

TRASH TO TREASURE

LEARNING OUTCOMES

Having completed this badge members will:

- be able to explain various materials that can be recycled;
- have knowledge of local recycling programs;
- demonstrate recycling skills;
- demonstrate the importance of recycling to the environment.



BADGE REQUIREMENTS

1. Explore various materials that can be recycled and the importance of recycling to the environment.
2. Research local government, school and/or community recycling programs.
3. Participate in a recycling activity for at least four weeks.
4. Make two articles from second-hand materials.

ADVENTURERS
SUNBEAMS

trash to
treasure



CATEGORY

The World
and Me

TIME FRAME

Four - five
weeks

AIM

To encourage
and promote
the benefits
of recycling.





Teaching ideas



1. Explore various materials that can be recycled and the importance of recycling on the environment.

Ask members to choose some 'recyclable' items to investigate, e.g. paper, aluminium cans, glass, plastics. What processes are used to recycle the item; what new product is the item made into; or is the item re-useable.

It may be possible to take members to the local recycling plant. An *Activity Approval Form* needs to be completed and sent to DHQ one month before the activity. Members may be able to make a list of questions that they can ask and have answered at the recycling depot.

Helping the environment

Resist waste Reduce Consumption

- The 'throw-away' society over the last few decades has had a very bad impact on the environment. Reverse this process by not throwing out so much in the garbage and taking a good look at what can be done with what we have.
- Buy products that will last longer or have more than a single use.
- Properly maintain the things you have properly, e.g. wash down the lawn mower, oil machinery, keep the house clean and free of dust, keep things neat and tidy, remove rubbish from the car.
- Repair things that are broken rather than throwing them away.
- Value what you have.
- Buy less – if you don't need it, don't buy it.
- Swap or pass things on, e.g. clothes can be handed down or given to others, someone else may need an item you no longer use.
- Have a 'garage sale'.
- Reuse an item or adapt it for another use, e.g. coffee jars make good storage containers and are great for gifts at Christmas when decorated.

Reduce at source

- Buy things with little packaging. Check the amount of packaging on a product when shopping, e.g. a packet of biscuits may have a tray, plastic covering and a box.
- Use products that offer a refill, soft-pack or concentrate, e.g. washing detergent, spray bottles, pump-packs, drink products, food products.
- Reuse plastic bags or provide your own robust shopping bag/ personal shopping trolley.
- Compost – all vegetable waste can be recycled through composting. Place scraps in a covered compost bin in the backyard or on a balcony. Compost can then be used on the garden or potted plants. Seeds that are prone to sprout and become a nuisance can be wrapped in newspaper and thrown out.

Ask members to make a poster or presentation using the words 'Reduce', 'Reuse' and 'Recycle'. Display the poster so that others may be made aware of the environmental issues associated with garbage disposal.

Teaching ideas




2. Research local government, school and/or community recycling programs.

Brainstorm with members what they do at home and at school and what they can do to improve their recycling habits.

Most local government areas have adopted recycling programs for specific items which are usually picked up weekly/fortnightly/monthly/annually from kerbside collections.

Items that may be collected for recycling are:

- Paper
- Cardboard
- Telephone books
- Glass
- Steel cans
- Aluminium cans
- Plastic marked with symbols  1-5. Use **Handout 1** for recycling plastic information. This could be laminated and displayed at home.

Remember that it only takes one plastic bag in a recycling bin to make that whole load non-recyclable. Plastic bags are not recyclable unless marked 'biodegradable'.

Wash all cartons, plastic bottles, glass bottles and cans. Squash plastic bottles, cartons and aluminium cans to reduce the size of the load.

All other things to be discarded from the home go into green waste, normal waste or large household items/waste collections. Many councils run clean up services where large items can be put out for collection. Items suitable for collection include beds and old furniture, washing machines and other white goods, dog kennels, swing sets, and so on.

Leaders may contact the local council and find out what can be collected, what cannot be collected, when these collections are held and other methods for disposal of certain items, e.g. car parts, and chemicals.

Green waste consists of branches and shrubbery. Councils may arrange a green waste collection for items such as tree stumps, root balls and/or may have a seasonal kerbside chipping service.

Specialised recycling

Some companies and community service groups have initiated programs to recycle goods to make life better for those less fortunate. Products may include:

- Computers, printers, ink cartridges
- Mobile phones
- Eyeglasses
- Corks

Ask members if they know of any groups in the local area which collect items that can be recycled or re-used. Ask members to research some of these programs. Find out what specific need these programs fulfil, e.g. Lions Clubs are collecting discarded eyeglasses to be recycled to help people in developing nations have eye-care that they could never afford; in Western Australia mobile phones are recycled in aid of cerebral palsy; *Guides Australia* have a cork recycling project.



TEACHING
IDEAS



Teaching ideas



3. Participate in a recycling activity for at least four weeks.

Members are to participate in a recycling activity over a minimum period of four weeks. This can be one activity over all the weeks or a different activity each week. Use **Handout 2** for members to record their weekly activity. Use the suggested ideas or any other ideas members may have.

Suggested ideas:

- sort the waste items in the home into three categories – garbage, recycling (according to local requirements), compost and make sure that each category is disposed of properly;
- do a garbage audit at home or at the Corps checking what is recycled and what is thrown away;
- at a Corps dinner/luncheon food scraps may be collected for someone who keeps chooks – check what is suitable first as chooks don't eat everything and some things can be harmful to them;
- collect items in the home that can be reused, e.g. milk cartons, kitchen rolls, egg cartons that can be used for craft, scrap paper that can be reused at school, jars that can be refilled for a fete or street stall;
- collect and clean jars with lids. Lid covers can be made with circles of material scraps, elastic bands and ribbons;
- sort through household goods, clothing and linen cupboards for unused items that can be useful to someone else. Give them away, have a blanket collection or a clothes swap night, take to an op-shop or get ready for a 'garage sale'/'Spring Fair';
- make a list of things in the household cupboards that were over-packaged, things that were in refills, things that have sat unused for a long time. Members talk about the list with parents/carers and work through a more 'user-friendly' shopping plan;
- make a list of items around the home that need regular maintenance to keep them in good working order, items that are broken and need repair, items that could be removed to make less clutter. Members discuss with parents/carers how they can help in a maintenance program in the home. Record the outcome of the discussion next to each listed item, e.g. lawn mower needs to be cleaned after mowing – John will hose off excess grass and put mower away in the shed; garden tools left out rusting in the rain – Jane will put the garden tools in the wheelbarrow for safe keeping when they have been washed and dried; garage is very untidy – Bonny and Fredrick will help Dad clean out the garage next Saturday.

NB: Cardboard toilet paper holders are not to be collected for craft due to the nature of their normal use and the possibility of cross-contamination of body wastes.

Teaching ideas



4. Make two articles from second-hand materials.

A recyclable or reusable item is not something that is bought from the local craft shop, e.g. if the article is to be made using paddle-pop sticks, collect them, don't buy them. For paper plates, or party cups use the excess from an open packet. All items that have had food on them are to be washed well. No trace of food can be left to form any cross-contamination.

Source of materials

- A 'reverse garbage' depot is a place where companies deposit excess, old or unusable stock or off-cuts. Items can be purchased cheaply by the bagful regardless of the contents, e.g. one large garbage bag could contain bottle caps, mascara brushes, wet suit material, parachute cloth, corks, tinsel, shop display paraphernalia.
- Collect items from members over a few weeks to build a supply of reusable materials such as egg cartons, kitchen rolls, margarine/ice cream containers, milk/juice cartons, plastic bottles.

Ask members to make at least two useful articles from second-hand materials. Members may use their own ideas or some of the suggestions from **Leader's Resource 1**.



TEACHING
IDEAS

Leader's Resource 1

Easy bird feeder

What you need:

- Small paper plates
- Paint
- PVA glue
- Hole punch
- Wild birds
- Paper towel rolls
- Wool or heavy duty string
- Scissors
- Paint brushes

What you do:

1. Cut paper towel rolls in half.
2. Decorate a paper roll and a small paper plate.
3. Having a theme for the decorating, e.g. use autumn colours, or bright colours for spring.
4. Allow the rolls and the paper plates to dry slightly, then using the hole puncher, place three holes at one end of the roll, equally spaced as these will be used to hang the feeder. Place them at equal height and at points that will help distribute the weight evenly.
5. On the opposite end of the roll cut two small half circles on opposite sides of the roll (these will allow the bird seed to fall from the roll onto the plate).
6. Glue the roll to the centre of the plate with the small half circle openings on the bottom.
7. Allow glue to set. Loop the string through the three holes on the top of the roll, fill with bird seed and place in a tree for the birds to enjoy.

Birdhouse – a one-season birdhouse made from recycled household materials

What you need:

- Milk carton
- Masking tape
- Brown shoe polish
- String
- Stapler and staples
- A soft cloth, rag or chamois
- Scissors or a knife
- Wild bird seed

What you do:

1. Clean and dry the milk carton thoroughly.
2. Staple the top of the carton shut.
3. Tear off small pieces of masking tape and cover the entire carton with the pieces of tape.
4. Using a soft cloth, rub brown shoe polish all over the tape. This will give the carton a rough, bark-like finish.
5. Cut a round hole (with adult assistance) about 10 centimetres above the bottom of the carton. The hole should be approximately two to four centimetres in diameter. This hole is for the birds to get in and out of the house.
6. Poke a few small drainage holes in the bottom of the carton and two ventilation holes in the top of the carton. Place a layer of seed in the base to attract birds.
7. Poke a hole through the top of the feeder, thread a piece of string through the hole and hang the feeder on a tree.

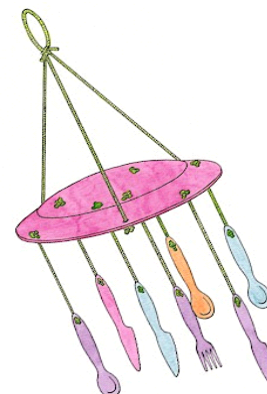


Leader's Resource 1 (contd)

Plastic cutlery wind chimes

What you need:

- some old plastic cutlery
- a paper plate
- a sharp pencil
- a pair of scissors
- some string or wool



What you do:

1. Cut the string into lengths from 10 to 15 centimetres.
2. Tie the string to the ends of the cutlery (you may need to pierce holes in the cutlery).
3. Poke some holes into the paper plate, thread the string through and tie a knot in each piece.
4. Finally, fasten three pieces of string to the top of the plate.
5. Optional: decorate the paper plate with crayons, paint, markers or paper.

Nylon snake

What you need:

- Colourful plastic cups (20 or so per member . If you have less, the snake will just be smaller)
- Pantihose leg (make sure no one needs it anymore)
- Newspaper
- Colourful plastic plates (2 for each member)
- Split pins
- Pen, or other sharp object for poking holes
- Scissors
- Fishing line for display (optional)

What you do:

1. Using the pen (or other sharp object – with an adults help) punch a hole in the base of each cup.
2. Thread the cups onto the pantihose leg through the holes you have punched. To space the cups, put a piece of balled up newspaper into each cup after it is threaded.
3. To make the snake's head, cut the rim off a plastic plate.
4. Punch two small holes for the eyes.
5. Punch a large hole at the edge of the plate between the eyes and thread the pantihose through this hole.
6. Thread the pantihose through the base of another cup which will be the mouth. Tie a knot in the end of the pantihose.
7. Cut the base off two plastic cups to make eyes. Attach the eyes to the paper plate head using split pins.
8. Cut a triangular piece for a tail, punch a hole in it and fasten it to the end of the snake's body.
9. Optional – Attach fishing line to the snake and hang it from the ceiling.

Leader's Resource 1 (contd.)

Bottle cap necklace

What you need:

- Two bottle caps per member (metal caps, off glass bottles)
- Piece of five centimetre ribbon per member
- Quantity of thin ribbon or wool (long enough to go around member's neck)
- Circle of card to insert into the bottle cap
- Small photo of member (to insert into bottle cap)
- Coloured ink pad
- White paint and a brush
- Scissors
- PVA glue
- Stapler and staples

What you do:

1. Paint the bottle caps white and allow them to dry.
2. Trim the photo and circle of card to correct size for inserting into bottle cap.
3. Glue each end of the five centimetre ribbon inside the bottle caps. Leave an allowance of ribbon so that the caps can be put on top of each other to form a 'locket'.
4. Glue the photo in the lower bottle cap. Write 'I love you' on the blank card circle. Glue inside the other bottle cap.
5. Press a finger into the ink pad and make two impressions in the shape of a heart on the outside of the bottle cap holding the 'I love you' message.
6. Make the 'locket' by placing the caps over the ribbon/wool necklace and stapling the central ribbon. Make sure the photo is inside.

Puzzle piece photo frame

What you need:

- A photo
- Piece of firm cardboard slightly bigger than photo
- Four paddle-pop sticks
- Old puzzle pieces
- Assortment of coloured paints
- Brushes
- PVA glue
- Oddments e.g. buttons, sequins
- String and tape

What you do:

1. Paint the puzzle pieces in lots of different colours and allow them to dry.
2. Place the photo onto the cardboard.
3. Glue the paddle-pop sticks to the cardboard around the outside of the photo.
4. Trim the card around the paddle-pop sticks.

Leader's Resource 1 (cont.)

5. Glue the puzzle pieces to the paddle-pop sticks mixing the colours and overlapping the pieces so that there are no obvious gaps.
6. Add a few buttons and other assorted trimmings onto the colourful puzzle pieces.
7. Attach a piece of string with tape to the back of the cardboard to hang the frame.

Other suggestions

Coasters: use assorted round lids, add greeting card pictures cut to size, use a sealant to make waterproof.

Milk carton pen holder: cut the top off a clean milk carton, cover the outside with pages from magazines.

Napkin rings: cut kitchen rolls into rings and cover with foil, colourful paper or 'Contact' adhesive, add decorations.

Cards and gift tags: made from old wrapping paper and art work. By combining a few oddments from scrapbooking you will have a variety of interesting pieces. Use old Christmas cards, cut around the main picture then add glitter very carefully around the edge or as an outline to specific features.

Coffee can drum: pierce the side of the can to add string to go around the neck, decorate with colourful shapes.

Clothes peg magnets/message holder: make basic alphabet shapes from scrap card, decorate with buttons or other oddments to make them colourful, glue alphabet shape to one side of a spring peg, attach magnet piece (from advertising fridge magnet) to the other side of the peg.

Artistic shoes: brighten up a pair of old canvas shoes by painting patterns or pictures on them, seal to make paint waterproof.

Storage Canisters: collect larger coffee jars and paint designs on the outside label them. Seal the design with a fixative to make them waterproof and durable.

Pot-Pourri: collect rose petals, lavender and other suitable flowers; dry and place in scraps of material that have been hemmed or pinking-sheared along the edge. Tie with a short ribbon. Collect oddments from people who sew.

New plants from old: if the Corps is having a stall or fete members can start potting up cuttings. Collect plastic pots and cuttings from keen gardeners and raise new plants ready for the fete or spring fair. Many plants will take root from cuttings. Members can have their own stall.

Recycled Paper: collect phone books to make paper. Some schools may have paper making frames. This activity could be worked into a camp or overnight stay to allow paper to dry.

Papier-mâché: old newspaper can be used to make papier-mâché articles using balloons and egg cartons. You can make money boxes, bowls and so on, saving money as well as resources.

Handout 1

Adventurers/Sunbeams

RECYCLING PLASTIC

Most plastic takes centuries to break down so encourage members to find ways to reduce their use of the material, reuse plastic or recycle it. Because it can be melted down and moulded again many kinds of plastic are recyclable, although some are easier to recycle than others. Polyethylene terephthalate or PET is the most commonly recycled, mostly because it is a very common form of plastic and easily identified. Different kinds of plastic have different melting points so recyclers need to be able to collect a pure batch or 'pure stream' of one kind of plastic to recycle it effectively.

Look for the symbol and number on the base of plastic containers and packaging.



1 PET or PETE

(Polyethylene terephthalate) Soft drink bottles, water bottles, some juice bottles, some plastic jars (usually has indented/bubble base)



2 HDPE

(High-density polyethylene) Milk and juice bottles, crinkly shopping bags, shampoo and cleaning product bottles



3 PVC

(Polyvinyl chloride) Food packaging, toys, plumbing pipes, shampoo and detergent bottles, cordial bottles



4 LDPE

(Low-density polyethylene) Food wrap, ice cream tub lids, black plastic sheeting, garbage bags, garbage bins, and recycling bins



5 PP

(Polypropylene) Potato crisp bags, hinged lunch boxes, ice cream tubs, drinking straws and microwave ware



6 PS and EPS

(Polystyrene and expanded polystyrene) Plastic cutlery, foam cups, foam packaging, yoghurt containers

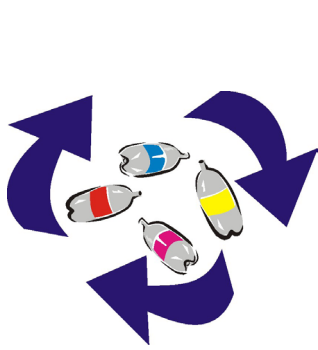


7 OTHER

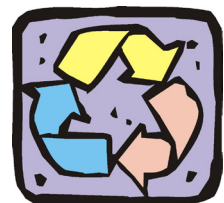
(All other plastics) Computer casings, hard hats, all other resins and multiple blend plastics

Handout 2

Adventurers/sunbeams



Week	Recycling Activity	Comment
1		
2		
3		
4		
5		





Devotional Ideas



1. **Title:** Play dough
Bible: Isaiah 64:8
Thought: God can change our lives
Supplies: Bible, some play dough or even potter's clay

Our society is sometimes called a plastic society. There are so many things made of plastic and people have even said that society is artificial. That's because plastic is a man-made substance not one that occurs naturally or just grows.

In Bible times there was no plastic. Juice was stored in big jugs made out of clay. Plates and cups were made out of clay. The clay was dug from the river bank, moulded, then dried or baked to make it hard. The clay then became a useful item.

This is also like our lives. Our lives can be moulded or changed. Read Isaiah 64:8. This means that God can shape our lives into something beautiful and useful.

Distribute the play-dough to members and allow them to mould it into shapes.

The play-dough can be moulded into any shape. It can be changed from one shape to another. We need to make sure that we allow God to take our lives like the clay or play dough and mould and shape it to make something beautiful and useful.

Devotional Ideas



2. Title:

Recycles lives

Bible:

Colossians 3:8b - 10

Thought:

Jesus can make something useful of our lives

Supplies:

Bible, fruit and vegetables ready to be peeled, vegetable scraps, leaves, weeds, grass clippings, bucket or container of water

Allow members to peel fruit and vegetables or show members the vegetation and fruit scraps. Ask if these things can ever be used again.

Demonstrate how to place all the waste products into a container and cover with water. Close the lid.

Ask members if they know what is going to happen. Explain that over time the things in the container die, break down and will make a very useful fertiliser for the garden called compost. (Show compost if you have some.)

This is what happens to all the wrong things in our lives when we give them to Jesus. He takes them away and the love He gives us in return helps us grow into beautiful, useful people. Read Bible passage.

Prayer: Dear Jesus, thank you for taking away all my wrong doings. Help me recycle my life into something good and useful.



DEVOTIONAL
IDEAS



Devotional Ideas



3. Title: Godly changes

Bible: Luke 2:52

Thought: Growing into what God wants you to be

Supplies: Bible, picture of caterpillar and butterfly

We have been looking at reusing things and changing some items into new things. In nature some things change so much that you would not know how they started at all.

Show members the picture of the caterpillar ask them what it is. It's a caterpillar – it's the first stage of life of the Monarch Butterfly. The caterpillar looks like a nasty worm, doesn't it? Not very pretty, not very special but it will change into a butterfly. First it spins a cocoon around itself. Then it rests in the cocoon while its body changes from that of a caterpillar to a butterfly.

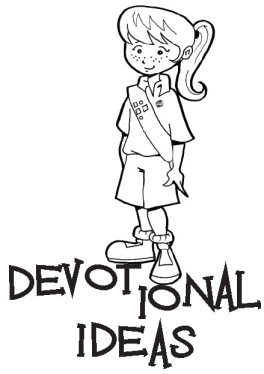
God knows that the caterpillar becomes a butterfly and even though the caterpillar looks totally unlike the beautiful Monarch Butterfly God knows its potential for beauty.

The same is true of us. Other people may look at us and see only a child. But God sees what you can become. The Bible tells us that Jesus pleased God as He grew up. Luke 2:52 tells us that Jesus increased in wisdom and stature (or size) and in favour with God and man. God knows that you will grow up and change just like Jesus did. He expects you to increase in wisdom by learning a lot at school and at church. God wants you to be healthy by eating healthy and exercising. He wants you to try to please your Heavenly Father as well as people on earth.

Someday you will change from a child into an adult just as the caterpillar changes into a butterfly. Let's ask God to help you make that change in a way that will be pleasing to him.

Prayer: As we grow, we ask that you would help us become children who please our Heavenly Father. Amen.





Devotional ideas



4. Title: Rubbish Collection

Bible: John 1:29

Thought: God can take away our sin

Supplies: Bible, garbage bag, paper with SIN written on it

What do you do with garbage at your house? Put it out for the garbage collection? What would happen if you didn't put it out? Your house would become smelly and dirty. We have 'rubbish' inside us that we call SIN and just like the garbage at home we have to put our rubbish out to be taken away.

Read the Bible verse.

Give members the pieces of paper with SIN written on them.

John's Gospel says that Jesus will collect our rubbish and take it away. He is our garbage collector. All we have to do to get rid of our rubbish is to put it out for collection. Let's take our 'rubbish' and put it in the bin for Jesus to take away.

Ask members to put their 'sin' in the bin. If appropriate you may ask them to write their 'sin' on the paper before putting in the bin.