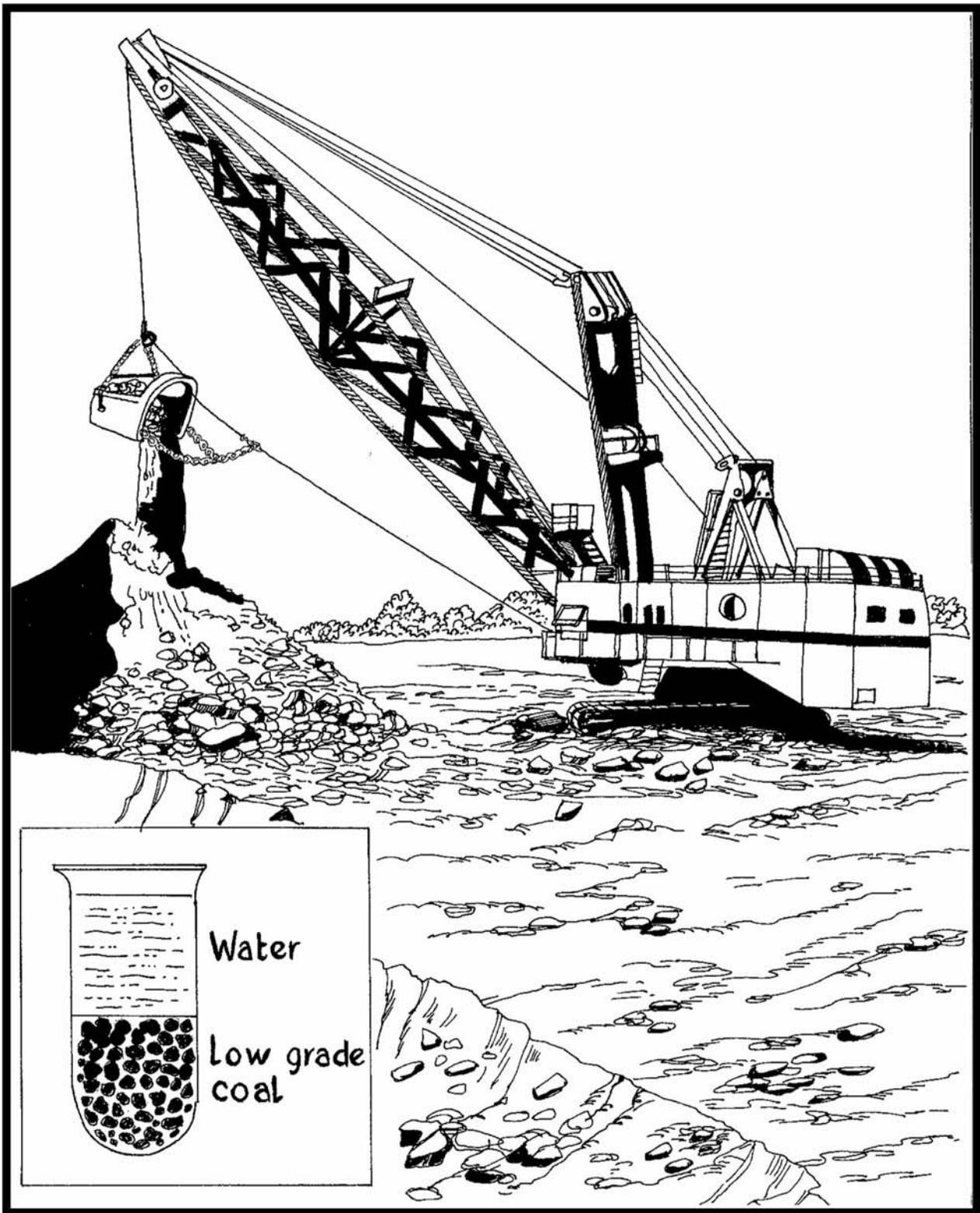


# Plastics-Take



# PLASTICS - TAKE

## LEARNING AREA: Social Sciences

### LEARNING OUTCOME 3: Exploring Issues

Make informed decisions about social and environmental issues and problems.

*Integration with other Learning Areas:*

Learning Area	Learning Outcome	Description
Language	4: Writing	Write different kinds of factual and imaginative texts for a wide range of purposes
Technology	3: Technology, society and the environment	Demonstrate an understanding of the interrelationships between science, technology, society and the environment.
Arts & Culture	1: Creating, interpreting and presenting	Create, interpret and present work in each of the art forms (visual arts).

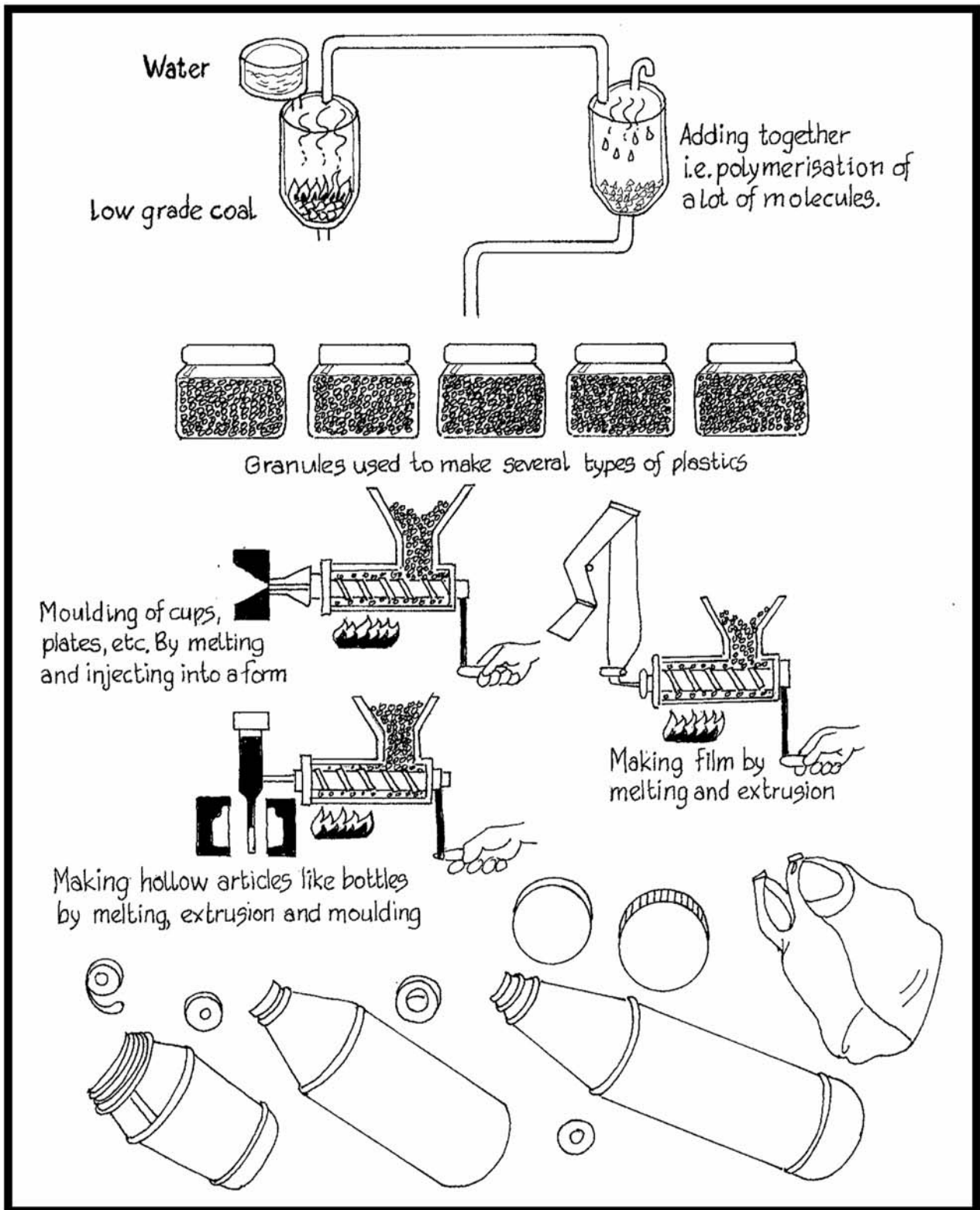
### ACTIVITIES

(E = Educator L = Learner)

	<b>How coal is formed and mined</b>
E	Discuss: How coal is formed.
L	Write a letter to the <a href="#">Wild Life and Environmental Society</a> to find out the effect of a coalmine on the environment.
E	Send the best letter.
L	Make a model of a mine dump in clay, play dough or sawdust, showing its effect on the environment.
L	Write to <a href="#">Chamber of Mines</a> to find out what is done to protect the environment when planning, building and closing a mine.
E	Send the best letter.
E	Make a model of a mine area once it has been restored after closing.
L	Discuss: The necessity for mining coal.



# Plastics-Make



# PLASTICS - MAKE

## LEARNING AREA: Technology

### LEARNING OUTCOME 1: Technological processes and skills

Apply technological processes and skills ethically and responsibly using appropriate information and communication technologies.

### LEARNING OUTCOME 3: Technology, society and the environment

Demonstrate an understanding of the interrelationships between science, technology, society and the environment.

*Integration with other Learning Areas:*

Learning Area	Learning Outcome	Description
Natural Sciences	1: Scientific investigations	Act confidently on curiosity about natural phenomena, and investigate relationships and solve problems in scientific, technological and environmental contexts
Natural Sciences	3: Science, Society and the Environment	Demonstrate an understanding of the interrelationships between science and technology, society and the environment.
Social Sciences	1: Geographical enquiry	Use enquiry skills to investigate geographical and environmental concepts and processes
Social Sciences	3: Exploring Issues	Make informed decisions about social and environmental issues and problems.

## ACTIVITIES

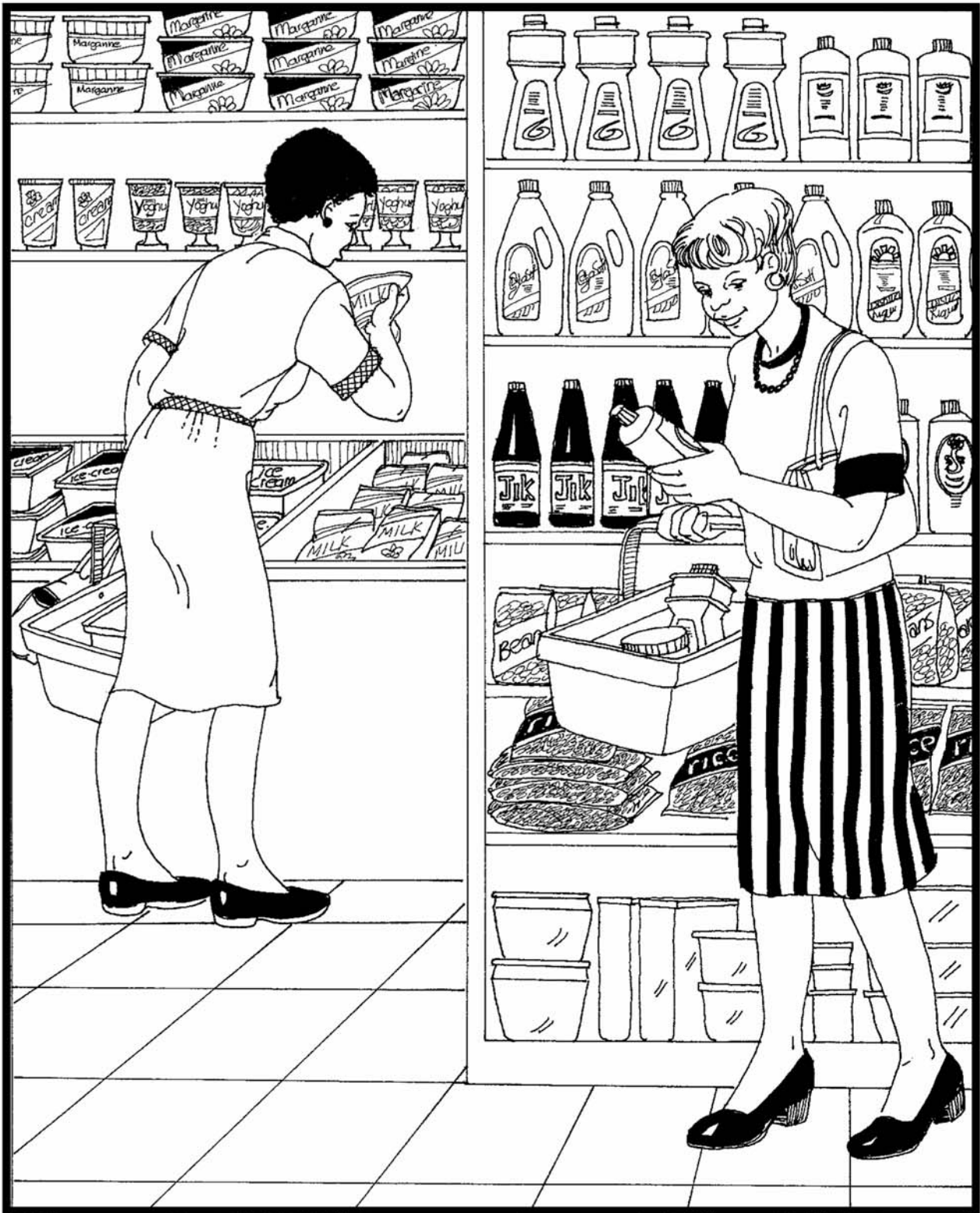
(E = Educator L = Learner)

L	<b>How plastics are made</b> Write a letter to the <a href="#">Plastics Federation of South Africa</a> to ask for information on : How plastics are made; polymer identification codes for different types of plastics; where the nearest plastics factory is; what is being done to protect the environment?
E	Post the best letter.
E	<b>School visit</b> Find the plastics factory closest to the school.
E	Discuss whether it is practical to visit it. If so, arrange a visit. If not, find any factory close to the school. Arrange a visit.
L	Draw up a survey form to include the questions : Where is it? What is made or done on the site? How big is the site? How many people work on the site? How many are office staff? How many work in the factory itself? How safe is it to work there?
E	<b>Burning plastics</b> Show what happens when you burn plastics. Be very careful and only do this outside. Using a potholder and tongs, hold different types of plastics items over a candle for approximately 15-20 seconds, or until the item catches on fire. Put burning items in an empty tin can and put out the fire.
L	Write down what they see, smell, feel.
E	Discuss: Harmful effects of burning plastics.
L	Find out which steps involved in the making of plastics could cause harm to the environment if not handled properly. Make a list of what is being done to protect the environment when plastics are made.





# Plastics-Buy



# PLASTICS - BUY

## LEARNING AREA: Economic and Management Sciences

### LEARNING OUTCOME 2: Sustainable Growth and Development

Demonstrate an understanding of sustainable growth, reconstruction and development, and reflect critically on related processes.

### LEARNING OUTCOME 3: Managerial, Consumer and Financial Knowledge & Skills


Demonstrate knowledge and the ability to apply responsibly a range of managerial, consumer and financial skills.

*Integrate with other Learning Areas:*

Learning Area	Learning Outcome	Description
Social Sciences	3: Exploring Issues	Make informed decisions about social and environmental issues and problems.
Mathematics	1: Numbers, Operations and Relationships	Recognise, describe and represent numbers and their relationships, and to count, estimate, calculate and check with competence and confidence in solving problems.

### ACTIVITIES

(E = Educator L = Learner)

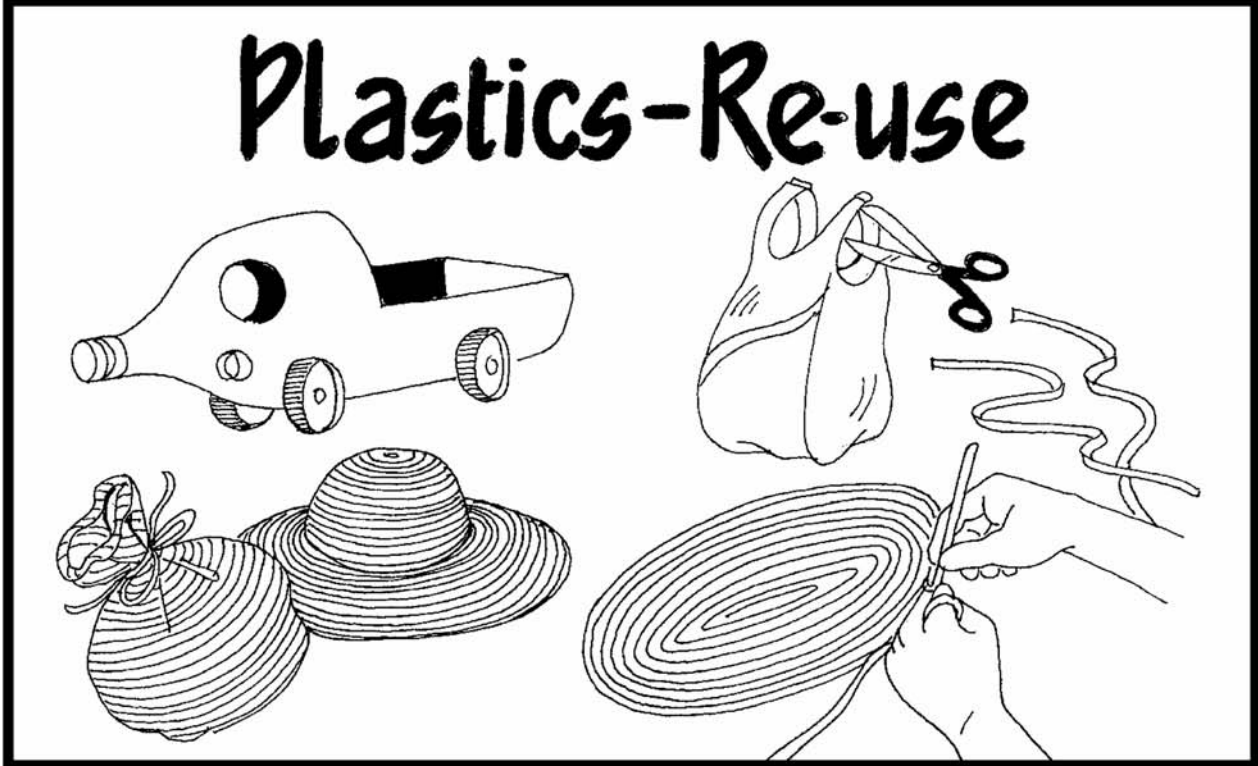
L L	<p><b>Products made from plastics</b></p> <p>Visit the tuck shop, local café, supermarket. Write down all the plastic items you see.</p> <p>Draw a table with 7 columns. In each column list the items according to type of plastic they are made of. Bring in some examples from home.</p> <div style="text-align: center;">  </div>
L L L	<p><b>Packaging or wrapping</b></p> <p>Use examples from previous exercise and write down all the different kinds of materials you find inside plastic containers e.g. liquids, solids, powders, gases.</p> <p>List the advantages of these materials being packaged in plastics.</p> <p>Write down everything you ate and drank yesterday. Mark each one that was packaged in plastics and why.</p> <p>Discuss: What else could they have been packaged in?</p>
E E L E	<p><b>Reducing waste</b></p> <p>Introduce the term reduce. Explain that the less packaging we buy the less waste there is to get rid of.</p> <p>Show that buying items of concentrated products and diluting them reduces waste, e.g. concentrated fruit juice. Buy a bottle of concentrated fruit juice. Collect empty bottles all the same size. In a separate container, add the water required to the concentrated juice. Fill up the empty bottles with the mixed juice.</p> <p>Work out how many bottles were needed for the mixed juice compared to the one bottle for the concentrated juice.</p> <p>Discuss how buying concentrated juice reduces waste. Ask for other examples of buying in concentrated form.</p>



# Plastics-Use



# Plastics-Re-use



# PLASTICS - USE AND RE-USE

## LEARNING AREA: Social Sciences

### LEARNING OUTCOME 2: Geographical knowledge & understanding

Demonstrate geographical and environmental knowledge and understanding.

### LEARNING OUTCOME 3: Exploring Issues

Make informed decisions about social and environmental issues and problems.

Integration with other Learning Areas:

Learning Area	Learning Outcome	Description
Life Orientation	2: Social development	Demonstrate an understanding of and commitment to constitutional rights and responsibilities, and to show an understanding of diverse cultures and religions.
Life Orientation	3: Personal development	Use acquired life skills to achieve and extend personal potential to respond effectively to challenges in his or her world.
Arts & Culture	1: Creating, interpreting and presenting	Create, interpret and present work in each of the art forms (visual arts).

## ACTIVITIES

(E = Educator L = Learner)

<p><b>L</b></p> <p><b>E</b></p> <p><b>L</b></p> <p><b>L</b></p>	<p><b>Plastics in the home and school</b></p> <p>Write down the names of all the rooms in your home. List all the plastic items found in each room OR Draw a diagram of your home and list plastic items found in each room.</p> <p>Write next to each item - <b>N for necessary</b> <b>L for luxury</b></p> <p>Divide learners into pairs. Each pair to draw an item made from plastics used in the garden. Put drawings in a box. Each pair to take one out of the box and write the name of the item on the board.</p> <p>Collect newspapers and magazines.</p> <p>Look through magazines and newspapers to find pictures of plastic items used for farming, transport, health/hygiene, sport and building. Make a collage, grouping and labelling the pictures accordingly.</p>
<p><b>E</b></p> <p><b>L</b></p> <p><b>E</b></p> <p><b>L</b></p> <p><b>E</b></p> <p><b>E</b></p>	<p><b>Re-use plastics</b></p> <p>Collect plastic shopping bags and hand one to each pupil.</p> <p>Cut off the closed end and make aprons for the younger children.</p> <p>Contact a local pre-school and ask for ideas on toys and teaching aids to make.</p> <p>Collect plastic items.</p> <p>Show pupils how to make toys and teaching aids.</p> <p>Deliver to pre-school.</p>

