

Ipswich City Council

WHAT A WASTE!

ENVIRONMENTAL EDUCATION PROGRAM

Teacher Resource Booklet



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For copies of this resource book contact:

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ABOUT THE 'WHAT A WASTE!' EDUCATION PROGRAM

Ipswich City Council conducts a FREE environmental education program for all schools and community groups within Ipswich. 'What A Waste!' Environmental Education Program comprises of two lessons that are designed for age appropriate learning:

1. Waste Matters

This lesson engages students awareness on waste minimisation through the implementation of appropriate waste disposal methods. Students will learn to identify the three different bins used for waste and the purpose of recycling. Students will discover the environmental benefits in reducing, reusing and recycling waste and how to apply these learnings to their own actions at school and in their home environment. Students will develop an appreciation for the health of our environment and will engage in interactive learning associated with pollution, waste and the environment.

2. Working With Worms

This lesson is an addition to 'Waste Matters' and engages students' awareness of compost solutions as an alternative to organic waste and food scraps entering general rubbish. The use of composts and worm farms will be closely examined, and students will learn to identify the value of worm farms and the relationship this plays on waste disposal. Students will discover how to establish a worm farm, and will be encouraged to apply these learnings to their school and/or home environment.

Each lesson has been closely linked to the Early Years Curriculum Guidelines and the Australian Curriculum (ACARA). For more information on each lesson's linkages please speak to the Environmental Education Officer at Ipswich City Council.

Teacher Resource Booklet

This resource book provides teachers with classroom activities to reinforce the messages learnt from Ipswich City Council's Environmental Education Programs. For additional classroom activity sheets please refer to the 'Activity Book'. All materials are free for teachers and coordinators to distribute to their students and classes. Teachers are welcome to adapt these activities for older year levels.



WASTE DISPOSAL

Waste collection services operate depending on your school or organisation's arrangements. Every week Ipswich City Council will collect waste and recycling from over 62,000 households. Private contractors assist in the waste collection services from commercial organisations. In order to maximise the benefits of this activity book for your class in waste education, please refer to the following information on appropriate waste disposal actions.



Household Refuse Collection

All households are provided with a 240 litre red-lidded refuse bin. Some households will have our new red-lidded bin (introduced in conjunction with our new green waste service) and some households may still have the green-lidded refuse bin. The collection service is provided weekly and is for general household waste only, such as food waste and plastic bags. It is not suitable for recyclables or garden waste. Recyclable items should be placed into the recycling bin.

Household Recycling Collection

All households are provided with a 240 litre yellow-lidded recycling bin. The collection is provided fortnightly and is for recyclable items only, such as newspaper, glass and aluminium cans. It is not suitable for general and garden waste. Placing items such as food scraps or packaging in the recycling bin can contaminate the entire recycling process.



Household Green Waste Collection

Ipswich City Council can offer households the option of an additional low-cost service to help with reducing greenhouse gases and the amount of waste sent to our landfills. The collection is provided fortnightly and for garden waste only. This includes grass clippings, prunings and small branches.

The green waste is collected and sent to a facility where it will be converted into mulch for green spaces in Ipswich.

THE THREE R'S

Ipswich City Council has embraced the three R's - Reduce | Reuse | Recycle

Many people believe there are now four R's and even five R's! A common addition to the three R's is to *Rethink* the choices we make in everyday purchases and the actions we make to help minimise waste and protect our environment.

Reduce

Cut down on the amount of rubbish being produced by reducing the material we buy that ultimately becomes waste:

- Buy products that have less packaging and/or packaging that can be recycled
- Buy in bulk wherever possible
- Use reusable bags and green bags as an alternative to plastic bags
- Borrow items that are not used very often
- Ask yourself is your purchase essential and something you really need or is it an impulse buy

Reuse

Before throwing anything away, think about how it could be reused:

- Reuse old envelopes for shopping lists or telephone notepads
- Buy products that can be refilled
- Reuse plastic containers and bottles
- Donate good quality old clothes and toys to a charity shop
- Donate read magazines to doctor surgeries
- Use rechargeable batteries that can be reused again and again
- Join a library and borrow books rather than purchasing them

Recycle

This is the process of creating new products from discarded goods. The recyclable items placed in the yellow-lidded recycling bin are taken to the Material Recovery Facility (MRF). The items are sorted and baled up before being sent to recycling manufacturers and turned into a wide range of new products. There are so many products now available in supermarkets that have been recycled or have recycled content. Garden waste can be recycled into compost.



WHICH BIN DOES THAT GO IN?

Description:

This activity encourages recognition of different items of waste and how they are correctly disposed.

Type:

Group Activity (approximately 20 children)

You Will Need:

- Colour photocopies of the posters and waste items on the following pages (you may wish to enlarge to A3).
- Scissors
- Sticky tape (or blu tac)
- A display board or space on a wall low enough for children to reach.

Before the Lesson:

- To ensure this game will not become damaged, you may wish to laminate the page of rubbish items.
- Cut out each of the waste item pictures, apply sticky tape (or blu tac) to the back and mix them up.

Setup:

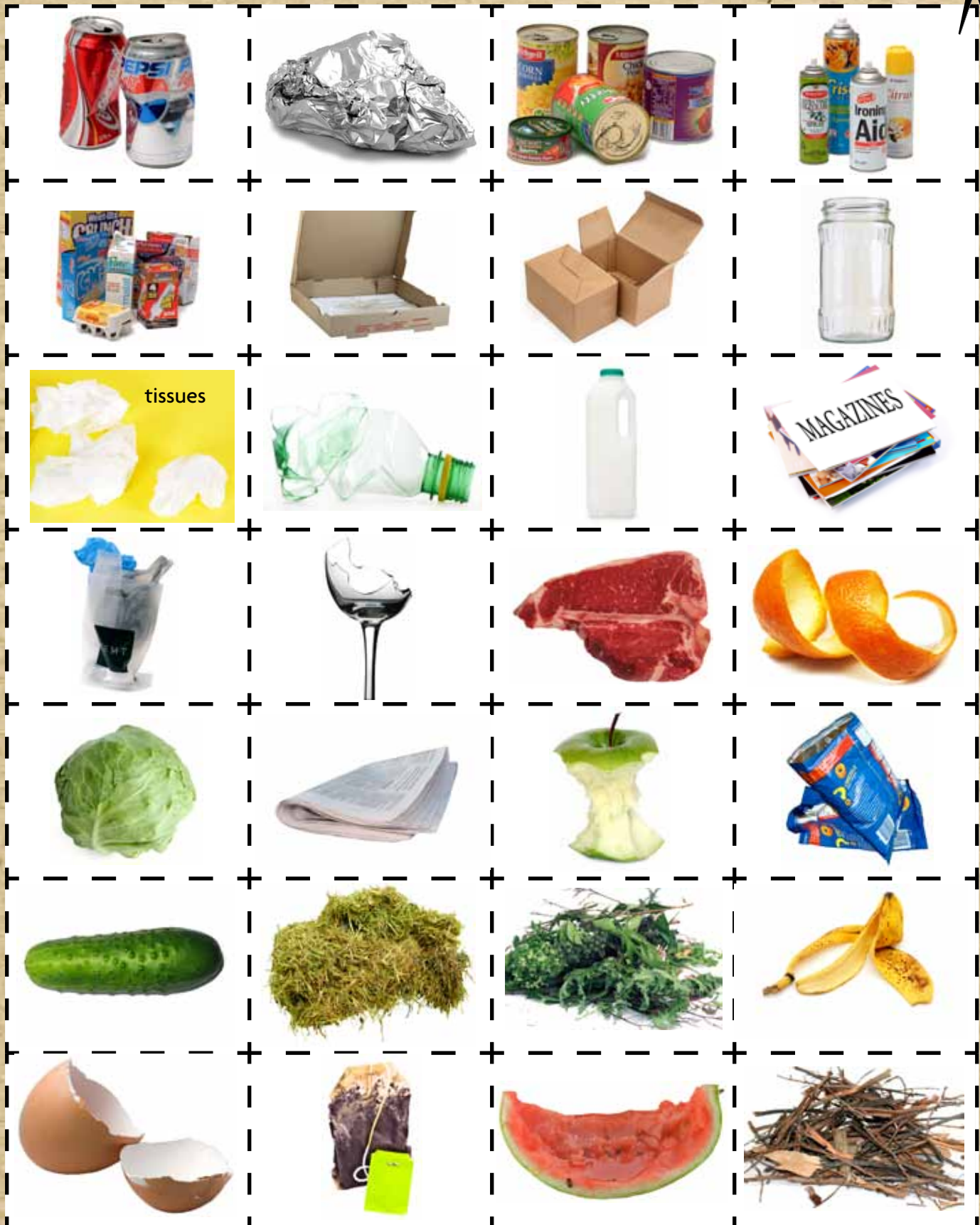
- Attach photocopied posters from the following pages to a display board or wall low enough for children to reach. Use the refuse bin poster, the recycling bin poster and either the worm farm or compost bin poster depending on which one the children have learnt most about. The green waste bin poster can also be used only if the children have learnt about green waste bins.
- Sit children in a half circle.

How to Play:

- Ask children to recognise the images on the posters. Discuss what happens to items put in the green lidded refuse bin, yellow lidded recycling bin, worm farms, compost bins and green waste bins if appropriate.
- Hold up the waste items on the cut out squares one by one, and ask children where that item should go (i.e., the green lidded refuse bin, yellow lidded recycling bin, worm farm, compost bin or green waste bin if appropriate).
- Invite one child to stick the item in the correct place on the posters.
- Repeat, so each child has an opportunity to stick an item on the posters.
- When complete, highlight the different volume of items in the recycling bin, refuse bin and compost or worm farm. Only a few items should have ended up on the refuse bin poster. Discuss the environmental benefits of having less rubbish in the refuse bin and the benefits of reusing and recycling.

Learning Outcomes:

- Children learn to recognise certain waste items as recyclable, non-recyclable or organic;
- Children gain an understanding of what will happen to waste materials after they are disposed of;
- Children learn about making choices that impact the environment and gain an understanding of the effects their decisions can have.



Refuse Bin



Recycling Bin



Green Waste Bin



Compost Bin



Worm Farm



I SPY WITH MY LITTLE EYE SOMETHING THAT CAN BE RECYCLED!

Description:

This activity encourages recognition of different items of rubbish and how they should be correctly disposed. This activity can be used as an alternative or follow-on to Lesson 1. It is best suited to children in Prep as it requires prior literacy learning.

Type:

Group Activity (approximately 25 children)

You Will Need:

- Two hoops or ropes placed in a circle
- Photocopies of the signs on the following pages (you may wish to enlarge to A3)
- Scissors
- Several items that can be recycled - newspaper, magazine, tin can, clean aluminium foil, soft drink can, cereal box, cardboard box, glass jar, plastic milk bottle
- Several items that cannot be recycled - tissue, paper towel, plastic bag, soft plastic packaging (without recycling symbol), chip packet, glass cup, food item

Try to have one item for each child in the group

Setup:

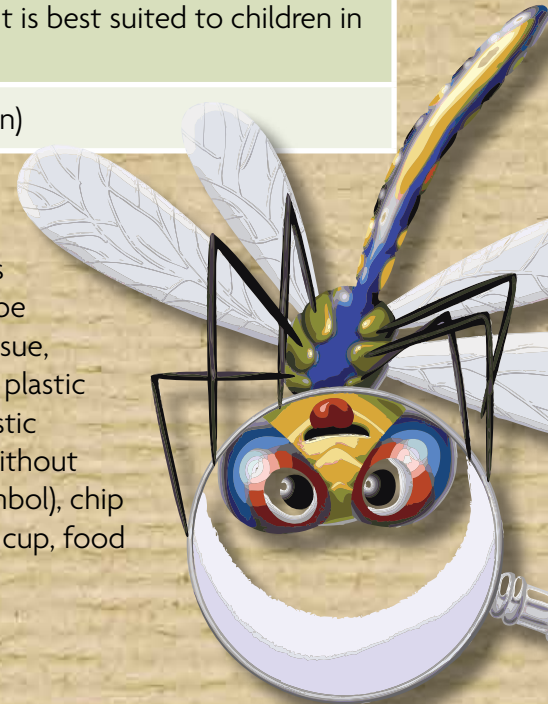
- Cut out the two provided signs and make two circles on the floor with the hoops or rope.
- Place one of the signs in each circle so each circle represents either a green-lidded refuse bin or a yellow-lidded recycling bin.
- Place items that can and cannot be recycled in a mixed pile on the floor.
- Sit children in a half circle.

How to Play:

- First demonstrate how to play the traditional game of 'I Spy'.
- The first child will pick an object from the items in front of them and say for example, 'I spy with my little eye, something beginning with B'.
- Other children in the class then guess the item starting with B the child is referring to.
- Once a child in the group has guessed the correct item eg. bottle, they are then asked to place that item in the correct circle (either the refuse bin or recycling bin circle).
- Repeat this game until each child has had a turn picking an item and saying 'I Spy'.
- To continue playing the game after all items have been placed in the circles, children can be asked to look for other items around the room.

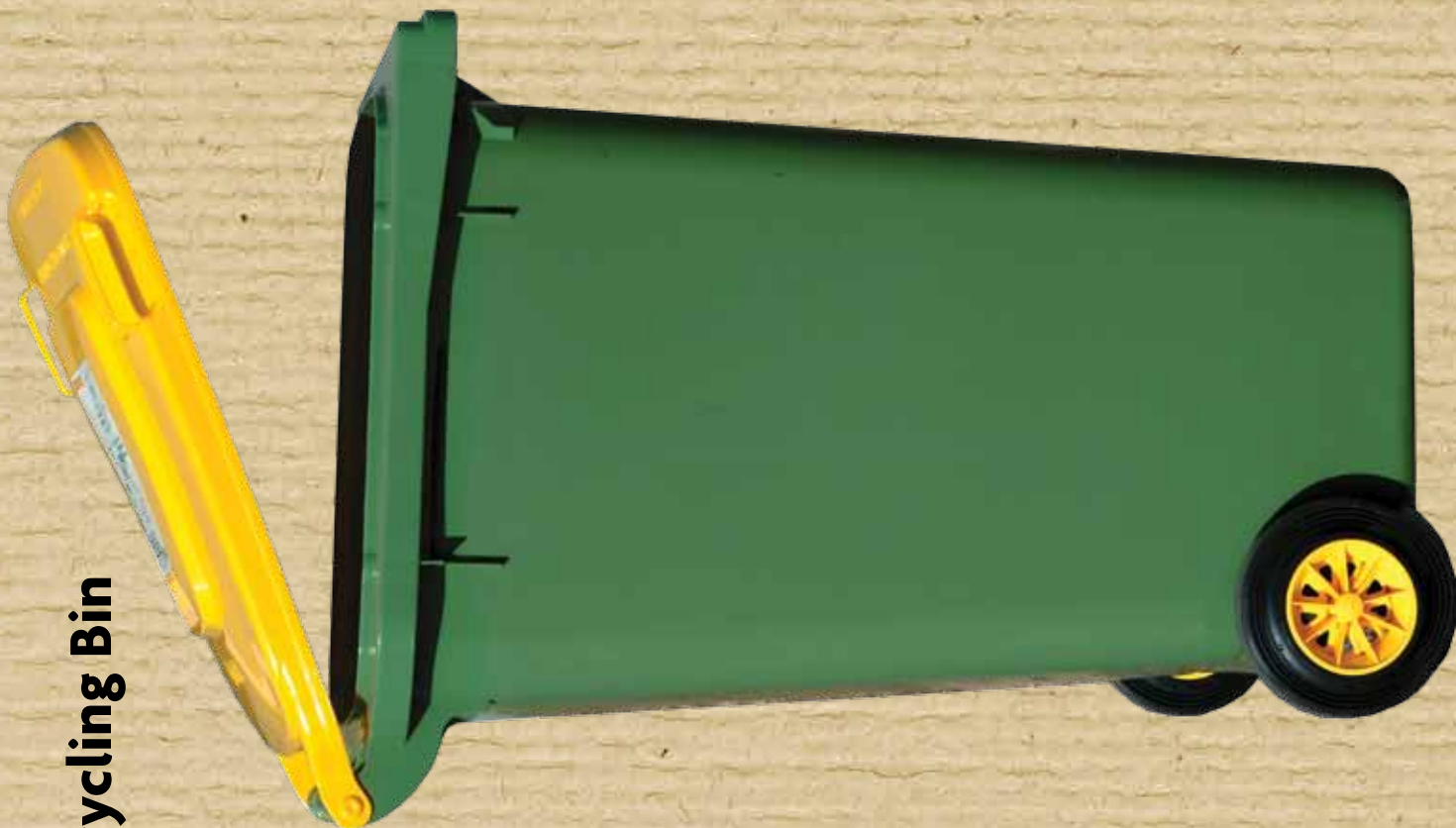
Learning Outcomes:

- Children learn to recognise certain waste items as recyclable or non-recyclable and an understanding of what will happen to waste materials after they are disposed of.
- Children learn about making choices that impact the environment and gain an understanding of the effects their decisions can have.
- Children practice literacy skills by using the alphabet.

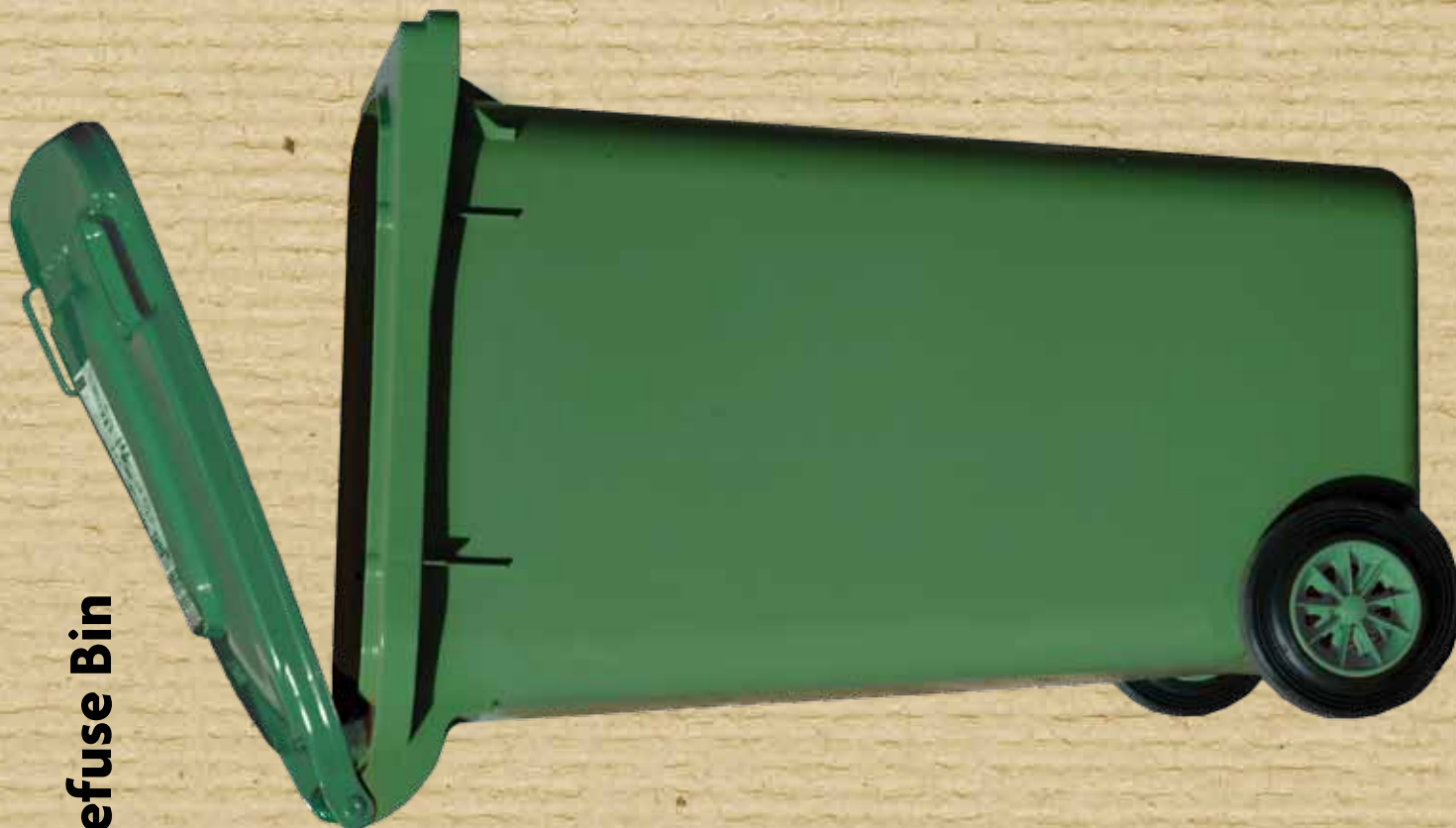




Recycling Bin



Refuse Bin



RUBBISH RHYMES TO SING TOGETHER

Description:

Playful rhymes about recycling and worm farming. Each rhyme has associated hand movements for children to learn. These rhymes can be used in association with any discussion or activity associated with rubbish, recycling or worm farming.

Type:

Group Activity

After discussions about rubbish, recycling or worm farming, teachers can sing the rhymes to the children using recognisable nursery rhyme tunes and the suggested actions. Encourage children to join in singing using actions. Children can also be encouraged to create their own actions. The rhymes are also provided on separate sheets with larger print to photocopy and display to children.

Rubbish, Rubbish Everywhere

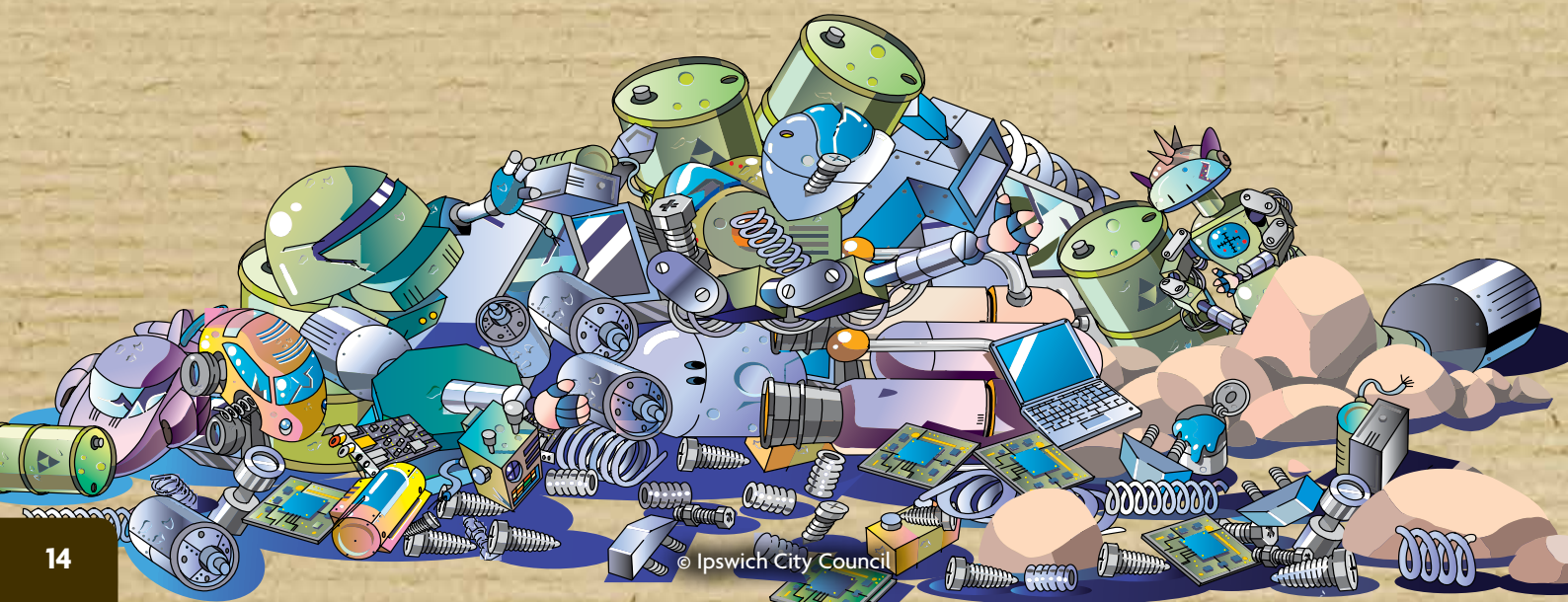
The tune to Humpty Dumpty could be used with this rhyme.

Words	Suggested Action
Rubbish, rubbish, everywhere,	Gesture to the ground
Nobody really seems to care,	Shaking head from side to side
Paper, plastic, glass and tin,	Counting items with fingers
Put it in the Recycling Bin.	Pretend to put an item in a bin

Little Wiggly Worm Song

The tune, 'I'm a Little Teapot' could be used with this rhyme.

Words	Suggested Action
I'm a little wiggly worm, watch me go!	Children to wiggle around like worms on the ground
I can wiggle fast, or very very slow,	
I wiggle all around, then back I go.	
Down into the ground, to the home I know.	



Ewy Worms

The tune to the children's rhyme, '...Think I'll go eat worms' could be used with this rhyme.

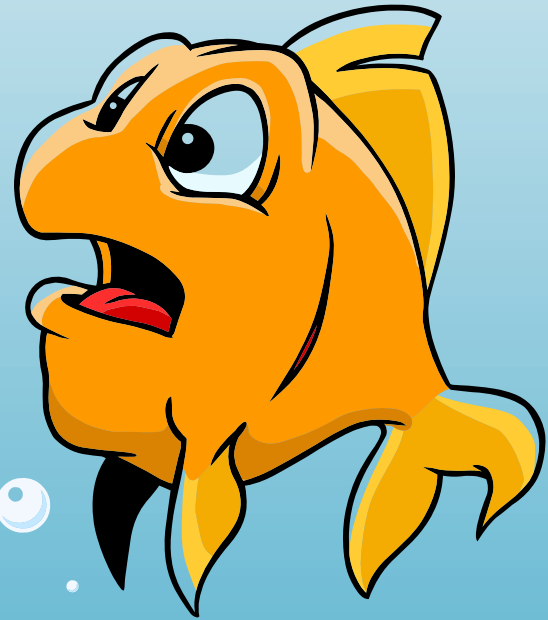
Words	Suggested Action
Blind as a bat,	Cover eyes
Slimy and slippery,	Wriggling worm hand movements
Got no arms or legs,	Touch arms then Touch legs
They squiggle and squirm,	Wriggling hand movement with left hand
Wriggle and wiggle,	Wriggling hand movement with right hand
Ewy ewy ewy ewy Worms.	Shaking head and body

Feed them apples,	
Carrots and peas,	Count each item with fingers
Paper and teabags too,	
Nobody know how much I love them,	Cross arms over chest, hugging
I'll feed worms today.	Pretend to put food in a worm farm



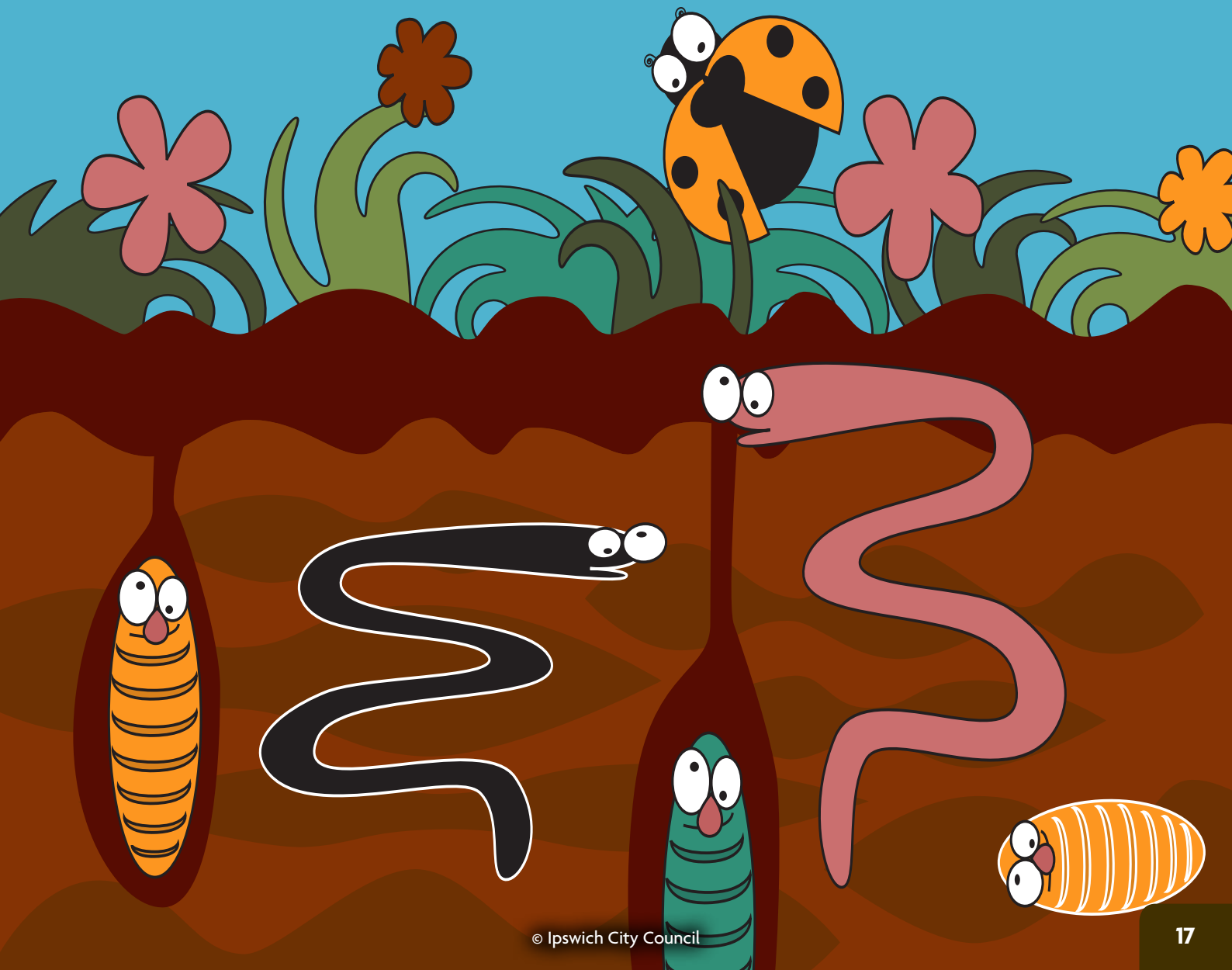
Rubbish, rubbish, everywhere

Rubbish, rubbish, everywhere,
Nobody really seems to care,
Paper, plastic, glass and tin,
Put it in the Recycling Bin.



Little Wiggly Worm Song

I'm a little wiggle worm, watch me go!
I can wiggle fast, or very very slow.
I wiggle all around, then back I go,
Down into the ground, to the home I know.





Ewy Worms

Blind as a bat,
Slimy and slippery,
Got no arms or legs,
They squiggle and squirm,
Wriggle and wiggle,
Ewy ewy ewy ewy Worms.

Feed them apples,
Carrots and peas,
Paper and teabags too,
Nobody knows how
much I love them,
I'll feed worms today.

MAKE PERCY THE PLASTIC BAG MAN

Description:

Children make a toy puppet out of plastic bags. Children learn that they can reuse waste items to make new things.

Type:

Group Activity

You Will Need:

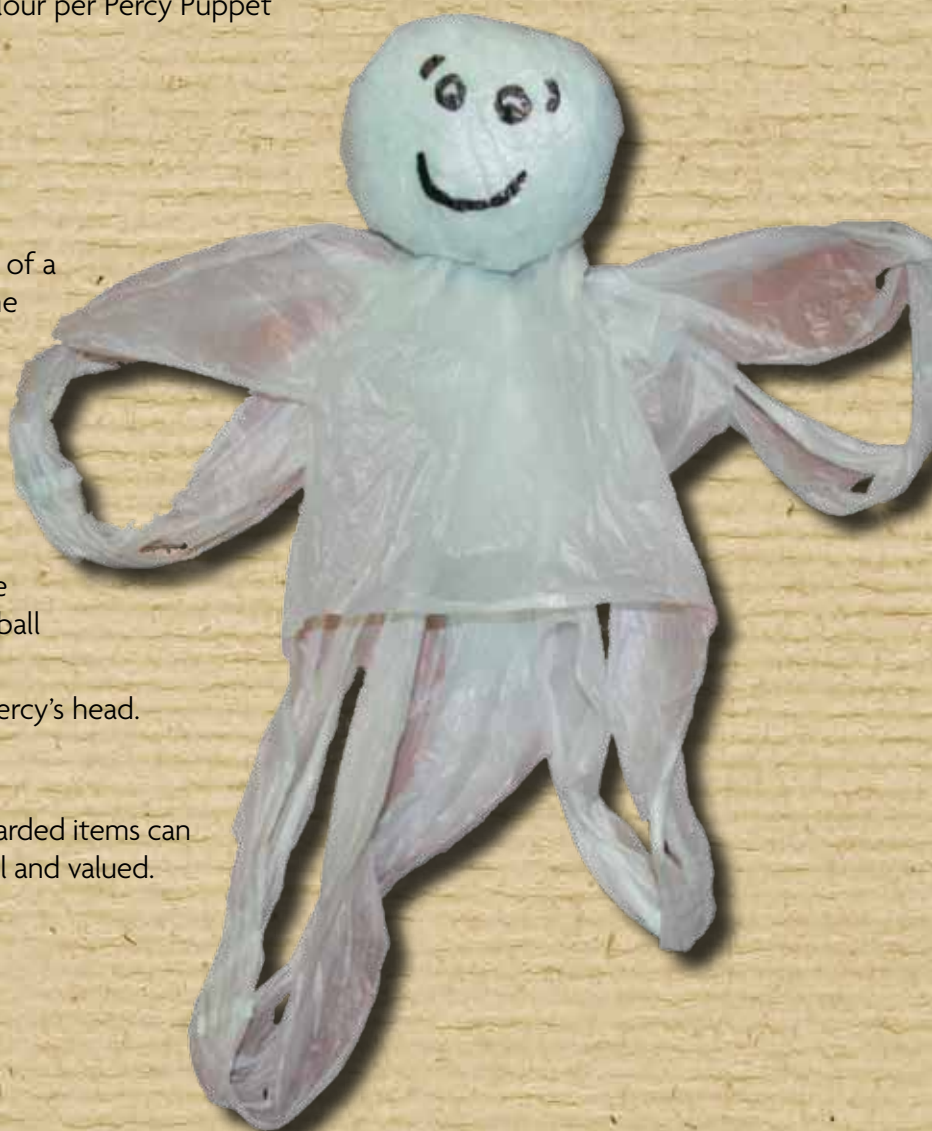
- Three plastic bags of the same colour per Percy Puppet
- Clear adhesive tape
- Scissors
- Marking pen

Making Percy

- Roll one plastic bag up to the size of a fist. Use adhesive tape to keep the plastic bag in a ball.
- Stick the centre of the base of the second plastic bag to hang freely. These will become Percy's legs.
- Use scissors to cut the handles off the third plastic bag. Stick one end of the handle just below the ball and repeat for the other side.
- Draw a face on the ball to make Percy's head.

Learning Outcomes:

- Shows children how everyday discarded items can be turned into something beautiful and valued.



TURNING TRASH INTO TREASURE

Description:

Children create a collage out of clean rubbish and recyclable items. This activity encourages children to think about creative ways they can reuse waste items that would otherwise have been thrown in the bin.

Type:

Individual Activity

You Will Need:

- One photocopied collage template per child. A variety of collage templates are provided.
- Glue sticks, sticky tape and scissors for the group.
- A variety of clean rubbish for the children to decorate their collages with eg. wrappers, styrofoam, old clothing/material, any other clean rubbish item.
- A variety of clean recyclable items for children to decorate their collages with eg. cardboard, used paper from magazines, junk mail, wrapping paper or newspapers.
- Paint, colouring pens and pencils for the group.

Setup

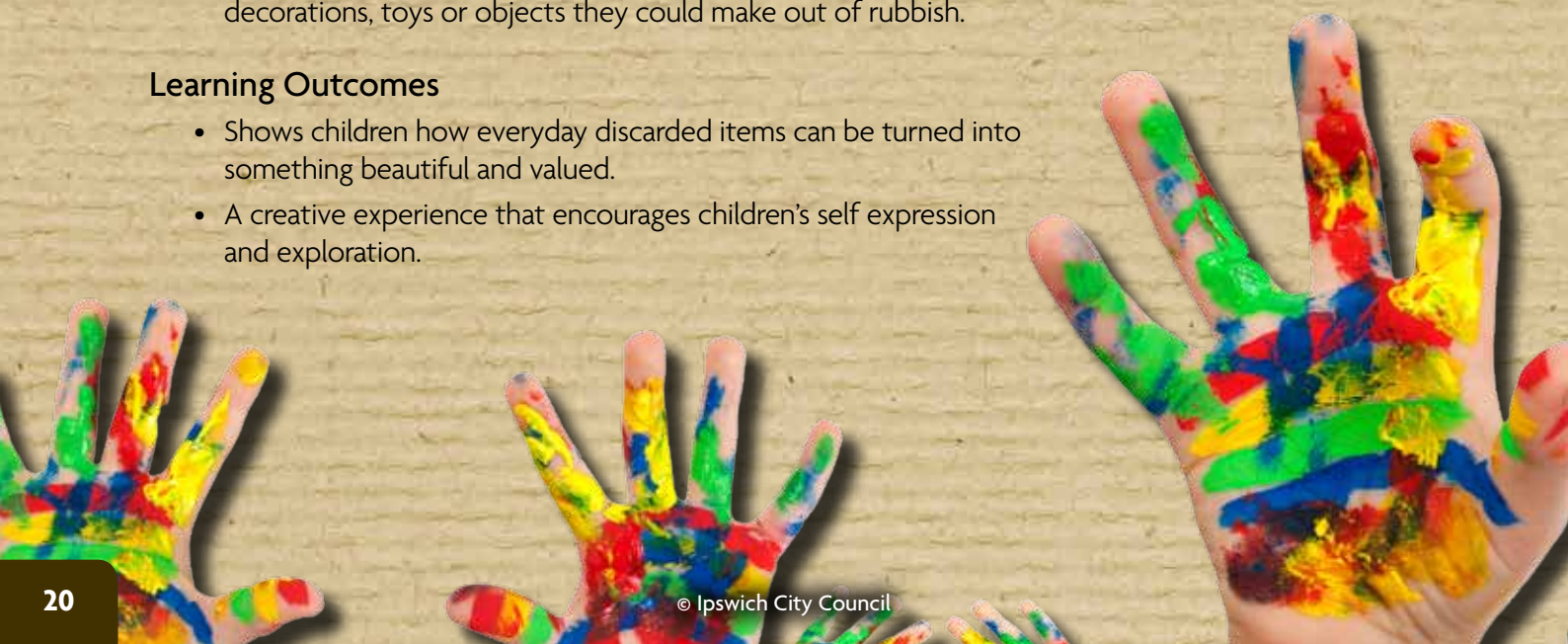
- You may wish to cut rubbish and recyclable items down to sizes that can be used in the children's collages.
- You may wish to cut around the edge of each template.
- You may wish to complete an example collage to show children what they can make.
- Place rubbish, recyclables and equipment on tables for the children to use in their collages.
- Rubbish and recyclables can be placed out in separate piles based on colours to help children choose decorations.

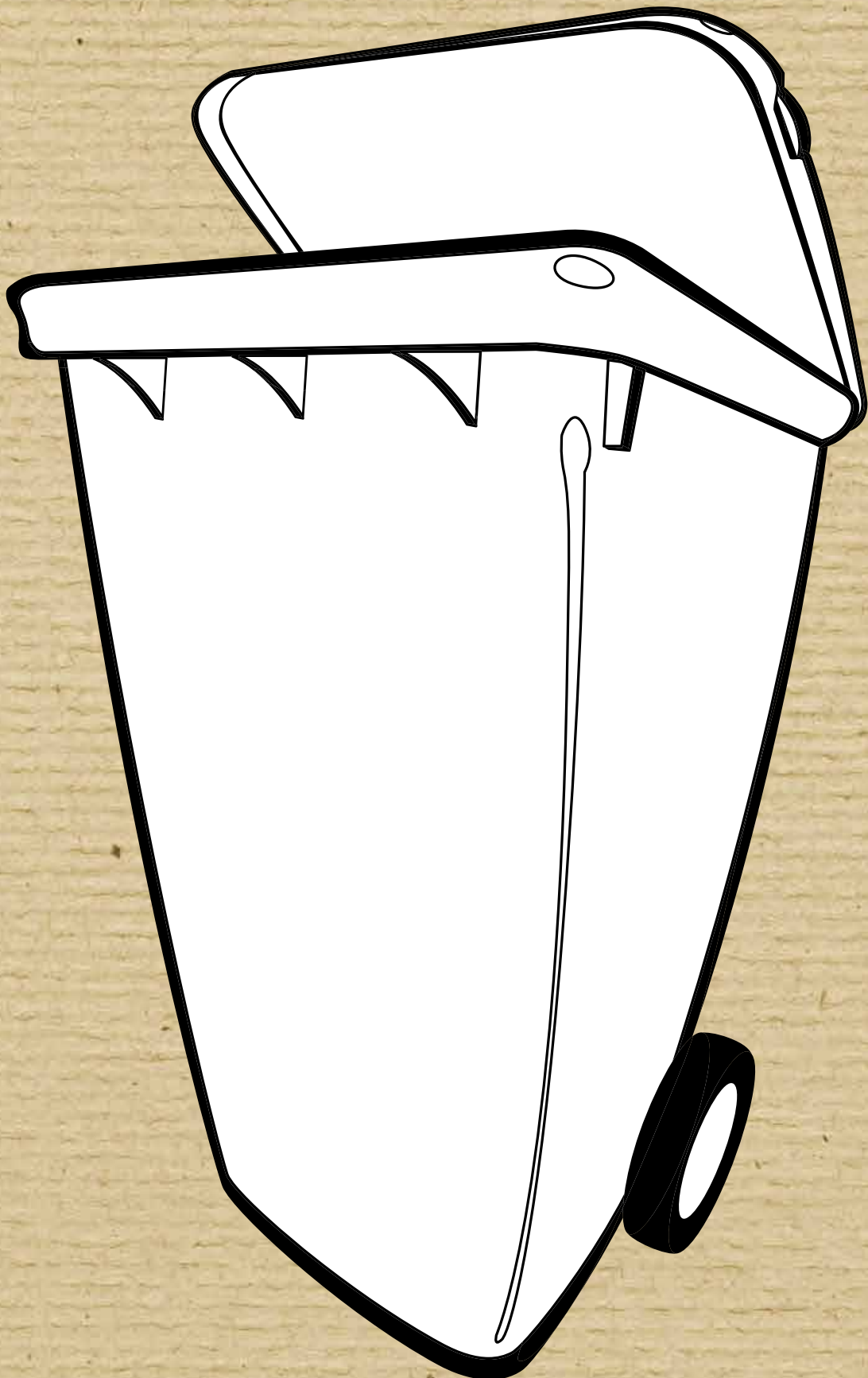
Making Collages

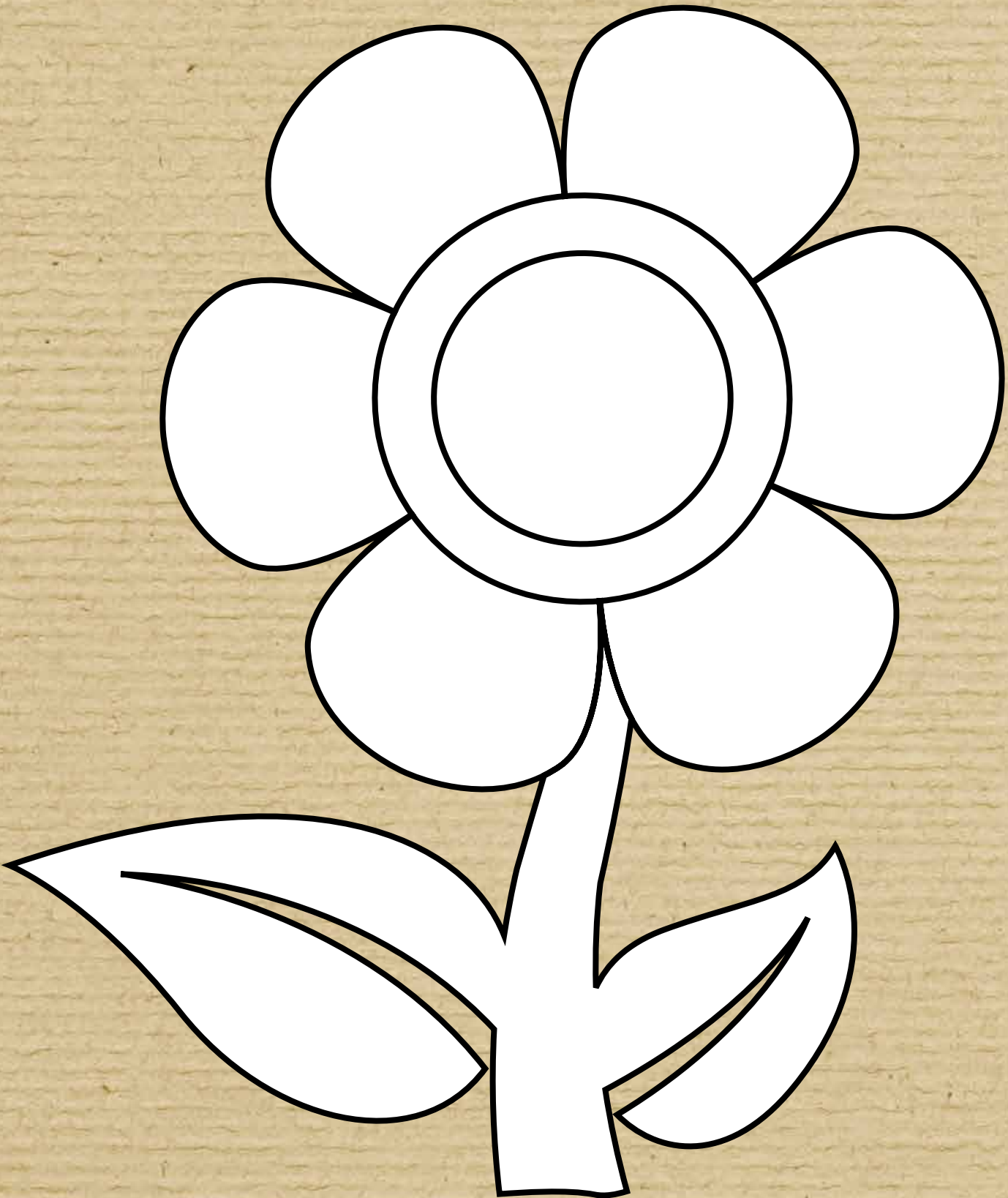
- Ask children to choose a template and to use glue or tape to stick different rubbish and recyclable items to the template to decorate it.
- Children can then add further decoration with paint, colouring pens and pencils.
- Once complete, children can show their creations to the group. Reflect on the wonderful things that can be made with the things we usually throw away. Ask children to think of other decorations, toys or objects they could make out of rubbish.

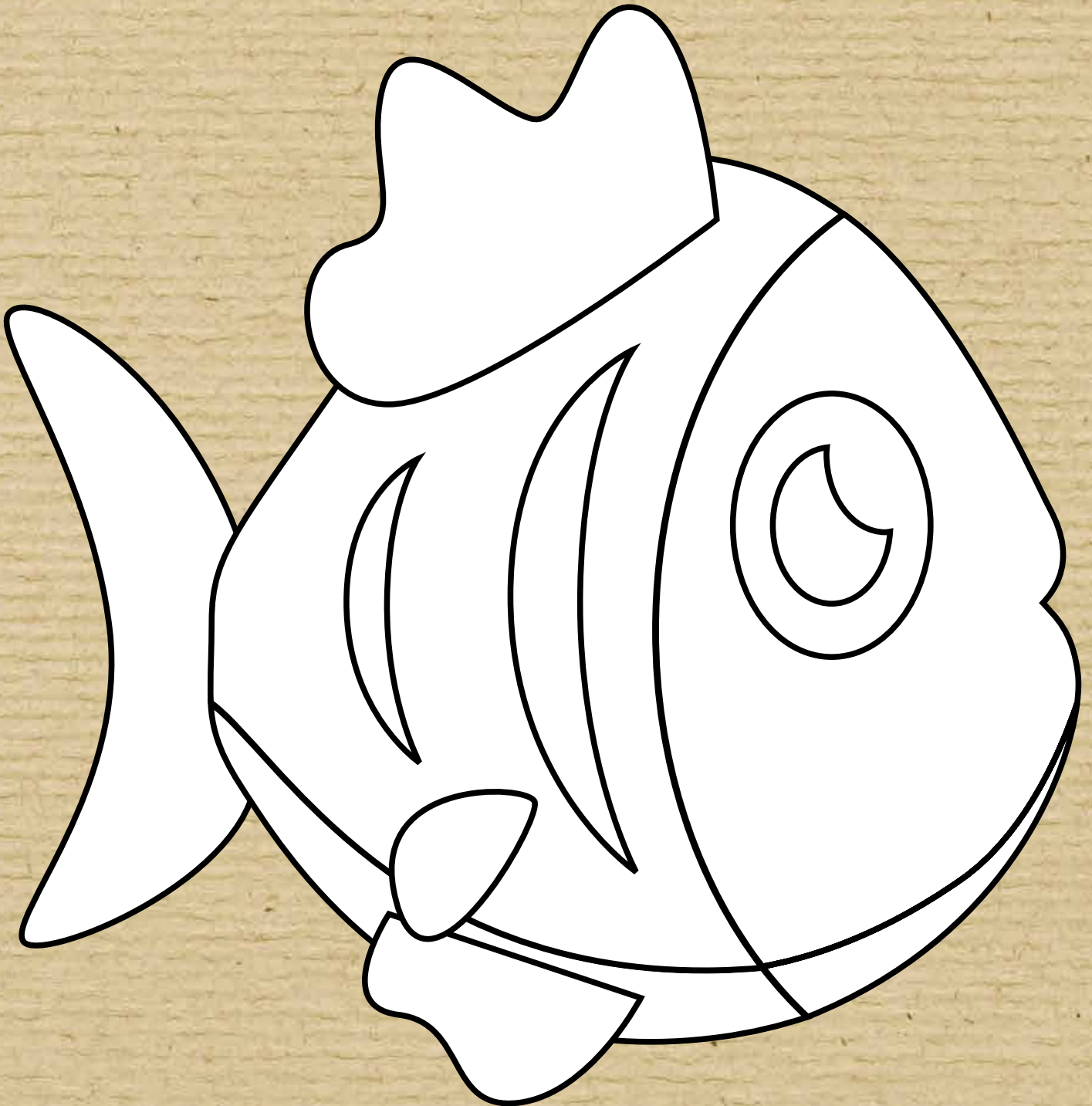
Learning Outcomes

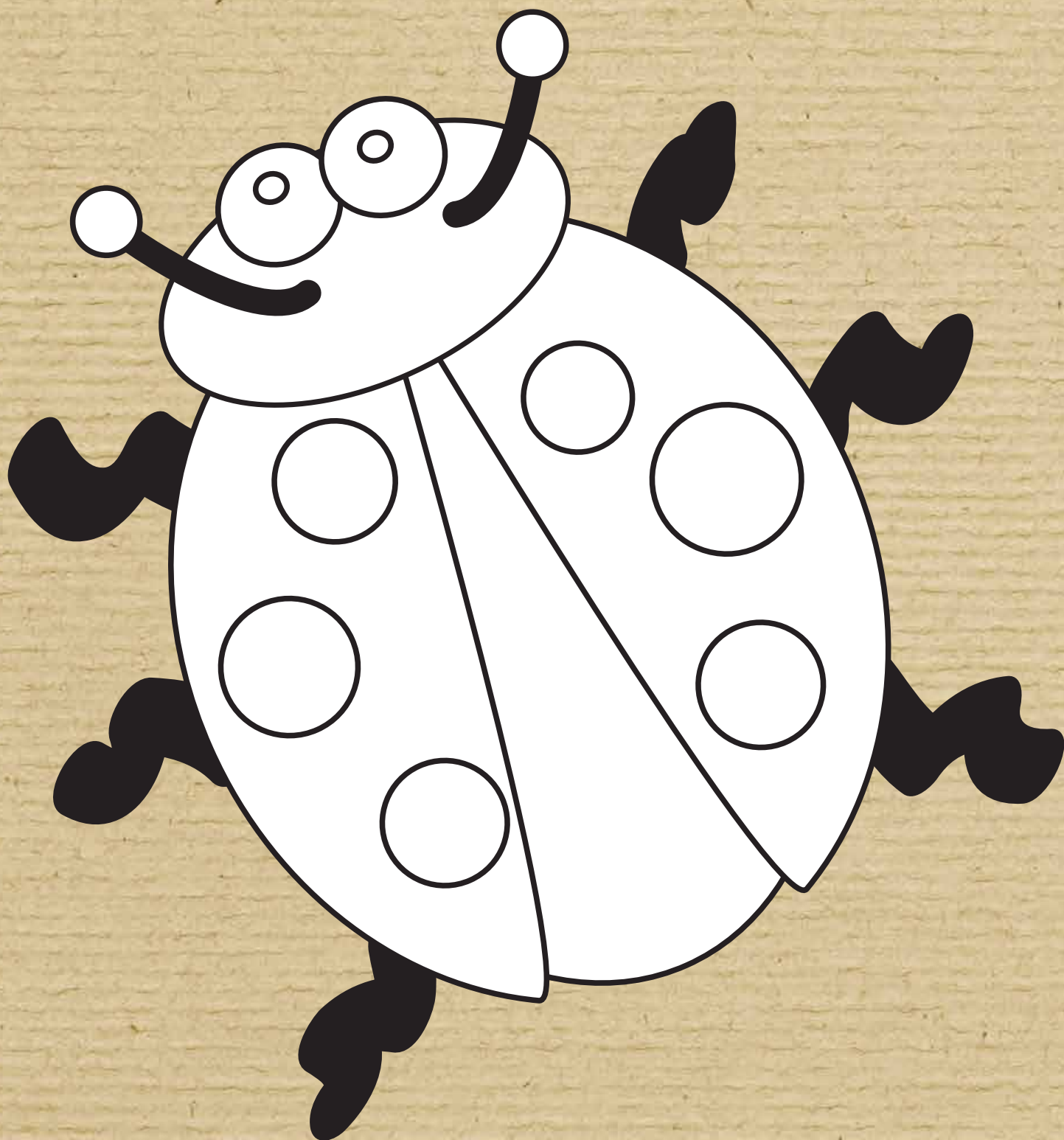
- Shows children how everyday discarded items can be turned into something beautiful and valued.
- A creative experience that encourages children's self expression and exploration.

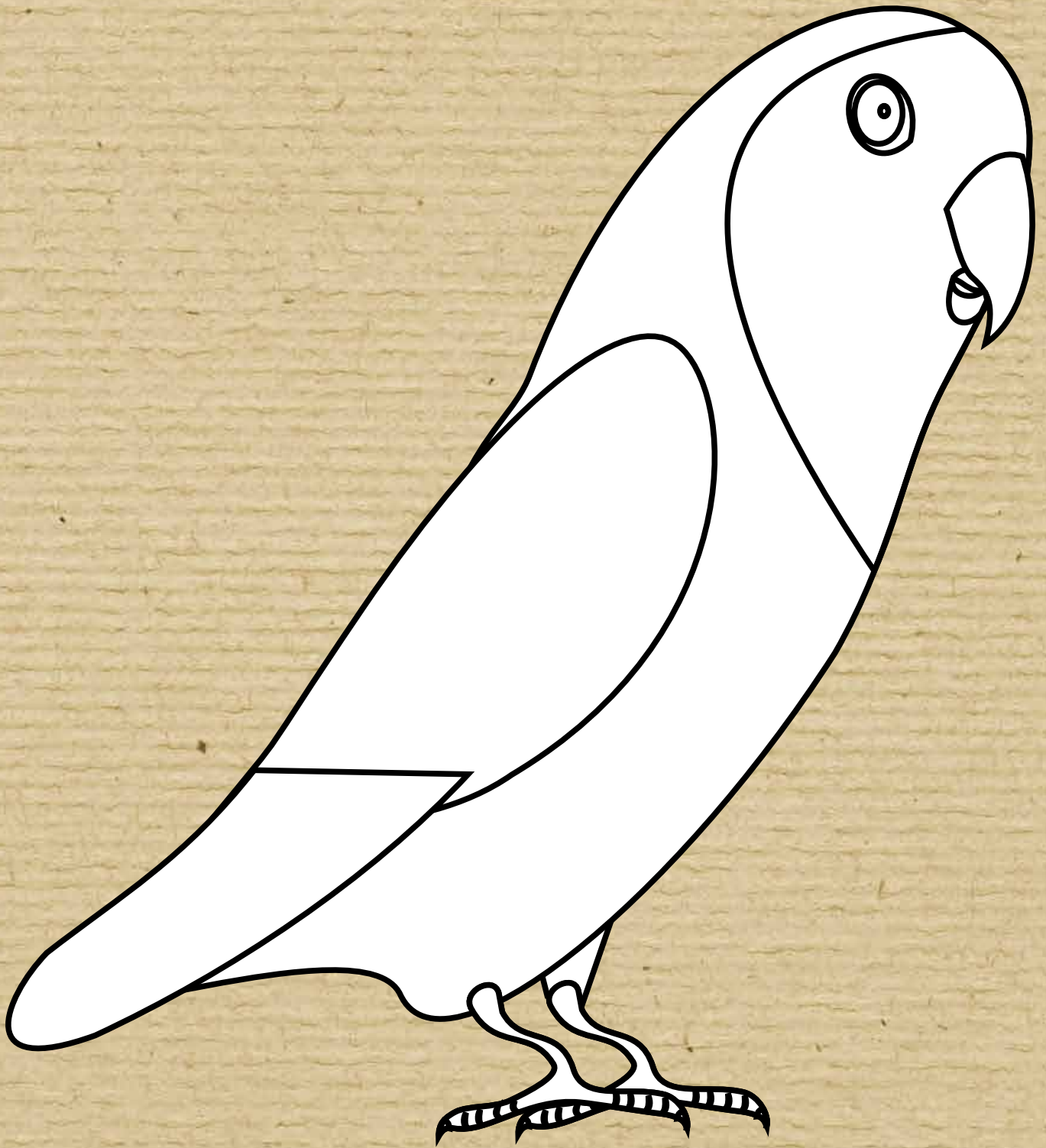












MAKE A WORM



Description:

As a group, children create a worm out of cut-out worm segments to display in a classroom or play area.

Type:

Individual and Group Activity (8 children)

You Will Need:

- Photocopies of the worm segments and food items provided (you may wish to enlarge to A3)
- Scissors
- Glue
- Sticky tape, blu tac
- Colouring pencils for the group

Setup

- Cut out the worm parts, worm segments and the food items.

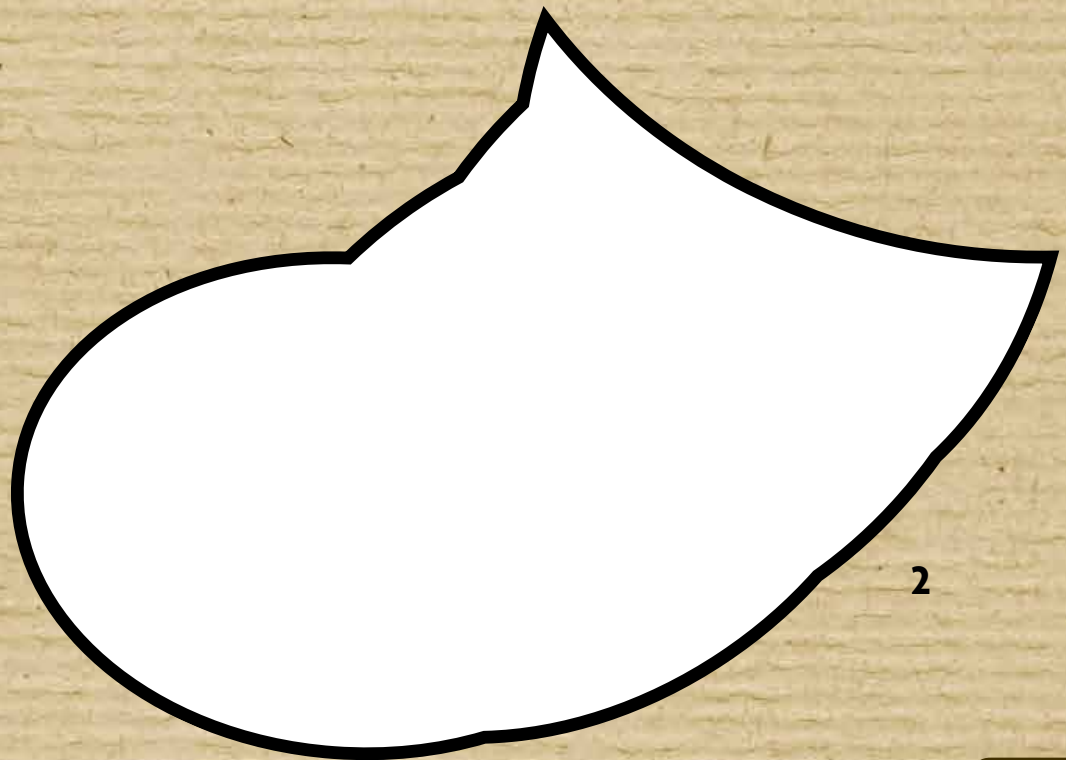
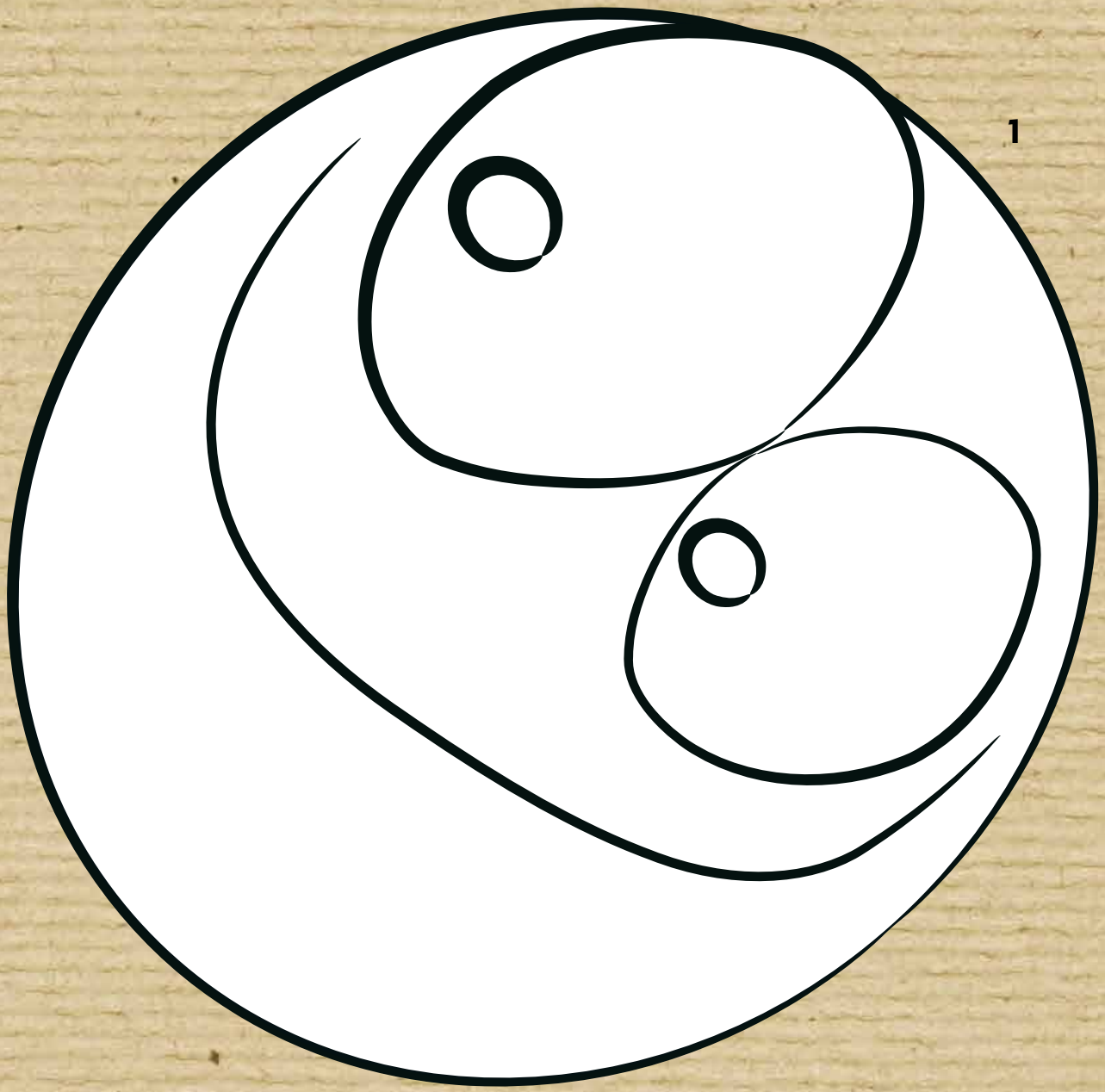
Making the Worm

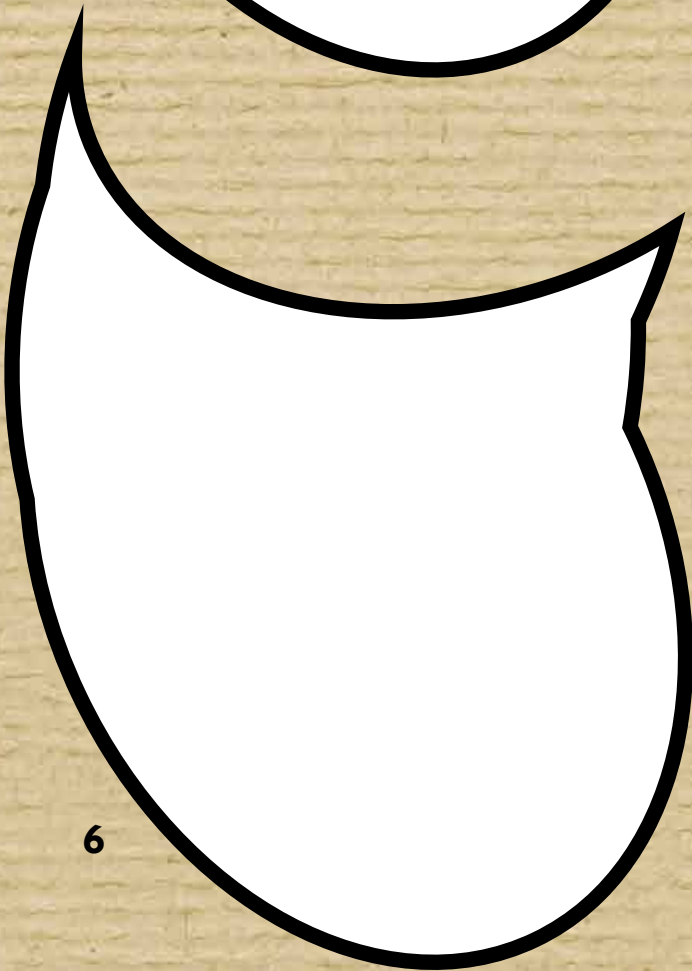
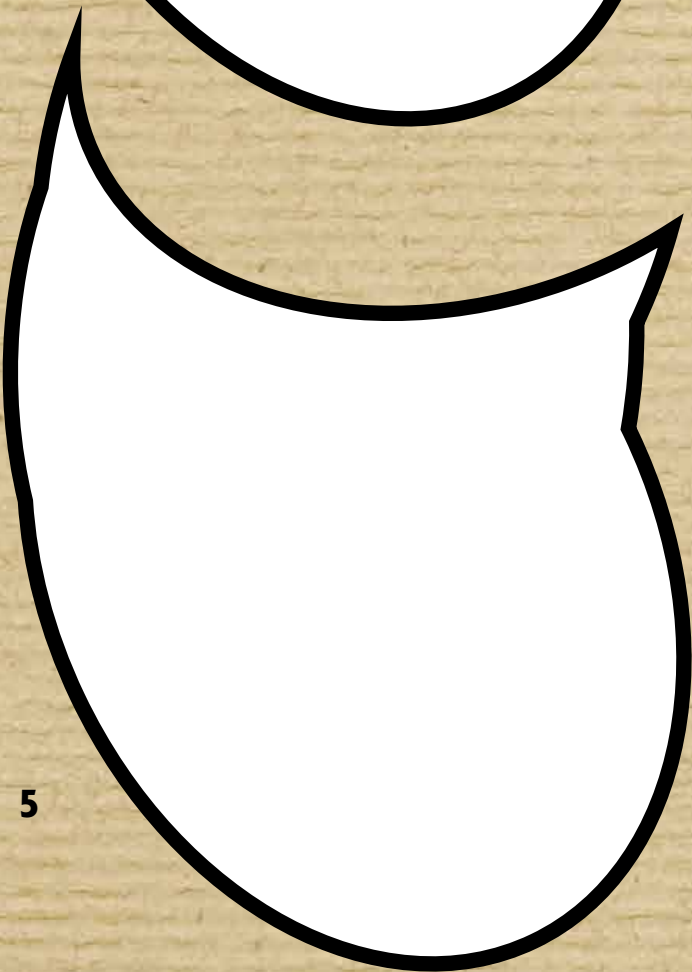
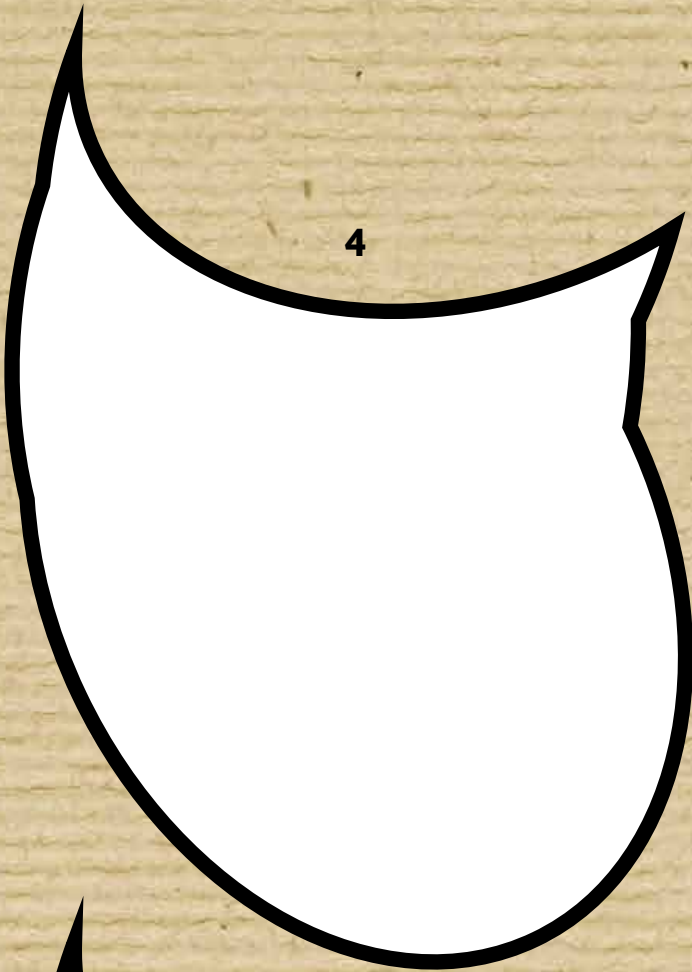
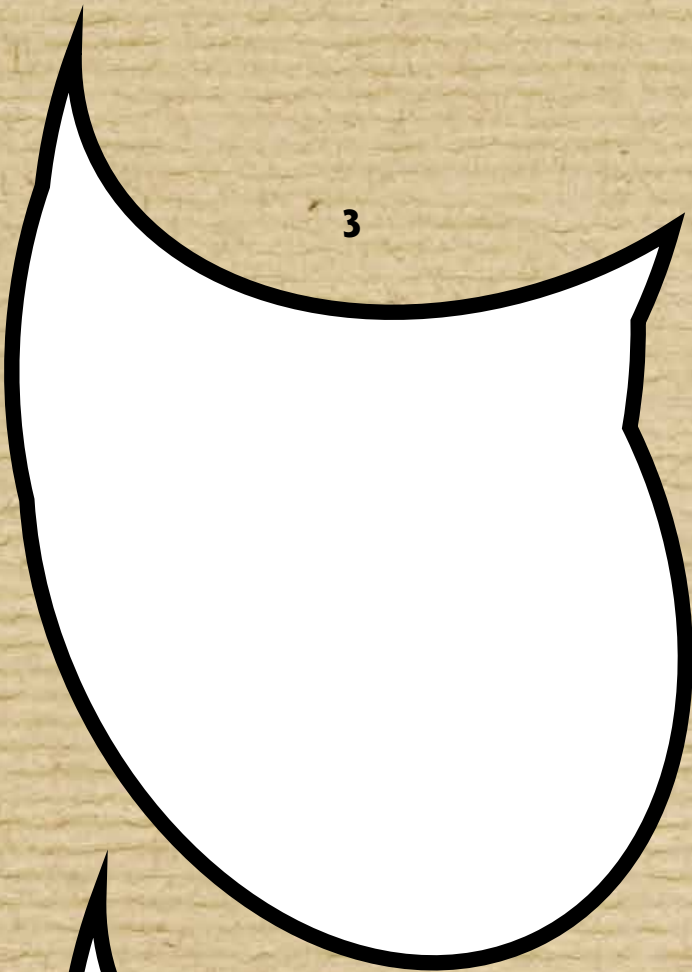
- Ask children to take one worm segment and find a piece of food that worms like to eat to glue on the segment.
- Ask children to show the teacher the food item they choose before they start gluing. Not all the food items provided can be fed to worms. Worm food can be identified by a worm underneath the image. Please refer to page 30 for food items. Waste items that cannot be placed into a worm farm are images without a worm underneath.
- Once the food item is glued on the worm segment, children can colour in the item and trace the letters of the food name.
- Starting with the worm's head, help each child attach their worm segment with sticky tape. Once all segments have been attached, stick on the end of the worm to form the shape of a complete worm. You may wish to stick the completed worm onto cardboard to keep it firmly in one piece.
- Show the completed worm to the children focusing on all the different types of food in the worm's 'tummy'. If the school has a working worm farm, this craft work could be used when children are deciding what types of food to give their worms.

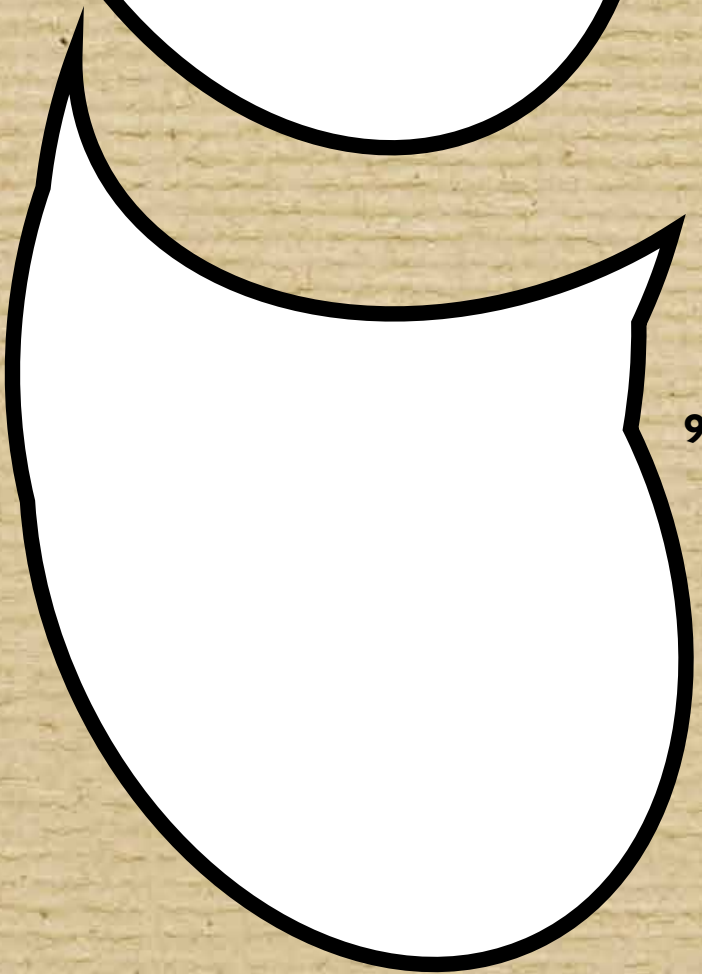
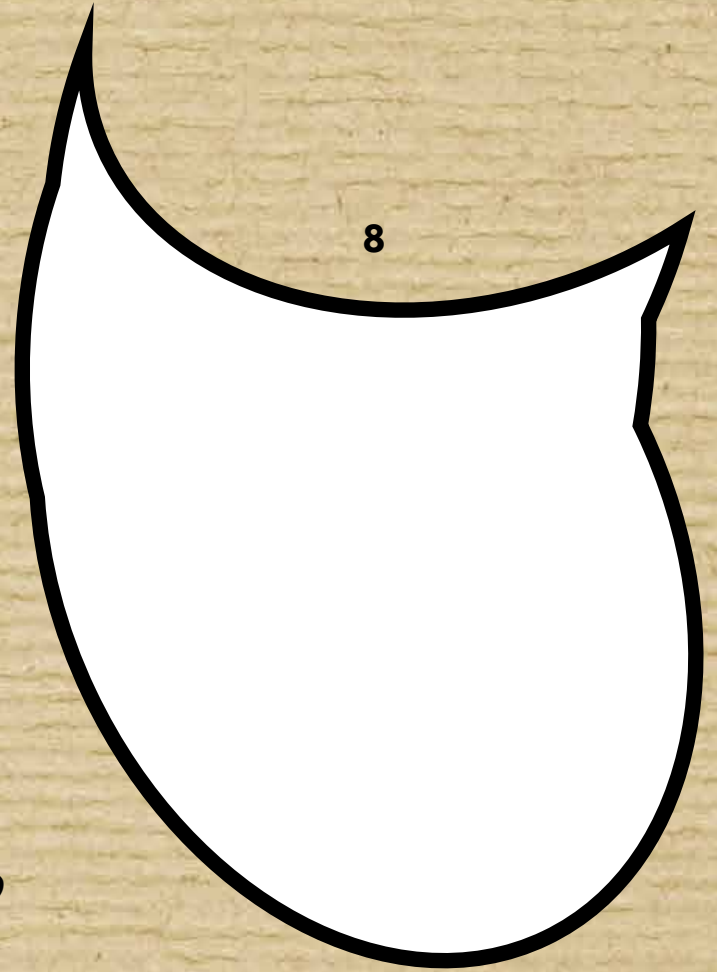
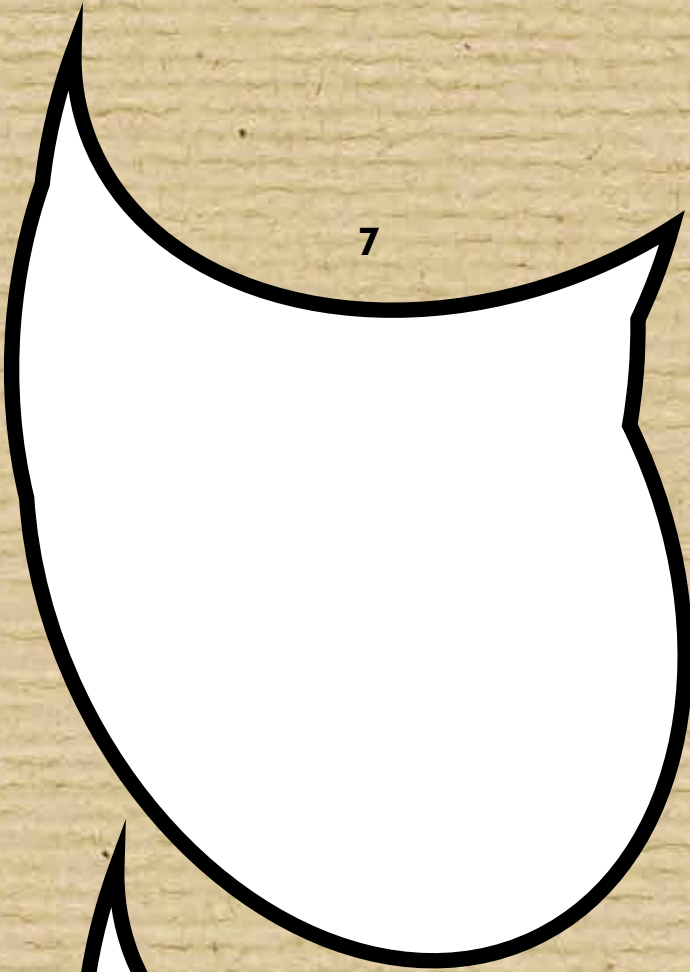
Learning Outcomes

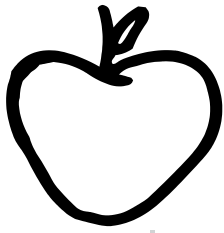
- Children learn to differentiate the types of food that can and cannot be fed to worms.
- Opportunity to use early writing skills.
- A creative experience that encourages children's self expression and exploration.



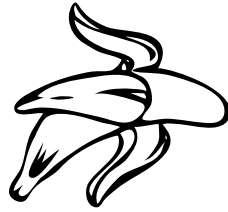




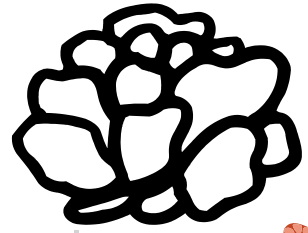




apple



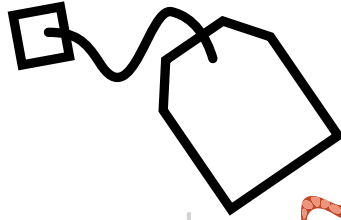
banana



lettuce



water melon



tea bag



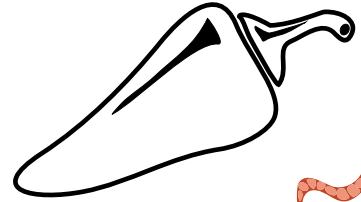
ripped up paper



hair



carrot



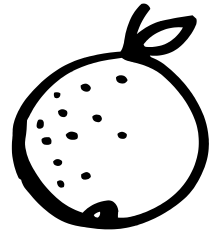
capsicum



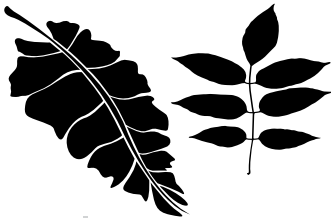
plastic bag



tin can



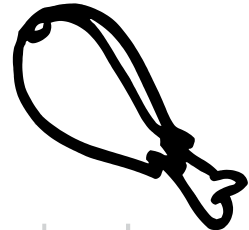
orange



leaves



cheese



chicken

EnviroEd

FREE environmental education

Council also offers programs through EnviroEd, an initiative from the Ipswich Enviroplan consisting of FREE environmental education for schools, community groups and Ipswich families.

- School education programs – lessons developed for inside and outside the classroom
- Holiday programs – Kids Go Wild holiday workshops in Queens Park
- Education in Queens Park – Environmental Education Centre and Ipswich Nature Centre open to the public

**For more information contact
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