

<ul style="list-style-type: none"> <li>• Prepare a transparent plate and a bowl of hot water. Put the transparent plate cover over the bowl. Ask the children to observe the change when the temperature of water increases. Ask them to tell what they can see. Advise them to be always careful with hot water and steam. We may get hurt if we touch it. Get the children to apply Higher Order Thinking Skills (HOTS) by answering the question on page 8 of Book 3.</li> </ul>	
<b>Activity Book</b>	
• Guide the children in doing the exercise on page 8 of Activity Book 3.	

<b>Topic</b>	My Birthday – Float and sink
<b>Content Standard</b>	• Researching the World of Matter
<b>Learning Standard</b>	• Find out about objects that sink and float.
<b>Teaching Materials</b>	Book 3, Activity Book 3, a sheet of checklist paper, a bucket of water, pencil, stone, key, plastic bottles, wood, toy ducks, straws and a ball, red and blue coloured pencils

**Suggested Activities**

**Book**

• Prepare a sheet of checklist paper. Ask the children to make a prediction of which things float and which sink before the experiment starts. Ask the children to tick the checklist using blue colour.

Things	Prediction		Observation	
	Float	Sink	Float	Sink
Pencil				
Straw				
Ball				
Key				
Stone				
Plastic bottle				
Wood				
Toy duck				

- Prepare a bucket of water, pencil, stone, key, plastic bottles, wood, toy ducks, straws and a ball.
- Ask the children to start the experiment by putting them into the water. Ask them to tick the result using red colour.
- Ask the children to compare their predictions with the results of the experiment.
- Guide the children in carrying out the fun activities ‘Let’s do this!’ on page 10 of Book 3.
- Refresh the children’s memory of what they have learnt by completing the revision exercise on page 11 of Book 3.

**Activity Book**

• Guide the children in doing the exercises on pages 9 to 11 of Activity Book 3.

<b>Topic</b>	On the Farm – Farm animals
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Name animals.
<b>Teaching Materials</b>	Book 3, Activity Book 3, picture cards of a sheep, hen, cow, horse, goat, goose, duck and turkey, sponge, a sheet of paper, scissors
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Prepare picture cards of a sheep, hen, cow, horse, goat, goose, duck and turkey. Ask the children to say the names of the farm animals. Tell them that these are the animals we can find on a farm.</li> <li>• Prepare a sheet of paper, scissors, and a large piece of sponge. Cut the sponge into shapes of a sheep, cow, hen, horse, goat, etc.</li> <li>• Get the children to dip each sponge cutout into paint, and then press it on a sheet of paper to create a picture of an animal farm.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 12 of Activity Book 3.</li> </ul>	

<b>Topic</b>	On the Farm – Farm animals and their young
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Name animals.
<b>Teaching Materials</b>	Book 3, Activity Book 3, picture cards of a duck, a hen, a horse, a sheep, a goat, a cow, a duckling, a chick, a foal, a lamb, a kid and a calf
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Prepare picture cards of a duckling, chick, foal, lamb, kid and calf. Ask the children to name these young animals.</li> <li>• Hide picture cards of a duck, hen, horse, sheep, goat and cow in the classroom.</li> <li>• Mix up picture cards of a duckling, chick, foal, lamb, kid and calf. Give each child a picture card of these young animals. Ask them to move around the classroom and locate the matching picture card of the parent, e.g. duck and duckling, hen and chick, etc.</li> <li>• Play the game “The Eagle Catches the Chickens”.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 13 of Activity Book 3.</li> </ul>	

<b>Topic</b>	On the Farm – How do animals grow?
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Name animals.
<b>Teaching Materials</b>	Book 3, Activity Book 3, picture cards of a hen, a chick, an egg, a calf, a cow, an arrow, video clips, cardboard box

<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Play a video clip to show a hen laying eggs, and the eggs hatching into chicks which grow up and become hens. Get the children to talk about what they saw in the video clip.</li> <li>• Prepare picture cards of an egg, a chick, a hen, and an arrow. Ask the children to arrange the picture cards and the arrow cards in the right sequence to show the life cycle of a hen.</li> <li>• Prepare a cardboard box. Ask a child to sit inside the cardboard box and pretend to be a chick that has just hatched from an egg.</li> <li>• Play a video clip to show a cow giving birth to a calf, and the calf growing up into a cow. Ask the children to talk about what they saw in the video clip.</li> <li>• Prepare picture cards of a calf, a cow, and an arrow. Ask the children to arrange the picture cards and the arrow cards in the right sequence to show the life cycle of a cow.</li> <li>• Tell the children that all animals grow and change.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 14 of Activity Book 3.</li> </ul>	

<b>Topic</b>	On the Farm – Animals and their uses
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, toy eggs, a pillow, a cardboard picture of a cow, a balloon, water, yogurt and cheese, video clips
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Show some chicken eggs. Then ask the children to think and tell where those eggs come from.</li> <li>• Prepare toy eggs and a pillow. Place the toy eggs under the pillow. Have a child sit on the pillow and guess how many eggs are under the pillow. Count the eggs together with the child.</li> <li>• Show a cup of milk. Then ask the children to think and tell where the milk comes from.</li> <li>• Play a video clip to show how milk is produced. Ask the children to talk about what they saw in the video clip.</li> <li>• Prepare a cardboard picture of a cow and a balloon. Pour water into the balloon. Ask the children to squeeze the balloon gently and pretend that they are squeezing out milk from the cow’s udder. Ask the children to make the sound of a cow.</li> <li>• Prepare yogurt and cheese. Ask the children to guess what yogurt and cheese are made from.</li> <li>• Play a video clip showing how yogurt and cheese are made. Ask the children to narrate what they saw in the video clip.</li> <li>• Ask the children to taste the yogurt and cheese, and describe the taste of each. Tell the children that yogurt and cheese are made from milk.</li> <li>• Tell the children that some types of food come from animals such as eggs, meat, milk and cheese.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 15 of Activity Book 3.</li> </ul>	

<b>Topic</b>	To the Beach – Air
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, tissue paper
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Tell the children that we cannot see air, but we can feel it.</li> <li>• Give each child a piece of tissue paper. Let them put the tissue paper in front of their nose and mouth. Get them to inhale and exhale. Observe if the tissue paper moves. Ask the children, “Why does the tissue paper move?”</li> <li>• Tell the children that the air we blow out when we exhale makes the tissue paper move. We inhale and exhale air.</li> <li>• Guide the children in doing the exercise on page 17 of Book 3.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 17 of Activity Book 3.</li> </ul>	

<b>Topic</b>	To the Beach – Wind
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, tempera paint, paper plates, drinking straws
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Ask the children to think and create their own wind such as flapping a thin book, flapping one’s hand, blowing, etc. Ask the children, “Can we see the wind? How does it feel? Can we feel it?” Tell the children that wind is moving air.</li> <li>• Prepare a few drops of tempera paint, a paper plate and a straw. Put a few drops of tempera paint on the paper plate.</li> <li>• Ask the children to use a straw to blow air at the tempera paint on the plate.</li> <li>• Guide the children in doing the exercise on page 18 of Book 3.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 18 of Activity Book 3.</li> </ul>	

<b>Topic</b>	To the Beach – Sea animals
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Name animals.
<b>Teaching Materials</b>	Book 3, Activity Book 3, picture cards of a seahorse, turtle, dolphin, squid, shark, starfish and jellyfish, paper bowls, green paint, green coloured paper, glue, a video clip

<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Show picture cards of a seahorse, turtle, dolphin, squid, shark, starfish and jellyfish. Ask the children to name the sea animals.</li> <li>• Play a video clip to show life under the sea. Then, ask the children to recall and name the sea animals in the video clip.</li> <li>• Prepare paper bowls, green paint, green coloured paper. Ask the children to paint the paper bowls green as the turtle’s shell. When the paint is dry, ask them to use a black marker pen to draw the ordered patterns on the turtle’s shell.</li> <li>• Ask the children to cut out shapes of a turtle’s head, its tail and legs from the green coloured paper.</li> <li>• Ask the children to glue the cutouts of the turtle’s body parts to the underside of its shell.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 19 of Activity Book 3.</li> </ul>	

<b>Topic</b>	To the Beach – Parts of a fish
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Name the body parts of animals.
<b>Teaching Materials</b>	Book 3, Activity Book 3, fish part printed template and paper plate, scissors, glue, a black marker pen, coloured pencil
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Play a video showing fish swimming. Ask the children to tell what a fish has, e.g. eyes, mouth, fins, scales, gills and tail.</li> <li>• Ask them how is each different part of a fish important to the fish.</li> <li>• Tell the children that fish breathe through their gills, and swim with the help of their fins and tails. They also have eyes to find food and avoid danger. They have a mouth to eat. They have scales on their body.</li> <li>• Prepare an outline of a fish’s body on a piece of paper. Prepare a paper plate. Ask the children to draw a triangle shape on the paper plate, then cut it out and glue it on the fish as its tail. Then draw the other body parts like the mouth, fins and gills on the plate. Cut them out and glue them on the fish’s body.</li> <li>• Ask the children to use a black marker pen to draw the eyes of the fish. Ask them to use a coloured pencil to draw the fish’s scales.</li> <li>• Refresh the children’s memory of what they have learnt by completing the revision exercise on page 21 of Book 3.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercises on pages 20 and 21 of Activity Book 3.</li> </ul>	

<b>Topic</b>	At a Fruit Farm – Fruit trees
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Identify the parts of a plant: (i) leaf (ii) stem (iii) root (iv) flower (v) fruit.
<b>Teaching Materials</b>	Book 3, Activity Book 3, picture cards of a banana plant, coconut tree, durian tree, mango tree and rambutan tree, and their fruits
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Show picture cards of a banana plant, coconut tree, durian tree, mango tree and rambutan tree. Ask the children to name the fruit trees. Tell them that there are many types of fruit trees.</li> <li>• Ask the children, “What do monkeys and squirrels eat? How do they get their food?”</li> <li>• Prepare a tree cutout from cardboard and include different fruit shapes on the tree. Get the children to match and paste picture cards of fruits to the shapes on the tree.</li> <li>• Ask the children to name the fruits on the tree. Ask them, “How many different types of fruits can you see on the tree?”</li> <li>• Get the children to apply Higher Order Thinking Skills (HOTS) by answering the question on page 22 of Book 3.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 22 of Activity Book 3.</li> </ul>	

<b>Topic</b>	At a Fruit Farm – Parts of a plant
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Identify the parts of a plant: (i) leaf (ii) stem (iii) root (iv) flower (v) fruit.
<b>Teaching Materials</b>	Book 3, Activity Book 3, chilli plant, sheets of white paper, coloured pencils
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Bring a chilli plant to the classroom. Show the chilli plant to the children.</li> <li>• Ask the children to observe the different parts of the chilli plant and name them. Tell the children that a plant has leaves, flowers, a stem, fruits and roots.</li> <li>• Let the children touch the leaves, flowers, stem, fruits and roots.</li> <li>• Ask the children to count the number of chillies growing on the chilli plant. Ask the children, “What is the colour of the chillies? (e.g. red, green, and yellow.)”</li> <li>• Prepare sheets of white paper and coloured pencils. Ask the children to look at the chilli plant and draw it on the paper. When the drawing is complete, ask the children to colour the chilli plant.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 23 of Activity Book 3.</li> </ul>	

<b>Topic</b>	At a Fruit Farm – What do plants need to grow?																				
<b>Content Standard</b>	• Researching the World of Living Things																				
<b>Learning Standard</b>	• State what is required for a plant’s growth through observation.																				
<b>Teaching Materials</b>	Book 3, Activity Book 3, a record form, two pots of flowers, red and blue coloured pencils.																				
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Prepare a record form, two pots of plants labelled A and B respectively.</li> </ul> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="3">Record Form</th> </tr> <tr> <th></th> <th>Plant A</th> <th>Plant B</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Things provided</td> <td>Water <input type="checkbox"/></td> <td>Water <input type="checkbox"/></td> </tr> <tr> <td>Sunlight <input type="checkbox"/></td> <td>Sunlight <input type="checkbox"/></td> </tr> <tr> <td>Air <input type="checkbox"/></td> <td>Air <input type="checkbox"/></td> </tr> <tr> <td rowspan="3">After two weeks</td> <td>Growing well?</td> <td>Still alive and growing well?</td> </tr> <tr> <td>Yes <input type="checkbox"/></td> <td>Yes <input type="checkbox"/></td> </tr> <tr> <td>No <input type="checkbox"/></td> <td>No <input type="checkbox"/></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• Ask the children to put plant A inside the classroom without giving it sunlight and water.</li> <li>• Tell the children that plants need sunlight, water and air to grow well. Ask them to put plant B in the garden to get the sunlight.</li> <li>• Tell the children that water is important for plants to get food and to grow. Ask them to water plant B.</li> <li>• After two weeks, ask the children to observe plants A and B, and record the changes to the plants.</li> <li>• Get the children to apply Higher Order Thinking Skills (HOTS) by answering the question on page 24 of Book 3.</li> <li>• Guide the children in carrying out the fun activities ‘Let’s do this!’ on page 25 of Book 3.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercises on pages 24 and 25 of Activity Book 3.</li> </ul>		Record Form				Plant A	Plant B	Things provided	Water <input type="checkbox"/>	Water <input type="checkbox"/>	Sunlight <input type="checkbox"/>	Sunlight <input type="checkbox"/>	Air <input type="checkbox"/>	Air <input type="checkbox"/>	After two weeks	Growing well?	Still alive and growing well?	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No <input type="checkbox"/>
Record Form																					
	Plant A	Plant B																			
Things provided	Water <input type="checkbox"/>	Water <input type="checkbox"/>																			
	Sunlight <input type="checkbox"/>	Sunlight <input type="checkbox"/>																			
	Air <input type="checkbox"/>	Air <input type="checkbox"/>																			
After two weeks	Growing well?	Still alive and growing well?																			
	Yes <input type="checkbox"/>	Yes <input type="checkbox"/>																			
	No <input type="checkbox"/>	No <input type="checkbox"/>																			

<b>Topic</b>	At a Fruit Farm – How do plants grow?
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Observe and record the germination and growth of a seed.
<b>Teaching Materials</b>	Book 3, Activity Book 3, paper cups, soil, flower seeds, record form, potatoes

**Suggested Activities****Book**

- Tell the children that some plants grow from seeds.
- Prepare paper cups, soil, and flower seeds. Ask the children to fill the paper cups with soil, and plant some quick-growing flower seeds in the soil. Then ask them to leave the cups outside the classroom.
- Prepare a record form. Ask the children to check on the plants and record how much the plant has grown after a week, and after two weeks.
- Tell the children that some plants grow from other parts of the plants, e.g. the potato grows from the roots.
- Prepare some potatoes. Bring the children to the garden. Ask them to plant the potatoes in the ground. Ask them to check on the potatoes, and record how much the potatoes have grown in a week, and after two weeks.
- Refresh the children's memory of what they have learnt by completing the revision exercise on page 27 of Book 3.

**Activity Book**

- Guide the children in doing the exercises on pages 26 and 27 of Activity Book 3.

<b>Topic</b>	Let's Go! – Pull and push
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, a chair, a tissue box, a toy car, a box, a rope
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Play a video clip showing the pull and push actions.</li> <li>• Ask the children what the people in the video are doing.</li> <li>• Prepare the chair, a tissue box and a toy car. Ask the children to push the chair, to pull tissue paper out from a tissue box and to push the toy car.</li> <li>• Divide the children into 2 groups. Prepare a rope and a box. One group will have a tug-of-war by pulling the rope, while another group will take turns pushing the box from a place to another.</li> <li>• Ask the children whether they are pulling or pushing.</li> <li>• Guide the children in doing the exercise on page 28 of Book 3.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 28 of Activity Book 3.</li> </ul>	

<b>Topic</b>	Let's Go! – Fast and slow
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, a music recording with a mixture of fast and slow tempo
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Play a music recording that has a mixture of fast and slow tempo. Get the children to move their hands or body in tune to the tempo.</li> <li>• Arrange some chairs in a circle. Let the children play the game 'Musical Chair' by moving around the chairs as long as the music is playing.</li> <li>• Ask the children to follow the music and move around at fast and slow speeds.</li> <li>• Guide the children in doing the activities on page 29 of Book 3.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 29 of Activity Book 3.</li> </ul>	

<b>Topic</b>	Let's Go! – Vehicles
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 3, Activity Book 3, toy vehicles, a sheet of paper
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Ask the children if they know what a vehicle is. Get them to name the vehicles that they have travelled in before.</li> <li>• Divide the children into three groups. Prepare toy vehicles. Give the first group of children toy vehicles that move on land. Give the second group of children toy vehicles that move on water. Give the third group of children toy vehicles that move in the air.</li> <li>• Gather the children at the play corner of the classroom. Ask them to sort the toy vehicles according to land, water and air transport.</li> <li>• Ask the children to stand up with the different toy vehicles they are holding, then tell if their vehicles move on land, water or in the air.</li> <li>• Give each child a sheet of paper. Ask the children to draw and colour their favourite vehicle.</li> <li>• Refresh the children's memory of what they have learnt by completing the revision exercise on page 32 of Book 3.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercises on pages 30 to 32 of Activity Book 3.</li> </ul>	

## Teaching Suggestions for Kids' Time Science Book 4 and Activity Book 4

<b>Topic</b>	Around Town – Wheels
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of a wheel, a hula hoop and a square cardboard box
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Show a picture card of a wheel. Ask the children if they know the name for the shape of the wheel. Get them to think of other things that have wheels, e.g. van, car, trolley, bicycle, etc. Tell the children that wheels help to move things easily.</li> <li>• Prepare a hula hoop and a square cardboard box. Divide the children into 2 groups. One group will be given the hula hoop. Another group will be given the square cardboard box.</li> <li>• Line the two groups of children at the same starting point. The group with the hula hoop will take turns to roll the hoop. The group with the box will take turn to push it. The fastest group to finish the race wins.</li> <li>• Guide the children in doing the exercise on page 2 of Book 4.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 2 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Around Town – Fuel
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one's work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of vehicles (car, motorcycle, aeroplane, ship, helicopter, tricycle), paper, pencils, two boxes
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Tell the children that most vehicles need fuel to move.</li> <li>• Show picture cards of car, motorcycle, aeroplane, ship, helicopter and tricycle. Ask the children to name the vehicles.</li> <li>• Prepare two empty boxes. Label one box 'Fuel', and another box, 'Without fuel'. Ask the children to sort the vehicle picture cards by placing each in the correct box.</li> <li>• Give each child a sheet of paper. Ask the children to draw one of their favourite vehicles that needs fuel and one of their favourite vehicles that does not need fuel.</li> <li>• Guide the children in doing the exercise on page 3 of Book 4.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 3 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Around Town – Light
<b>Content Standard</b>	• Researching Physical Surroundings
<b>Learning Standards</b>	<ul style="list-style-type: none"> <li>• State the various sources of light.</li> <li>• Explore the use of sunlight in daily living.</li> </ul>
<b>Teaching Materials</b>	Book 4, Activity Book 4, a big cardboard box, shape cutouts, torchlight
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Ask the children how they feel when the room is dark, e.g. Do you feel uneasy? Are you able to see things clearly?</li> <li>• Prepare a large cardboard box that can fit a child inside. Stick some shape cutouts on the inner sides of the cardboard box. Ask a child to crawl inside the box to find the shape cutouts on the sides of the cardboard box. Close the flaps of the box and do not give the child a torchlight. After around 30 seconds, the child comes out of the box and tells how many shapes he has found.</li> <li>• Ask another child to crawl inside the box with a torchlight. Ask him to find the shape cutouts in the box. Ask him to tell how many he has found at the end of 30 seconds.</li> <li>• Ask the children to tell why light is important to us.</li> <li>• Guide the children in doing the exercise on page 4 of Book 4.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 4 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Around Town – Shadows
<b>Content Standard</b>	• Researching Physical Surroundings
<b>Learning Standard</b>	• Record the result of the observation of shadows.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a torchlight
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Bring the children to a room and prepare a torchlight. Switch off all the lights in the room. Then turn on the torchlight and shine it on the whiteboard.</li> <li>• Use the hands to make shadows of animals, e.g. rabbit, bird, crocodile, cow, snail, crab, etc. Ask the children to look at the shadows and name the matching animals.</li> <li>• Teach the children to make shadow puppets with their hands.</li> <li>• Guide the children in doing the exercise on page 5 of Book 4.</li> <li>• Refresh the children's memory of what they have learnt by completing the revision exercise on page 6 of Book 4.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercises on pages 5 and 6 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Going Shopping – Metal
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standards</b>	• Gather objects according to identifiable features. • State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a metal fork, a spoon, a canned drink, a pan and canned food, an empty box, a plastic bottle, a plastic cup, a towel, a pencil, an eraser, two hula hoops
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Prepare a metal fork, a spoon, a canned drink, a pan and canned food. Ask the children to touch and feel each of them. Ask them, “How does each feel? Is it hard or soft? Can you tell what they are made of?”</li> <li>• Prepare an empty box. Mix up the metal things above with a plastic bottle, a plastic cup, a towel, a pencil and an eraser. Put all the things inside the box. Prepare two hula hoops. One hula hoop is for the things made of metal. Another hula hoop is for the non-metallic things.</li> <li>• Get the children to sort the things into metallic and non-metallic objects by placing them in the correct hula hoops.</li> <li>• Get children to apply Higher Order Thinking Skills (HOTS) by completing the exercise in the book. Get them to name some things that are made of metal (e.g. key, pot, ring, etc). The children can give any suitable answers.</li> <li>• Guide the children in doing the exercise on page 7 of Book 4.</li> </ul>	
<b>Activity Book</b>	
• Guide the children in doing the exercise on page 7 of Activity Book 4.	

<b>Topic</b>	Going Shopping – Wood and glass
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standards</b>	• Gather objects according to identifiable features. • State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, paper, pencil, chopsticks, wooden blocks, a video clip displaying the process of making paper, a glass jar
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Tell the children that some things are made of wood. Ask them if they know where wood comes from.</li> <li>• Show them the chopsticks and wooden blocks. Let them touch and feel the objects.</li> <li>• Ask the children to walk around the classroom and find the things made of wood, e.g. wooden box, wooden chair, wooden door, wooden puppets, wooden toys, etc.</li> <li>• Show a piece of paper. Ask the children, “Do you have any idea how this paper is made?”</li> <li>• Show a video clip displaying the process of making paper. Get the children to narrate what they saw in the video clip. Tell them that paper comes from trees. Remind them not to waste paper.</li> <li>• Tell the children that some things are made of glass.</li> <li>• Show a glass jar. Ask the children to touch and feel it, then describe it, e.g. smooth, hard, shiny.</li> </ul>	

<ul style="list-style-type: none"> <li>• Ask the children, “Does glass break easily? Can people get hurt by broken glass?”</li> <li>• Ask the children to demonstrate the correct way to hold a glass cup so as to avoid breaking it.</li> <li>• Ask the children to think of things made from glass and draw them on the paper, e.g. vase, wine bottle, jug, bowl, mirror, etc.</li> <li>• Ask the children to name the things they have drawn on the paper.</li> </ul>	
<b>Activity Book</b>	
• Guide the children in doing the exercise on page 8 of Activity Book 4.	

<b>Topic</b>	Going Shopping – Plastic and rubber
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standards</b>	• Gather objects according to identifiable features. • State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, plastic container, plastic forks and spoons, plastic plate and plastic jug, metal spoon, balloons, gloves, rain boots, rubber band and erasers
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Prepare a plastic container, plastic forks and spoons, a plastic plate and a plastic jug. Ask the children to touch and feel all of them. Ask them if they know what these things are made of. Tell the children that some things are made of plastic. Gather the children at their play corner. Ask each child to choose one toy made of plastic.</li> <li>• Prepare a metal spoon and a plastic spoon. Ask the children to identify the one with a lighter weight.</li> <li>• Prepare balloons, gloves, rain boots, rubber bands and erasers. Ask the children to touch and feel all those things. Ask them, “What are these things made of? Are they made of plastic?”</li> <li>• Tell the children that some things are made of rubber. Tell the children that rubber comes from the latex of the rubber tree.</li> <li>• Ask the children, “Can the balloon be stretched? How does it feel – hard or soft? What is the difference between the balloon and the plastic spoon?” Tell the children that the balloon is made from rubber and thus it is elastic.</li> <li>• Refresh the children’s memory of what they have learnt by completing the revision exercise on page 10 of Book 4.</li> </ul>	
<b>Activity Book</b>	
• Guide the children in doing the exercises on pages 9 and 10 of Activity Book 4.	

<b>Topic</b>	To the Zoo – Where do animals live?
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Identify the places where animals live.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a video clip showing a land animal’s life and a sea animal’s life, a bucket of water, an empty box, a table, plastic toys of animals, a sheet of paper

**Suggested Activities****Book**

- Play a video clip showing a land animal's life and a sea animal's life. Ask the children to tell what they saw in the video. Do all animals live on land only? Do all animals live in water only? What kind of animals can live on land and also in water?
- Prepare a bucket of water, an empty box, a table, plastic toys of animals, e.g. lion, elephant, zebra, fish, dolphin, shark, turtle, snake, salamander, frog.
- Ask the children to sort the toy animals according to their habitats. Ask the children to put the toy animals: into the bucket of water (if they live in water), on the table (if they live on land) and into the empty box (if they live on land and also in water).
- Prepare a sheet of paper. Ask the children to draw one of their favourite animals and tell where it lives.

**Activity Book**

- Guide the children in doing the exercise on page 11 of Activity Book 4.

<b>Topic</b>	To the Zoo – What do animals eat?
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Compare and contrast animals based on their staple food: (i) animals that eat meat (ii) animals that eat plants (iii) animals that eat meat and plants.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of a deer, giraffe, hippopotamus, crocodile, tiger, leopard, bear, raccoon and chimpanzee, a cardboard, toys of vegetables and meat, an empty box

**Suggested Activities****Book**

- Ask the children to stand up if they have visited a zoo before. Ask them to name the animals they saw at the zoo.
- Show picture cards of a deer, giraffe, hippopotamus, crocodile, tiger, leopard, bear, raccoon and chimpanzee. Ask the children to look at the cards and guess what food these animals eat.
- Prepare a cardboard. Draw three lines on the cardboard to differentiate the group of animals that eat plants only, the group of animals that eat meat only and the group of animals that eat plants and also meat.
- Tell the children that some animals eat plants only. Some animals eat meat only. Some animals eat plants and also meat.
- Ask the children to sort the picture cards of the animals and place each animal on the cardboard according to the main type of food it eats.
- Prepare toy vegetables and toy meat. Put all the toys in an empty box. Ask the children to pretend to be different animals. Ask them to find their food in the box.

**Activity Book**

- Guide the children in doing the exercise on page 12 of Activity Book 4.

<b>Topic</b>	To the Zoo – How do animals move?
<b>Content Standard</b>	• Researching the World of Living Things
<b>Learning Standard</b>	• Observe and imitate animal movements.
<b>Teaching Materials</b>	Book 4, Activity Book 4, video clips showing the movements of different animals, masks of different animals

**Suggested Activities****Book**

- Play different video clips showing the movements of different animals, e.g. elephant, kangaroo, fish, crab, pigeon and snake. Ask them to observe how these animals move, then talk about it.
- Divide the children into six groups. Each group will pretend to be one type of animal, e.g. elephant, kangaroo, fish, crab, pigeon or snake. Prepare masks of the different animals and ask the children to put them on.
- Ask the children to move like the animals they pretend to be, e.g. fly like a pigeon, hop like a kangaroo, swim like a fish.
- Refresh the children's memory of what they have learnt by completing the revision exercise on page 14 of Book 4.

**Activity Book**

- Guide the children in doing the exercises on pages 13 and 14 of Activity Book 4.

<b>Topic</b>	People at Work – Does it absorb water?
<b>Content Standard</b>	• Researching the World of Matter
<b>Learning Standard</b>	• Find out materials that can absorb water.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a checklist, a bucket of water, towel, sponge, cotton, eraser, hair band, tissue paper, spoon, sock, handkerchief, pencil, plate, cup and brush

**Suggested Activities****Book**

- Prepare a checklist. Ask the children to predict which things can or cannot absorb water before the experiment starts. Ask them to tick the checklist.

Things	Prediction		Result	
	Can absorb water	Cannot absorb water	Can absorb water	Cannot absorb water
Towel				
Sponge				
Cotton ...etc				

- Prepare a bucket of water, towel, sponge, cotton, eraser, hair band, tissue paper, spoon, sock, handkerchief, pencil, plate, cup and brush.
- Get the children to start the experiment by dropping all the objects into the bucket of water. Ask them to observe which objects absorb water and which do not, and then tick the results on the checklist.

- Ask the children to compare their predictions with the results. Discuss why some of the objects can absorb water while the others cannot.
  - Guide the children in carrying out the fun activities ‘Let’s do this!’ on page 16 of Book 4.
- Activity Book**
- Guide the children in doing the exercises on pages 15 and 16 of Activity Book 4.

<b>Topic</b>	People at Work – Does it dissolve in water?
<b>Content Standards</b>	<ul style="list-style-type: none"> <li>• Science Process Skills</li> <li>• Researching the World of Matter</li> </ul>
<b>Learning Standard</b>	• Find out about materials that can dissolve in water.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a checklist, a few cups of water, salt, sugar, sand, beans, rice, instant coffee powder, cocoa powder, a stone and flour

**Suggested Activities**

**Book**

- Prepare a checklist. Ask the children to predict which things can or cannot dissolve in water before the experiment starts. Ask them to tick the checklist.

Things	Prediction		Result	
	Can dissolve in water	Cannot dissolve in water	Can dissolve in water	Cannot dissolve in water
Salt				
Sugar				
Sand...etc				

- Prepare a few cups of water, some salt, sugar, sand, beans, rice, instant coffee powder, cocoa powder, a stone and flour.
- Start the experiment by asking the children to drop each kind of thing into a cup of water, and then stir the mixture. Ask them to observe which things dissolve in the water and which do not. Record the results in the checklist.
- Ask the children to compare their predictions with the results. Discuss why some of the objects can dissolve in water while the others cannot.
- Guide the children in carrying out the fun activities ‘Let’s do this!’ on page 18 of Book 4.

**Activity Book**

- Guide the children in doing the exercises on pages 17 and 18 of Activity Book 4.

<b>Topic</b>	People at Work – Magnets
<b>Content Standard</b>	• Researching the World of Matter
<b>Learning Standard</b>	• Find out the effects of magnets on various objects.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a magnet, a checklist, a plastic ruler, a key, a safety pin, paper clips, an eraser, paper, a pencil

**Suggested Activities**

**Book**

- Show the magnet and tell the children that a magnet has two sides. One end is North pole. The other end is South pole.
- Tell the children that magnets come in different shapes and sizes. Ask them to guess the things that will be attracted by a magnet.
- Prepare a checklist. Before the experiment starts, ask the children to predict which of the listed things can be attracted by magnet. Ask them to tick the checklist.

Things	Prediction		Result	
	Yes	No	Yes	No
Plastic ruler				
Paper clips				
Eraser, etc.				

- Prepare a plastic ruler, a key, a safety pin, some paper clips, an eraser, paper, a pencil, etc.
- Ask the children to put a magnet near each of the things. Then observe which things get attracted to the magnet and which do not. Ask them to tick the results on the checklist.
- Ask the children to compare their predictions with the results. Ask them why some things get attracted to magnets and some do not.
- Tell the children that magnets attract things that are made of iron or steel only.
- Guide the children in carrying out the fun activities ‘Let’s do this!’ on page 19 of Book 4.

**Activity Book**

- Guide the children in doing the exercise on page 19 of Activity Book 4.

<b>Topic</b>	People at Work – Uses of magnets
<b>Content Standard</b>	• Researching the World of Matter
<b>Learning Standard</b>	• Find out the effects of magnets on various objects.
<b>Teaching Materials</b>	Book 4, Activity Book 4, a compass, a pencil case with a magnetic button, a magnetic rod, a sand container, 10 iron paper clips, a metal ring, a plastic toy car, a pencil, an eraser and a plastic spoon

**Suggested Activities**

**Book**

- Tell the children that magnets are very useful to people.
- Bring a compass and a pencil case that has a magnetic button. Ask the children to look at the things and tell how the magnet works e.g. a compass shows us directions, the magnet button keeps a pencil case shut, a magnetic rod holds the paper in place on the whiteboard, etc.
- Prepare a sand container, 10 iron paper clips, a metal ring, a toy car, a pencil, an eraser and a plastic spoon. Hide all the things inside the sand.
- Divide the children into two groups. Ask the children to find the 10 iron paper clips and the metal ring using magnets. Another group will use a plastic spoon. Let the children discover which method is the faster one.
- Refresh the children’s memory of what they have learnt by completing the revision exercise on page 21 of Book 4.

**Activity Book**

- Guide the children in doing the exercises on pages 20 and 21 of Activity Book 4.

<b>Topic</b>	Time to Celebrate – Electricity
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, old magazines and a manila card
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Tell the children that many machines need electricity to work. Get the children to walk around their classroom and identify the things that need electricity to operate, e.g. fan, light, television, radio, etc.</li> <li>• Discuss the consequences if we touch a switch with our wet hands.</li> <li>• Tell the children that electricity is dangerous. Therefore, they should not touch a switch with wet hands.</li> <li>• Prepare some old magazines and a manila card. Ask the children to find and cut out pictures of electrical things in the magazines. Then, paste them on the manila card.</li> <li>• Guide the children in doing the exercise on page 22 of Book 4.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 22 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Time to Celebrate – Batteries
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, different types of batteries, an alarm clock, a torchlight, a remote control, a mobile phone
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Show the different types of batteries. Tell the children that batteries produce electricity. Ask the children to name the things that need batteries to work.</li> <li>• Prepare an alarm clock, a torchlight, and a remote control, all of which have no batteries in them. Let the children use the things and ask them if the things are working.</li> <li>• Prepare different types of batteries. Ask the children to install batteries according to the types of batteries needed, e.g. AA batteries for the alarm clock, AAA batteries for the torchlight and remote control. Then ask the children to turn on the things and see if they work.</li> <li>• Show the children a mobile phone. Ask them, “Does a mobile phone need batteries?” Show the children the battery of a mobile phone.</li> <li>• Get the children to apply Higher Order Thinking Skills (HOTS) by completing the exercise in the book. Let the children name some things that need batteries to function (toy car, electric toothbrush, etc). Children can provide any suitable answers.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 23 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Time to Celebrate – Heat
<b>Content Standard</b>	• Researching Physical Surroundings
<b>Learning Standards</b>	<ul style="list-style-type: none"> <li>• State an observation through one’s work, or orally.</li> <li>• Explore the use of sunlight in daily living.</li> </ul>
<b>Teaching Materials</b>	Book 4, Activity Book 4, stones and two boxes
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Tell the children that we cannot see the heat but we can feel it.</li> <li>• Prepare some stones and two boxes. Ask the children to put some stones inside the boxes and close them.</li> <li>• Ask the children to put one box inside the room, and the other box outside under the sun.</li> <li>• Ask the children to wait for 15-20 minutes before bringing the box from outside back into the room. Ask the children to touch the box and stones, and decide which box had received more heat.</li> <li>• Guide the children in doing the exercise on page 24 of Book 4.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 24 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Time to Celebrate – Uses of heat
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, pictures of people ironing clothes, cooking food, boiling water and sitting around the campfire, frozen pizza and oven
<b>Suggested Activities</b>	
<b>Book</b>	
<ul style="list-style-type: none"> <li>• Tell the children that heat is very useful to people. Ask them how heat is useful to us.</li> <li>• Show pictures of people ironing clothes, cooking food, boiling water and sitting around a campfire, etc. Ask the children to describe what those people are doing. Discuss the uses of heat in the pictures.</li> <li>• Prepare a frozen pizza and an oven. Show the frozen pizza to the children. Ask them if it can be eaten straightaway. Then put the frozen pizza in the oven.</li> <li>• After a couple of minutes, remove the pizza and ask the children to tell what has happened to the frozen pizza. Ask them, “How does the oven make the frozen pizza ready for eating? What does the oven provide?”</li> <li>• Refresh the children’s memory of what they have learnt by completing the revision exercise on page 26 of Book 4.</li> </ul>	
<b>Activity Book</b>	
<ul style="list-style-type: none"> <li>• Guide the children in doing the exercises on pages 25 and 26 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Our World – The Earth
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture card of Earth, a white paper plate, blue and green crepe paper, brushes and glue
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Show a picture card of Earth. Tell the children that we live on Earth. It is round like a ball.</li> <li>• Get the children to name the natural things on Earth, e.g. plants, mountains, rivers, sea, people, animals, etc.</li> <li>• Prepare a white paper plate, blue and green crepe paper, brushes and glue.</li> <li>• Ask the children to arrange and glue the blue and green crepe paper on the paper plate to create Earth. The blue colour would represent rivers and seas; the green colour, leaves and grass.</li> <li>• Next, ask the children to draw some flowers, and trees on some paper. Then cut the shapes out and glue them on the paper plate.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 27 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Our World – Day and night
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of the sun, moon and stars, play dough, blue, black and white coloured cards
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Show a picture card of the sun. Tell the children that the sun rises in the east and sets in the west. It gives us light and heat. Ask the children to think and tell what activities they can do in the daytime e.g. go hiking, eat, play, go to the beach, park, etc.</li> <li>• Prepare some play dough and a blue-coloured card. Ask the children to make clouds and the sun using the play dough, then stick them on the blue card.</li> <li>• Show picture cards of the moon and stars. Tell the children that we can see the moon and stars at night. At night, it is dark and cool. Ask the children what activities they can do at night, e.g. sleep, read books, watch television, etc.</li> <li>• Prepare some play dough and a black-coloured card. Ask children to make stars and the moon using the play dough, then stick them on the black card.</li> <li>• Show a picture card of the rainbow. Ask them, “Have you ever seen a rainbow? How many colours are in a rainbow? What are the colours of the rainbow?”</li> <li>• Prepare play dough and a white-coloured card. Ask the children to make seven rainbow colours, then stick them on the white card.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 28 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Our World – Weather
<b>Content Standard</b>	• Researching Physical Surroundings
<b>Learning Standard</b>	• Observe and describe different weather conditions.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of sunny, windy, cloudy and rainy days
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Show picture cards of sunny, windy, cloudy and rainy days. Ask the children to describe the different weather conditions.</li> <li>• Ask them what activities they can do on sunny, windy, cloudy and rainy days.</li> <li>• Get the children to apply Higher Order Thinking Skills (HOTS) by completing the exercise in the book. Based on this stimulus in the book, “Ben wants to go out and brings an umbrella along.” Let the children think and predict what the weather is like (Answers: rainy, cloudy, very hot, going to rain soon, etc.).</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 29 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Our World – Pollution
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of dead fish (water pollution), of sick people and dead animals (land pollution), haze (air pollution)
<b>Suggested Activities</b> <b>Book</b> <ul style="list-style-type: none"> <li>• Tell the children that pollution is harmful to the environment. When the environment becomes polluted, it is dirty and dangerous for living things to live in.</li> <li>• Show a picture card of water pollution, e.g. dead fish in a river. Discuss the consequences of water pollution, e.g. it can cause the death of sea animals, destroys their homes, etc.</li> <li>• Show a picture card of land pollution, e.g. drains and places filled with rubbish. Discuss the consequences of land pollution, e.g. it will become breeding grounds for pests and disease-causing virus and bacteria, more people will fall sick and suffer from dangerous diseases such as dengue fever, scarlet fever, etc.</li> <li>• Show a picture card of air pollution, e.g. haze, smoke from factories, petrol fumes from vehicles, smoke from open burning, etc. Tell the children that haze is the fine dust trapped in the air and that open burning and forest fires cause haze.</li> <li>• Get the children to apply Higher Order Thinking Skills (HOTS) by completing the exercise in the book. Get the children to observe the picture in the book and think if the boy in the picture is doing the right thing. Then, give reasons for their answers (Answer: No, because open burning causes air pollution and it is harmful to us.) Children can provide any suitable answers.</li> </ul> <b>Activity Book</b> <ul style="list-style-type: none"> <li>• Guide the children in doing the exercise on page 30 of Activity Book 4.</li> </ul>	

<b>Topic</b>	Our World – Reuse and recycle
<b>Content Standard</b>	• Science Process Skills
<b>Learning Standard</b>	• State an observation through one’s work, or orally.
<b>Teaching Materials</b>	Book 4, Activity Book 4, picture cards of a tyre vase and a pencil holder made from a plastic bottle, an empty plastic bottle (cut in half) and coloured paint, recycled items

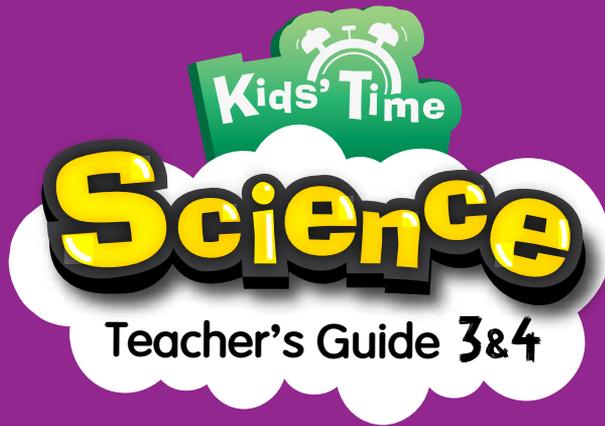
**Suggested Activities**

**Book**

- Prepare some samples of recycled items, e.g. plastic bottle, can, newspaper, large bins and boxes. Place these recycled items in one large bin. Ask the children to sort the items according to what they were made from, e.g. paper, plastic and aluminum.
- Tell the children that some things can be reused. Show the picture cards of a tyre vase and a pencil stand made from a plastic bottle. Ask the children to look at the picture cards and tell what things were reused.
- Prepare an empty plastic bottle (cut in half) and coloured paint. Ask the children to paint the half with a base, then put it in the sun to dry. The children will use it as a pencil holder.
- Tell the children that glasses, plastic, aluminum and paper can be recycled to make new things.
- Get the children to apply Higher Order Thinking Skills by completing the exercise in the book. Let the children know that an empty milk carton can be reused as a pencil holder. Let the children think of things that can make by reusing the milk cartons besides making a pencil holder (Answers: a box to keep paper, handicraft, etc). Children can provide any suitable answers.
- Refresh the children’s memory of what they have learnt by completing the revision exercise on page 32 of Book 4.

**Activity Book**

- Guide the children in doing the exercises on pages 31 and 32 of Activity Book 4.



Kids' Time  
**Science**  
Teacher's Guide 3&4

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