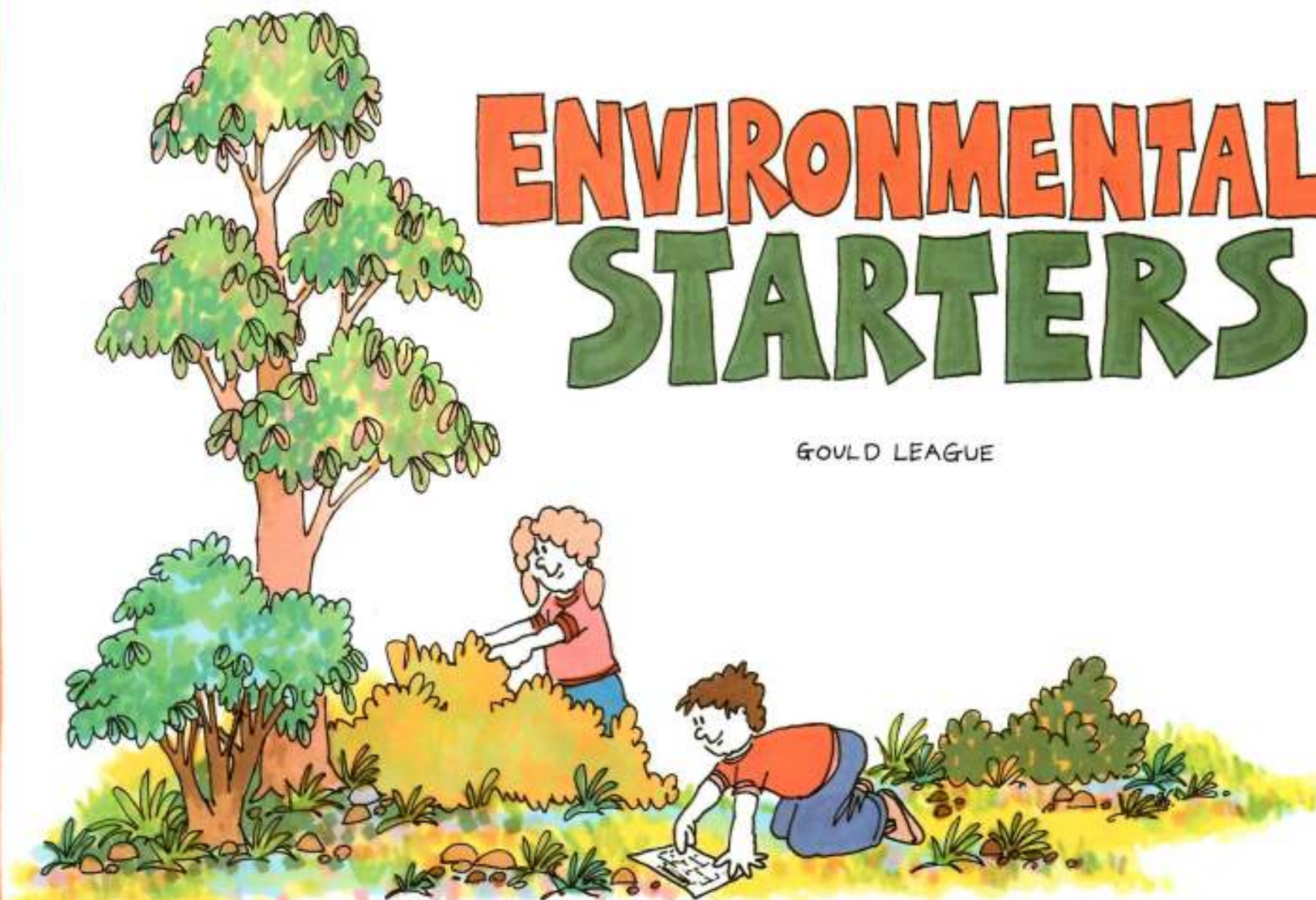


ENVIRONMENTAL STARTERS

GOULD LEAGUE



CONTENTS

Introduction	2	Leaf Damage	23	Rubbings Match	46
Environmental Bingo	3	Environmental Paces	26	Texture Touch	47
Environmental "I-Spy"	6	Shape Hunt	27	Plant Families	50
Treasure Hunt	7	Getting Older	30	Sneaky Sniffers	51
Weed Transect	10	Materials Hunt	31	Nature's Noises	54
Tree Hug	11	Finger Frame	34	Word Hunt	55
Grass Count	14	Leaf Cards	35	Hoop Study	58
Grass Cards	15	Leaf Shape	38	Lichen Look	59
Color Cards	18	Nature Numbers	39	Pebble Puzzle	62
Color Grading	19	Grid Measure	42	Follow-up	63
Photographic Partners	22	Alphabet Hunt	43	References	64

INTRODUCTION

Perhaps the question most often asked in education is, "Where do I start?" Whenever we are impressed with an idea or a program, it is the problem of implementing it ourselves that usually presents the greatest difficulty. In the emerging field of environmental education, the question and its difficulties are no less formidable and it is in the interests of providing one answer that "Environmental Starters" evolved.

Each of the activities presented has been a part of the Gould League of Victoria's in-service education program

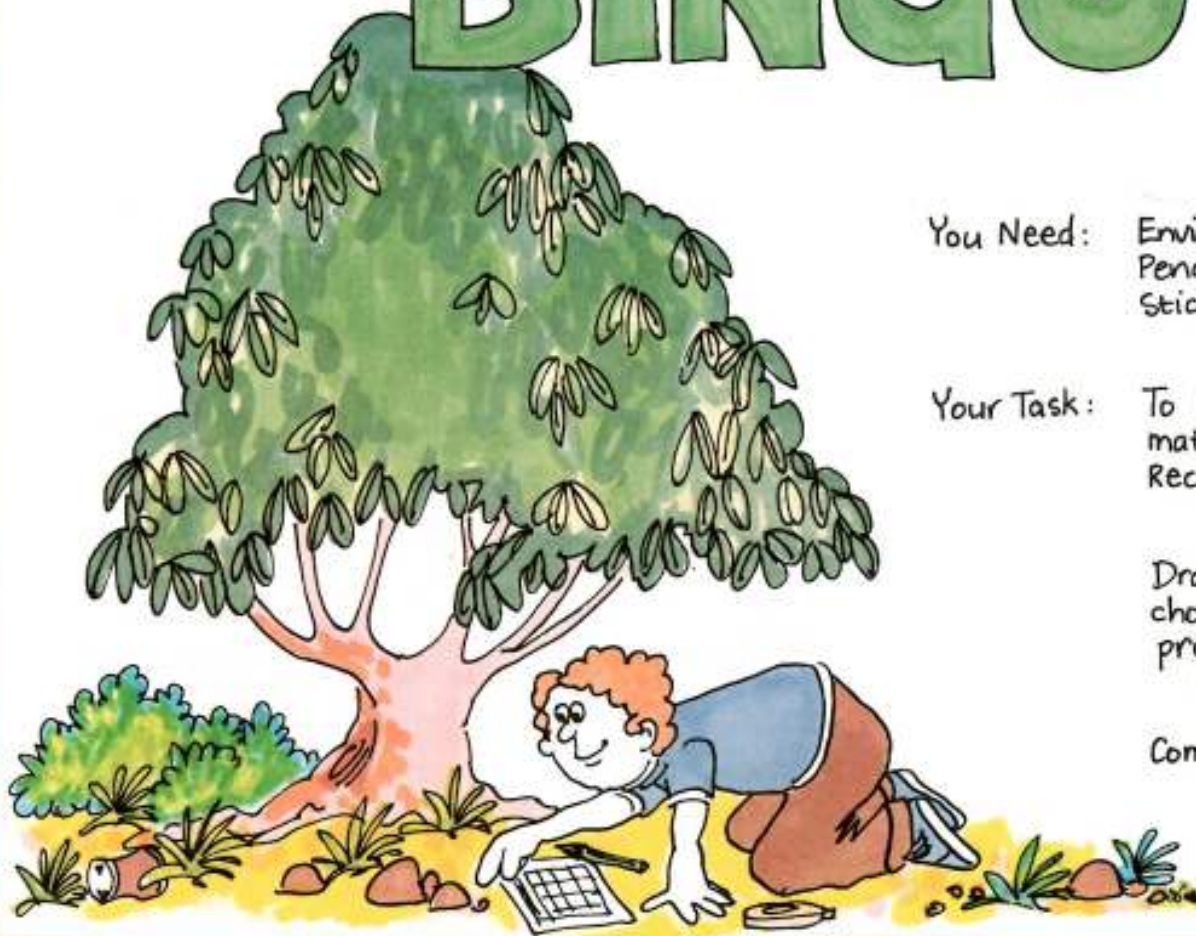
for several years. As such it has been trialled and modified in practice many times — with children and adults. We have found that each idea provides the stimulus for alerting participants to specific features of their environment and offers the potential for developing a wider consciousness of a habitat area.

In its lay-out we have tried to make it adaptable to varying teaching strategies. It could, for example, be used as a text and activity book for an individual or

group, who work through the book as a whole. Alternatively, "Environmental Starters" could be broken up to form a set of assignment cards with multiple copies of each Record Sheet available for a facet-style approach to the subject.

Whichever method the book fits into, we see it providing a stimulating starting point for environmental education, as the beginning of a wider teaching program.

ENVIRONMENTAL BINGO



You Need: Environmental Bingo Record Sheet
Pencil
Sticky Tape

Your Task: To look for objects around you that match the words listed on your Record Sheet.

Draw, list or tape the objects you choose onto the matching spaces provided on your Record Sheet.

Compare your work with a friend's.

Gravid League Environmental Starters

ENVIRONMENTAL BINGO

RECORD
SHEET

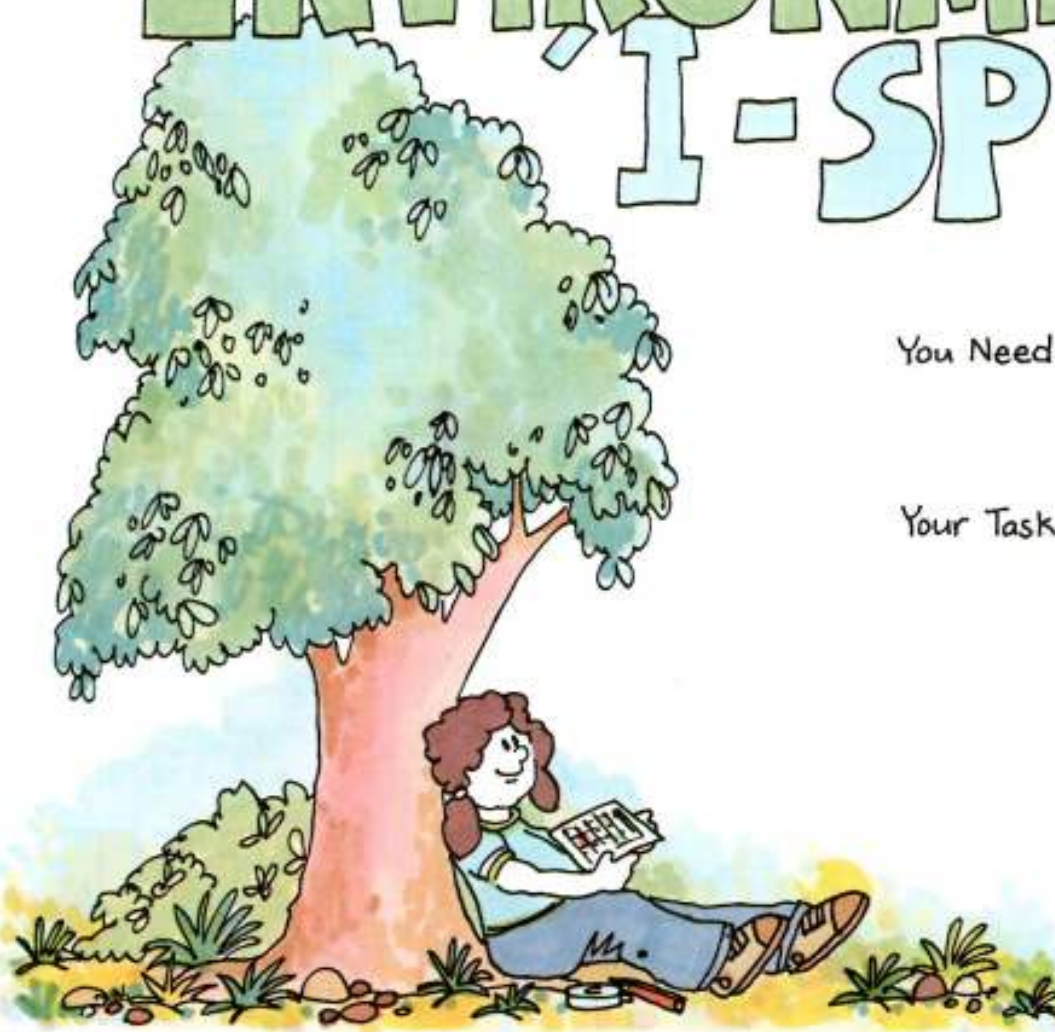
Rough	Pointed	Broken	Smooth
Soft	Old	Shiny	Curved
Chewed	Smelly	Tiny	Dirty

ENVIRONMENTAL 'I-SPY' RECORD SHEET

A	B	C	D	E
F	G	H	I	J
K	L	M	N	O
P	Q	R	S	T
U	V	W	Y	



ENVIRONMENTAL 'I-SPY'



You Need: Environmental 'I-Spy' Record Sheet
Pencil
Sticky Tape

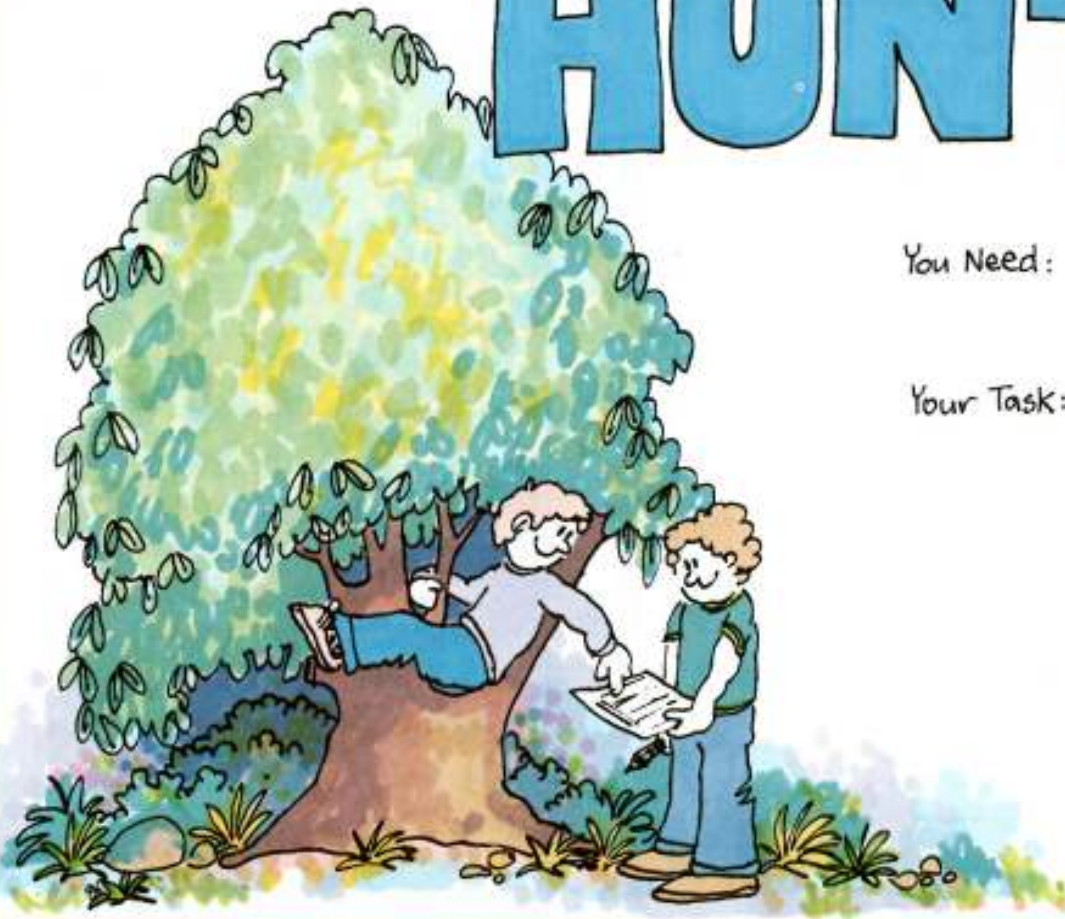
Your Task: To look for objects around you that each begin with a different letter of the alphabet.

Draw, list or tape each object you find onto your Record Sheet in the space that matches the first letter of each.

Compare your work with a friend's.

Gould League Environmental Starters

TREASURE HUNT



You Need: Treasure Hunt Record Sheet
Pencil

Your Task: To look around you for interesting objects that match the headings on your Record Sheet.

Choose one of the three lists of Treasure Hunt objects. The first list is of objects in interesting places. The second is of objects in different stages of growth, and the third is objects that each mean something different to you.

On your Record Sheet, list and describe the "treasure" objects you find, next to the headings they match.

TREASURE HUNT

RECORD SHEET

1

something underneath something else	
something between two things.	
something above something else	
something in an empty place	
something you can just reach	
something you can't pick up	
something in a dark place	
something in a wet place	

2

something young	
something growing under difficulties	
something growing well	
something dried or parched	
something damaged or injured	
something old	
something dead	
something rotting	

3

something with a pleasant smell	
somewhere quiet	
something ugly	
something pretty	
something unpleasant to touch	
something unusual	
something you have never seen before	
somewhere you would like to sit	

WEED TRANSECT

RECORD
SHEET

GRASS
(or WEED)

--	--	--	--	--	--	--	--

NAME
(MAKE ONE UP)

--	--	--	--	--	--	--	--

WEED TRANSECT



You Need: Weed Transect Record sheet
1.5 metre length of string for each person,
Stake
Sticky Tape, Pencil

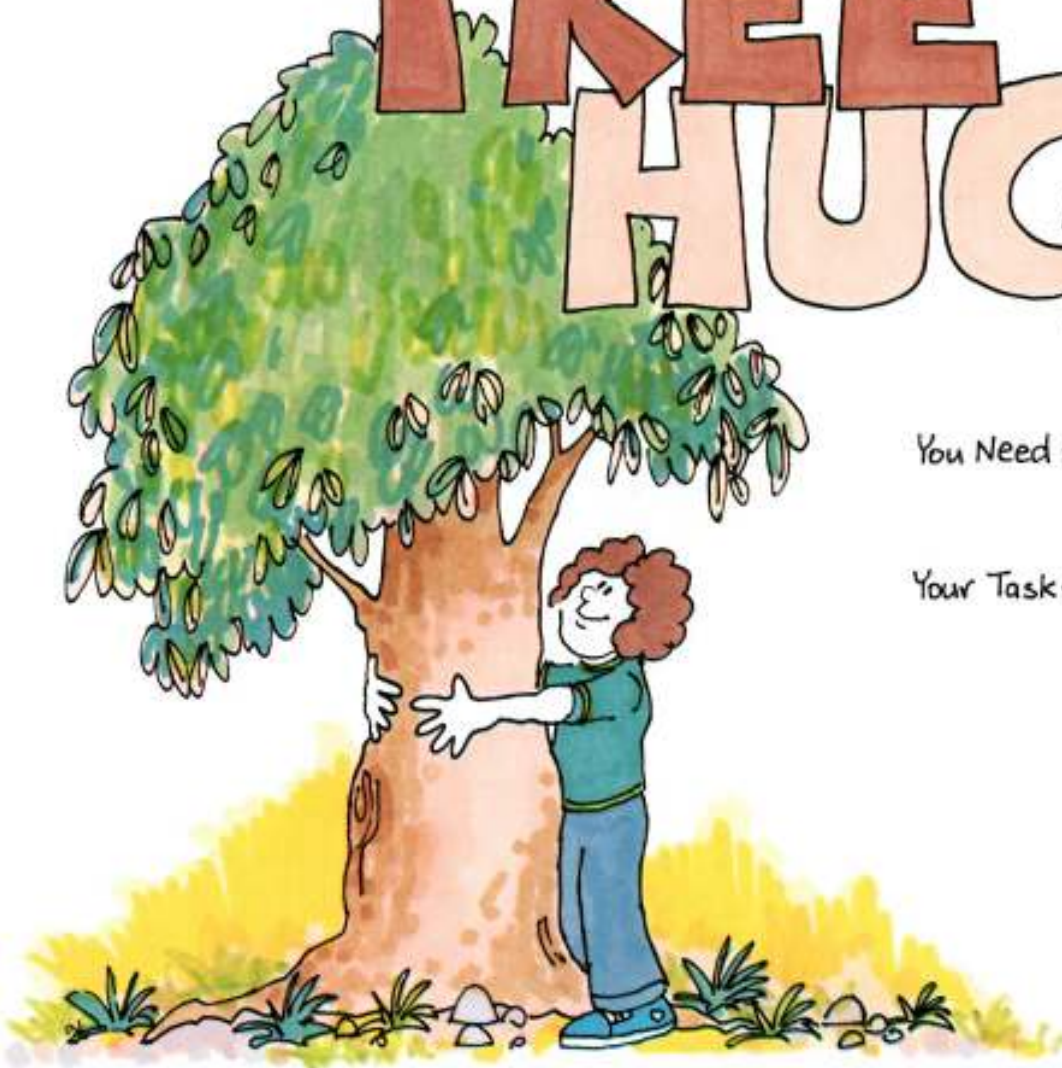
Your Task: To stretch your string in a straight line and see how many types of grass it touches.

Tie one end of your string to a stake with the string straight along the ground. Collect a piece of each type of grass your string touches, and tape it in a space on your Record Sheet.

Make up a name that describes each type of grass.

Gould League Environmental Starters

TREE HUG



You Need: Tree Hug Record Sheet
Pencil

Your Task: To choose eight trees near you
and rate them on how pleasant
they are to hug.

Try to choose trees that are
different in shape and size.

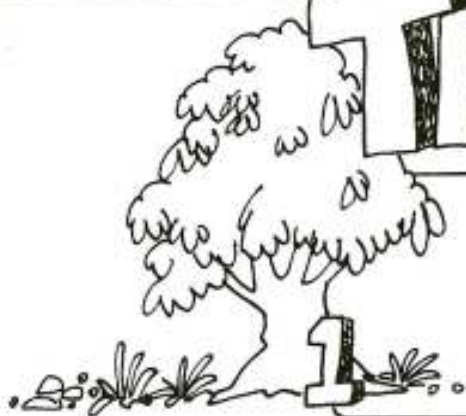
On your Record Sheet, draw or
describe the shape of each tree
and write down a word that best
describes what each feels like
to hug.

Gould League Environmental Starters

TREE

HUG

RECORD SHEET



GRASS COUNT

RECORD SHEET

MOST-COMMON

1	2	3	4	5
---	---	---	---	---

LEAST-COMMON

6	7	8	9	10
---	---	---	---	----

GRASS COUNT

You Need: Grass Count Record Sheet
Sticky Tape



Your Task: To collect ten different types of grass from an area of lawn and to range them from the most common to the least common.

Tape the different grasses you find to your Record Sheet, starting with the grass you think is most common in the area.

Compare your work with a friend's. If you use the numbers on your Record Sheet as points for each type of grass, you can have a race with your friend to see who can collect some grass that exactly totals, say, 35 points.

Gould League Environmental Starters

GRASS CARDS

You Need: Set of Grass Cards
Grass Cards Record Sheet
Pencil
Sticky Tape

Your Task: To look for different types of grass around you that match those on your Grass Cards.

You can make the Grass Cards by sticking different types of grass and weeds onto cardboard squares with clear adhesive plastic.

When you find any grasses that match the Grass Cards, tape them to your Record Sheet beside the number or name you have given to each Card.

Gould League Environmental Starters



GRASS CARDS

RECORD SHEET

CARD
NUMBER or NAME

GRASS

CARD
NUMBER or NAME

GRASS

COLOR CARDS

RECORD
SHEET

COLOR

NAME or NUMBER

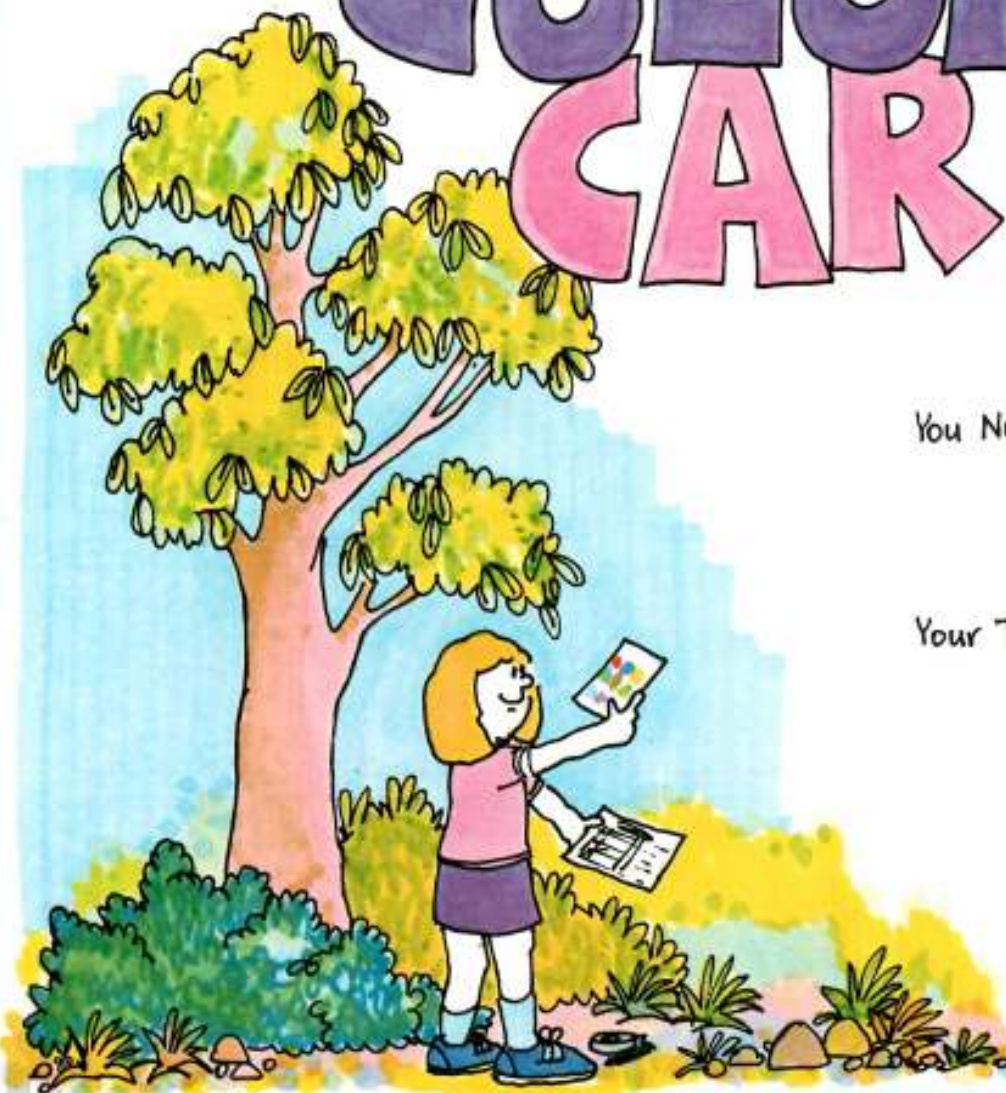
OBJECT

COLOR

NAME or NUMBER

OBJECT

COLOR CARDS



You Need : Color Cards
Color Cards Record Sheet
Pencil
Sticky Tape

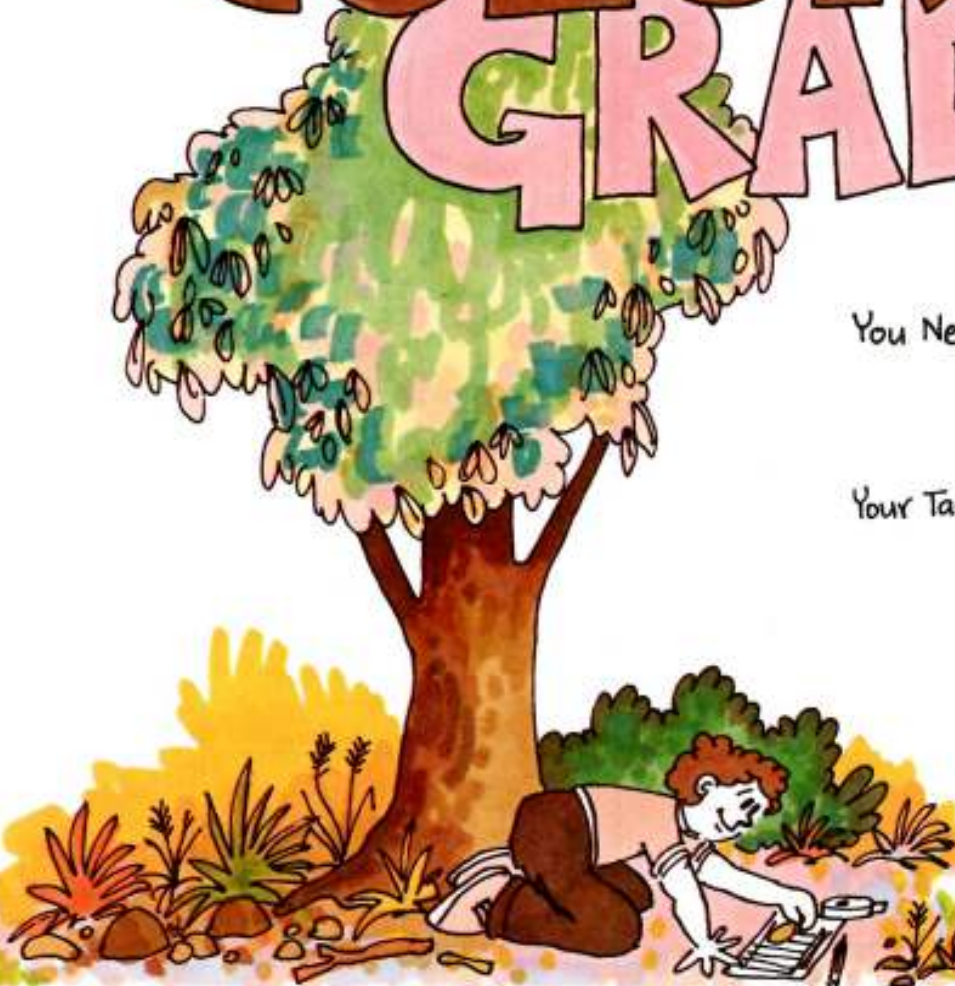
Your Task: To look at the objects around you
and choose some which match the
colors on your Color Card .

A number of Color Cards can be made
from one paint color chart .

List, draw or tape the objects you
choose onto your Record Sheet
beside the name or number you give
to each of the different colors .

Gould League Environmental Starters

COLOR GRADING



You Need: Color Grading Record Sheet
Sticky Tape
Pencil

Your Task: To look around you for objects of a similar color that you can range in order from the lightest to the darkest.

Tape your objects in order onto your Record Sheet in the spaces provided.

Under the objects you have chosen write a word that best describes each.

COLOR GRADING

RECORD
SHEET

LIGHTEST

DARKEST

1

2

3

4

5

6

7

8

DESCRIBING WORDS

PHOTOGRAPHIC PARTNERS



RECORD
SHEET

Flat	Broken	Rough	Small
Colorful	New	Dead	Shiny
Dirty	Dark	Damp	Attractive

PHOTOGRAPHIC PARTNERS



You Need: A Partner
Photographic Partners Record Sheet
Pencil

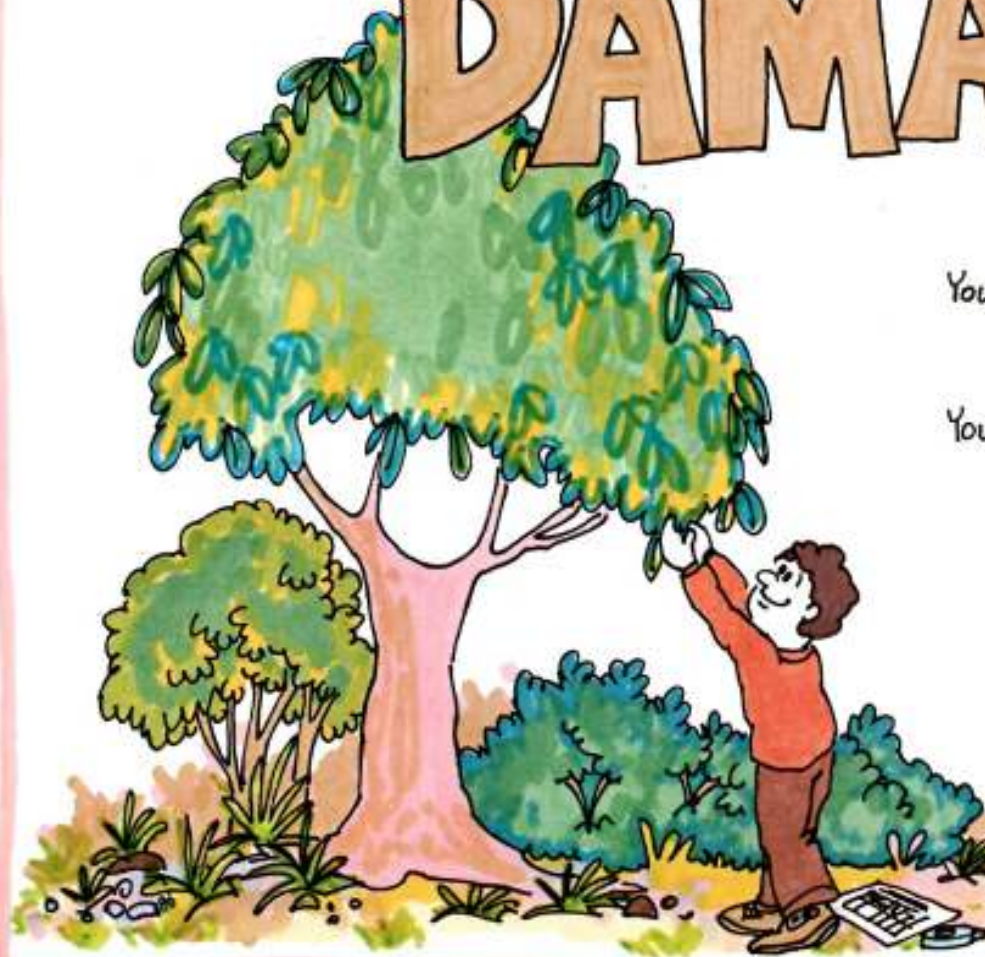
Your Task: To use your partner as a camera, leading him around with his eyes closed until you see any of the things that match your Record Sheet.

To take a "photograph," push your finger lightly against your partner's ear. He opens his eyes only for as long as you touch his ear. Three seconds is usually enough.

Take six "photographs" then give the Record Sheet to your partner and ask him to list or tick the "photos" taken.

Gravid League Environmental Starters

LEAF DAMAGE



You Need: Leaf Damage Record Sheet
Sticky Tape

Your Task: To look for leaves around you that show different signs of damage.

Collect five damaged leaves that match the headings on your Record Sheet. Be careful not to pick a leaf that is being used as an insect's home.

Tape the damaged leaves onto your Record Sheet.

Compare your work with a friend's.

Gould League Environmental Starters

LEAF DAMAGE

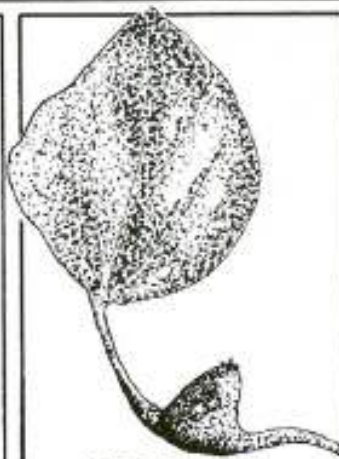
RECORD SHEET



ROLLED



CHEWED



GALLS

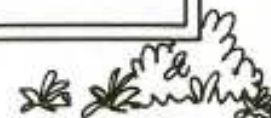


MINED



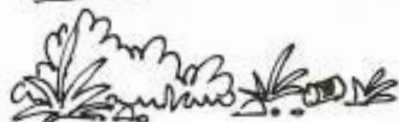
OTHERS

Remember: Don't pull off a leaf that is being used as an insect's home - draw it.



ENVIRONMENTAL PAGES

RECORD SHEET



1	2	3	4	5
---	---	---	---	---

6	7	8	9	10
---	---	---	---	----



ENVIRONMENTAL PACES



You Need : Environmental Paces Record Sheet
Pencil
Sticky Tape

Your Task : To see how many different things
you can touch as you take ten
paces.

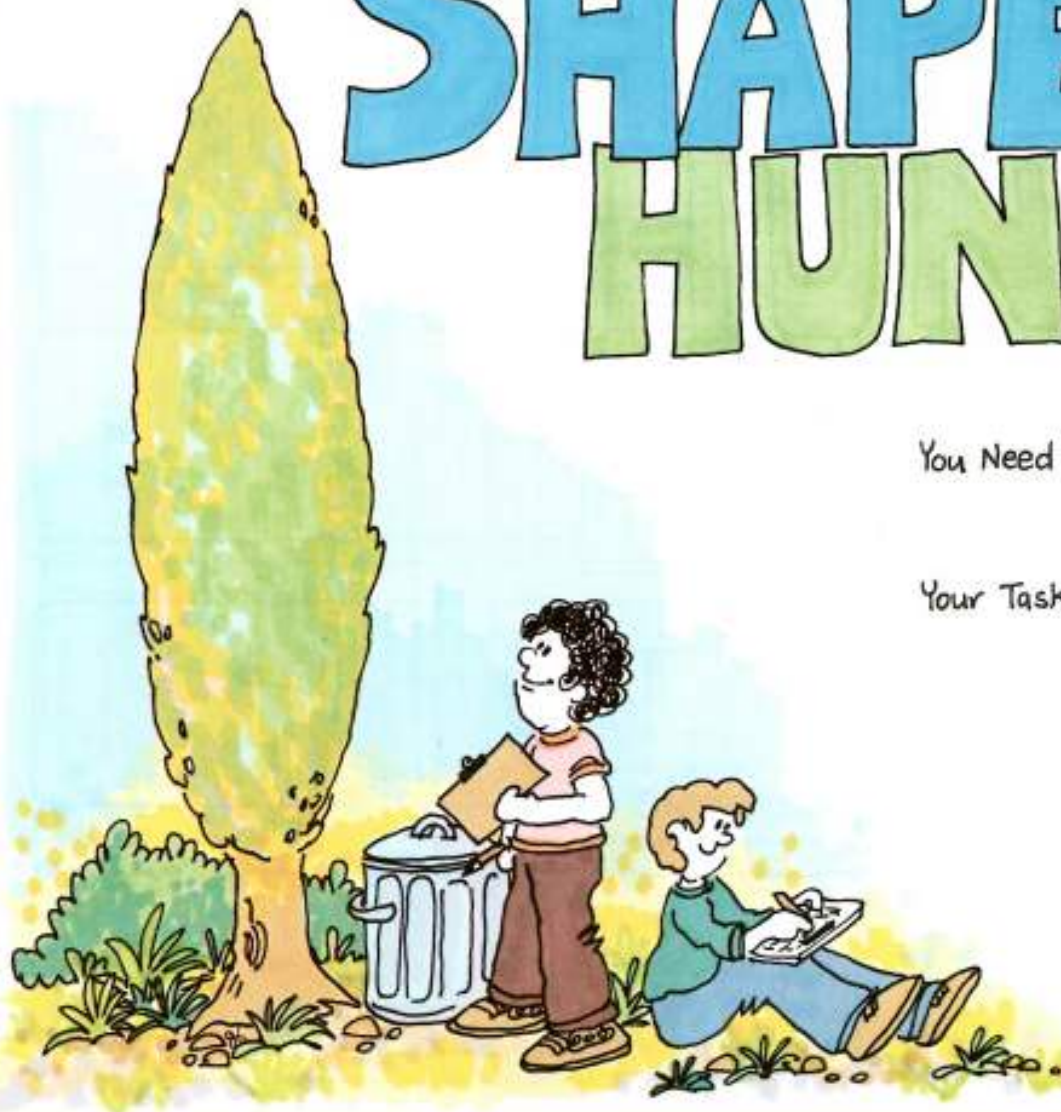
Choose an area where you can take
ten paces in a straight line.

After each step you take, list, draw
or tape onto your Record Sheet
something you can touch without
moving your feet.

Compare your work with a friend's.

Gould League Environmental Starters

SHAPE HUNT



You Need : Shape Hunt Record Sheet
Pencil

Your Task: To look for shapes in different objects
around you that most closely match
those on your Record Sheet.

In the spaces on your Record Sheet
draw the objects that you can find
that match each shape.

If you like, you can look for two
objects that match each shape—
something man-made and
something natural.

SHAPE HUNT

RECORD
SHEET



Lance-shape



Semi-circle



Circle



Rhombus



Triangle



Oval



Rectangle



Square

GETTING OLDER

RECORD
SHEET

1

YOUNGEST

5

2

6

3

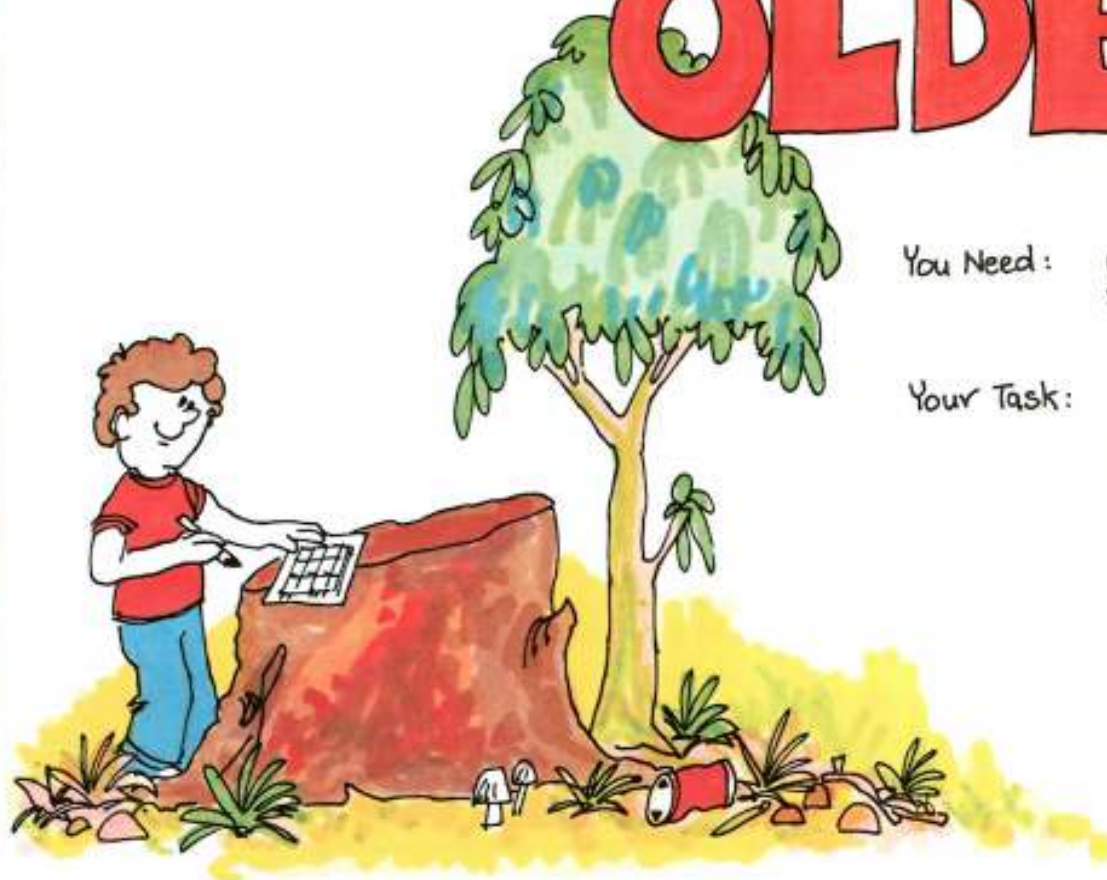
7

4

8

OLDEST

GETTING OLDER



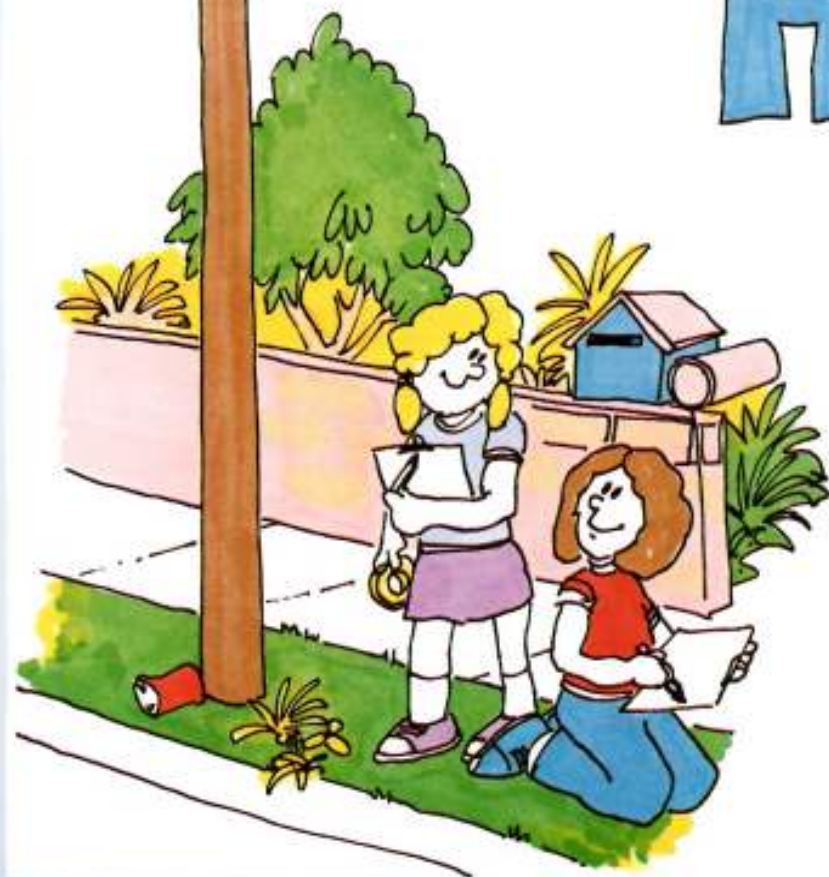
You Need: Getting Older Record sheet
Sticky Tape, Pencil

Your Task: To look for eight different objects
around you that you can range from
the youngest to the oldest.

Draw or tape each object onto your
Record Sheet starting with the
object you think is the youngest.

Write down two or three words
that describe each object.

MATERIALS HUNT



You Need: Materials Hunt Record Sheet
Sticky Tape, Pencil

Your Task: To look for objects around you
made from eight different materials.

List or draw the objects you can
see that are made of each of the
materials written on your Record
Sheet.

Look around for something of each
material that is small enough to
tape on to your Record Sheet.



MATERIALS HUNT

RECORD
SHEET

METAL

Plastic

Cement

WOOD

Slate
and
Stone

GLASS

Tiles
(Ceramic)

Brick

FINGER

FRAME

RECORD SHEET



List or draw
eight of the
objects you
can see.

1

2

3

4

5

6

7

8

Write down as
many words as
you can of things
you see through
your frame in
one minute.

FINGER FRAME



You Need: Finger Frame Record Sheet
Pencil

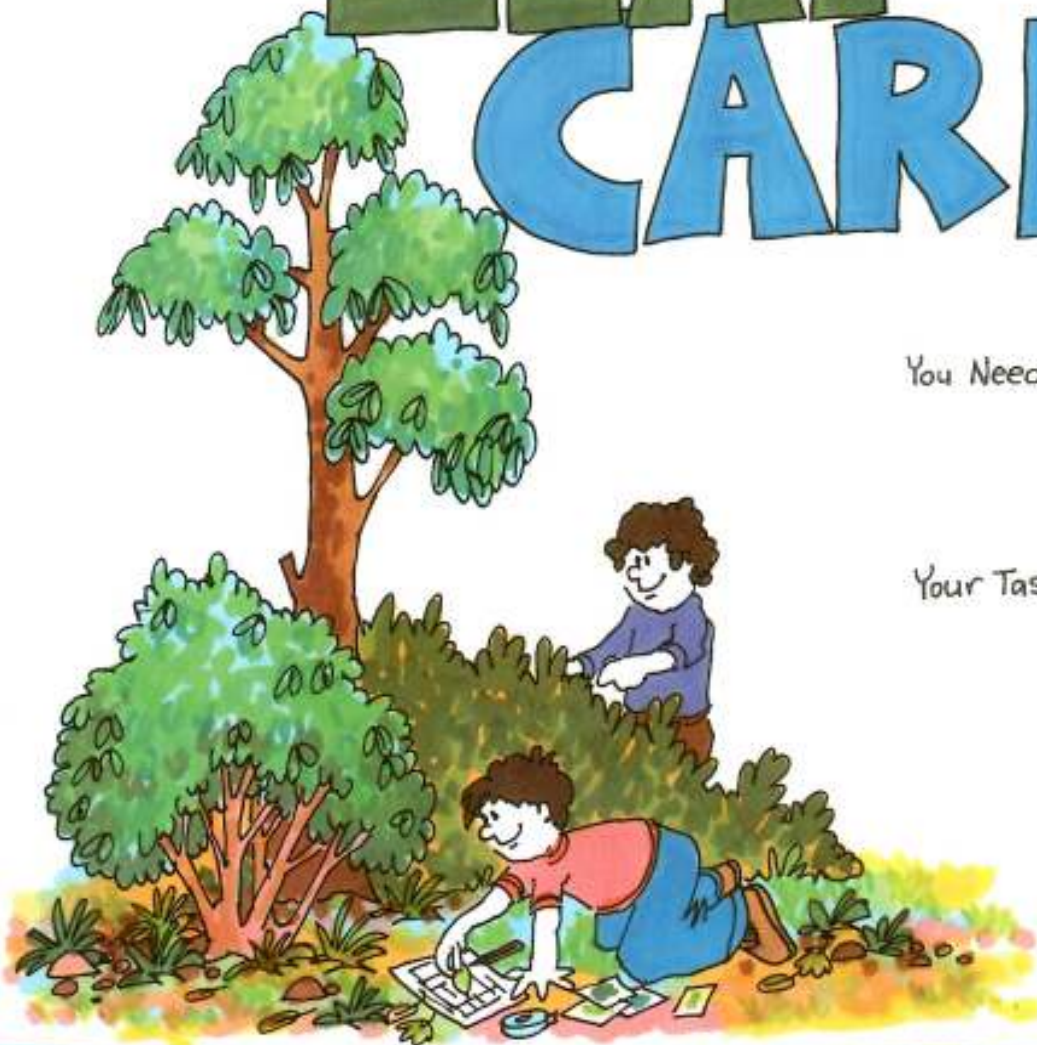
Your Task: To hold your arms out straight in front of you and make a Finger Frame with your hands that you can look through.

Line up on an interesting object and keep your arms still. List eight things you can see within your frame.

Line up on the same object as a friend and see who can list the most objects within one minute.

Gould League Environmental Starters

LEAF CARDS



You Need: Set of Leaf Cards
Leaf Cards Record Sheet
Pencil
Sticky Tape

Your Task: To look at the different trees around you and match their leaves with those on your Leaf Cards.

You can make the Leaf Cards by sticking different leaves onto cardboard with clear adhesive plastic. Give a number or name to each leaf.

When you find a leaf that matches one of your Leaf Cards, tape it to your Record Sheet beside the number or name of the card it matches.

Gould League Environmental Starters

LEAF CARDS

RECORD SHEET

CARD
NUMBER or NAME

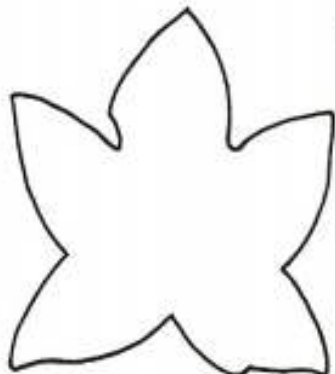
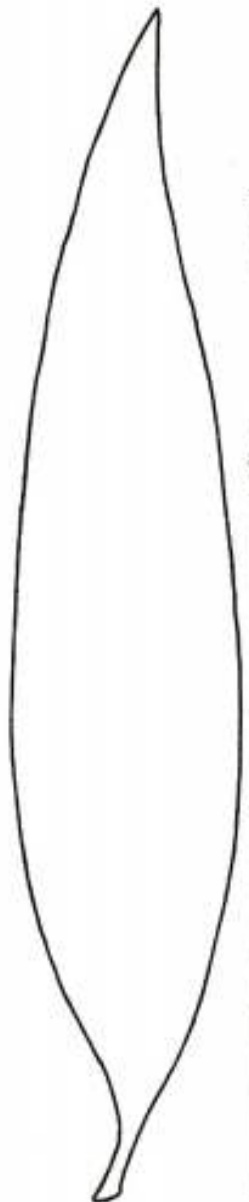
LEAF

CARD
NUMBER or NAME

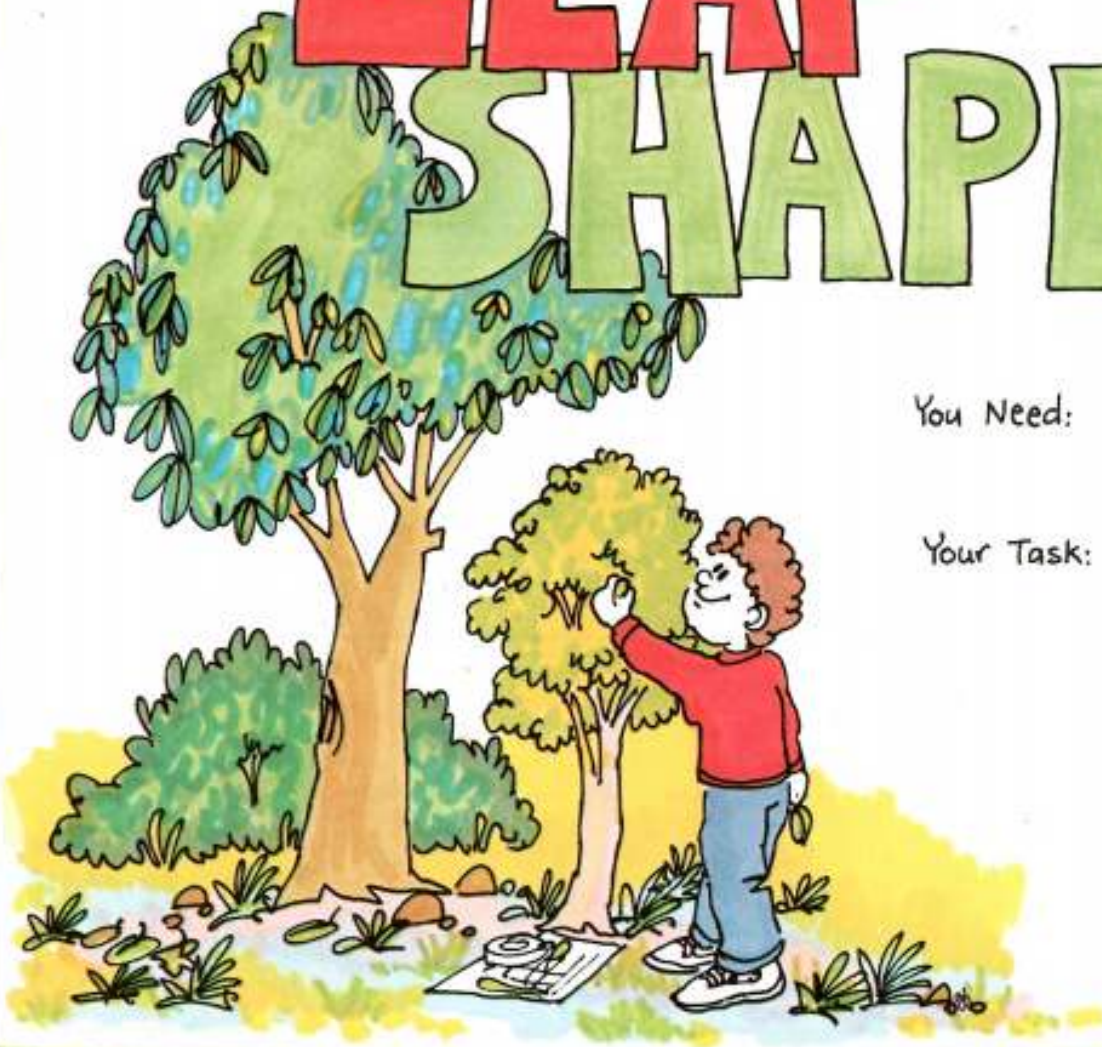
LEAF

LEAF SHAPE

RECORD
SHEET



LEAF SHAPE



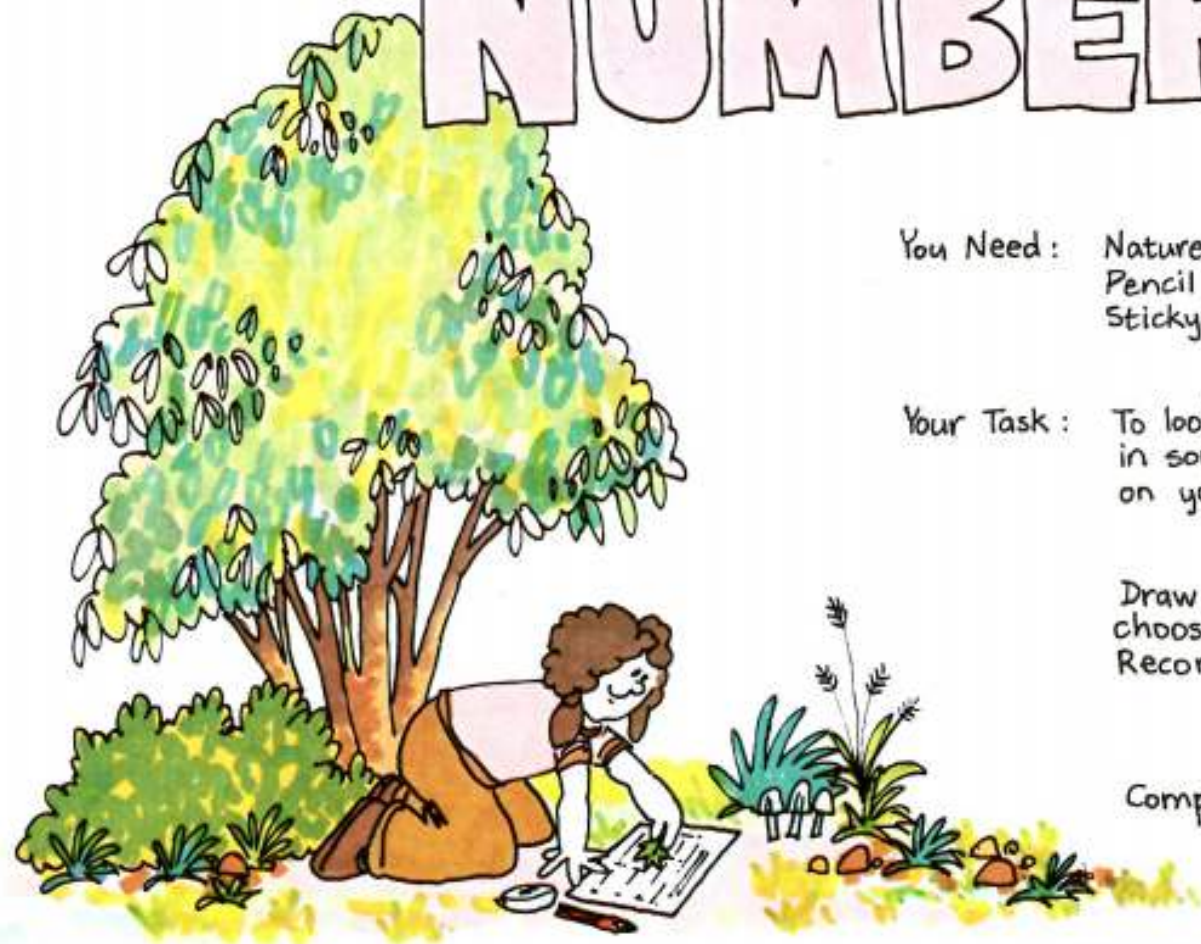
You Need: Leaf Shape Record Sheet
Sticky Tape

Your Task: To find around you different leaves
that fit neatly into each of the
shapes on your Record Sheet.

Look for leaves that fit into each
space and tape them onto your
Record Sheet.

See how many different types of
leaves you can find to fill up the
spaces.

NATURE NUMBERS



You Need: Nature Numbers Record Sheet
Pencil
Sticky Tape

Your Task: To look for objects around you that
in some way match the numbers
on your Record Sheet.

Draw, list or tape the objects you
choose onto the spaces on your
Record Sheet.

Compare your work with a friend's.

NATURE NUMBERS

RECORD
SHEET



4

8

1

5

9

2

6

10

3

7



GRID MEASURE

RECORD
SHEET

PLANT

SYMBOL

--	--

--	--

--	--

--	--

--	--

GRID MEASURE

You Need : Grid Measure Record Sheet
Sticky tape , pencil
100 square grid on clear plastic

Your Task : To work out the area covered by each type
of grass under your grid.

Place your plastic grid over a patch of grass.

Stick down on your Record Sheet five types
of grass that you can see through your
grid.

Make up a symbol to draw beside each.

Now fill in the grid squares on your
Record Sheet with the symbols for
each grass, as you can see them through
your plastic grid.

Count the types of grass in each grid square.

Which grass covers the most space ?

Gould League Environmental Starters



ALPHABET HUNT



You Need: Alphabet Hunt Record Sheet
Sticky Tape, Pencil

Your Task: To look for the shapes of letters
of the alphabet in objects around
you.

Draw or tape eight objects onto
your Record Sheet, and beside
each write the letter you can see.

How many words can you make
up from your eight letters?

ALPHABET HUNT

RECORD
SHEET



SKETCH

1

LETTER

SKETCH

5

LETTER

2

6

3

7

4

8



RUBBINGS MATCH

RECORD
SHEET

Bumpy	Wood	Brick	Fabric
Leaf	Bark	Words	Concrete
Cracked	Asphalt	Patterned	Metal



RUBBINGS MATCH



You Need: Rubbings Match Record Sheet
Crayon
Thin Paper
Scissors
Sticky Tape or Glue } ..or try crayon
rubbing directly
on to Record Sheet.

Your Task: To take rubbings from different objects described on your Record Sheet.

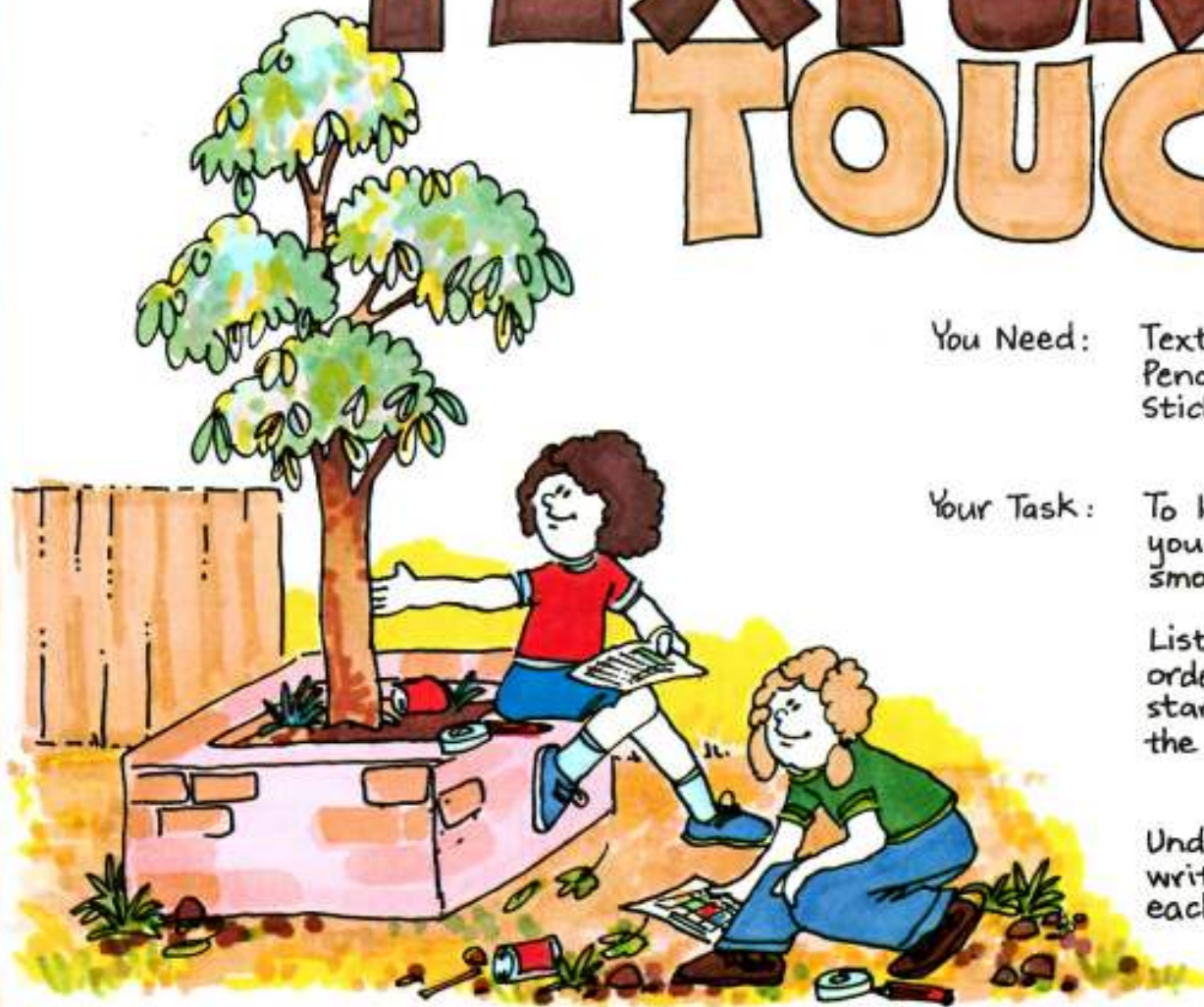
Look around you for objects with interesting textures and take rubbings from those that you think match each of the headings on your Record Sheet

Cut out the rubbings and attach them to the spaces on your Record Sheet.

Compare your work with a friend's.

Gould League Environmental Starters

TEXTURE TOUCH



You Need: Texture Touch Record Sheet
Pencil
Sticky Tape

Your Task: To look around you for objects that you can range in order from the smoothest to the roughest.

List, draw or tape your objects in order onto your Record Sheet, starting with the one you think the smoothest.

Under the objects you have chosen write a word that best describes each one.

TEXTURE TOUCH

RECORD
SHEET

SMOOTHEST

ROUGHEST

--	--	--	--	--	--	--	--

DESCRIBING WORDS

--	--	--	--	--	--	--	--

PLANT FAMILIES

RECORD SHEET

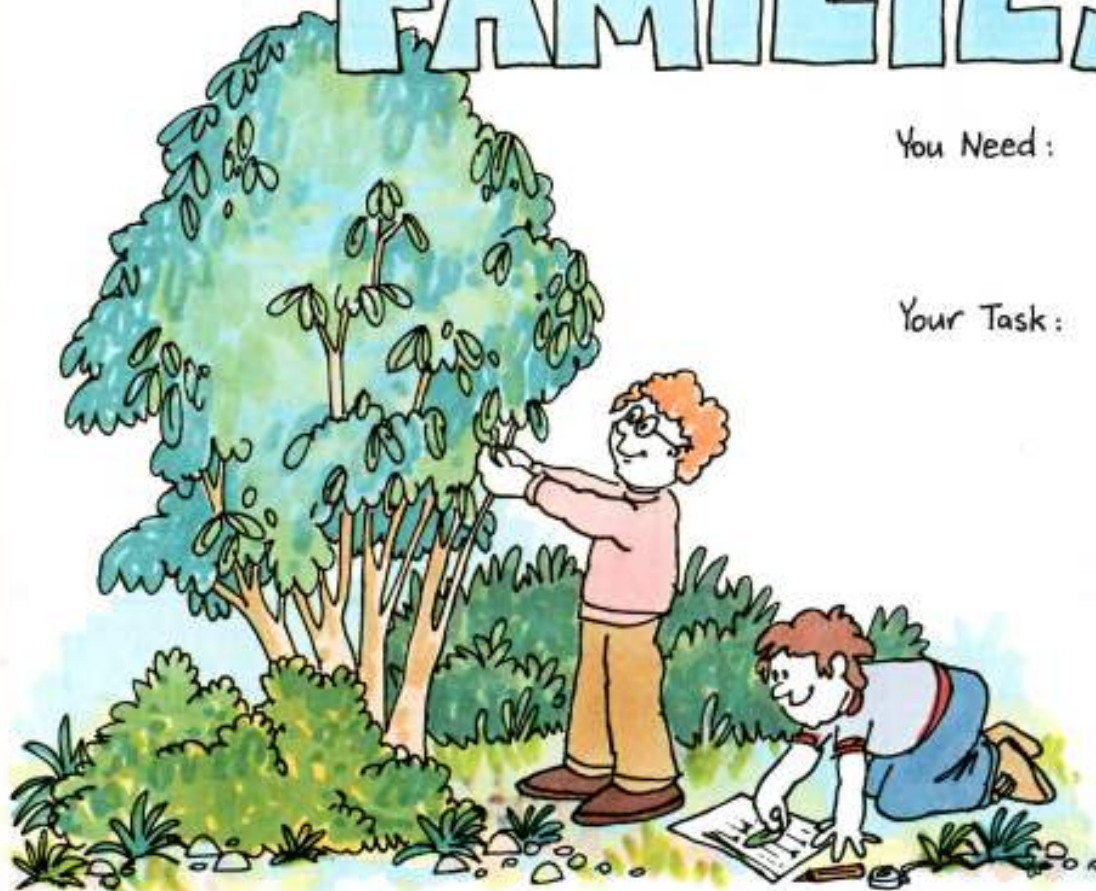
1	PLANT LEAF	YOUR MADE-UP NAME
2		
3		
4		

5	
6	
7	
8	

Group your eight plants into three families. Then make up names for your family groups next to the plant numbers.

A				
B				
C				

PLANT FAMILIES



You Need: Plant Families Record Sheet
Pencil
Sticky Tape

Your Task: To make up names for some of the different plants around you and their family groups.

Tape a leaf from eight different plants onto the numbered spaces on your Record Sheet.

Beside each leaf write down the name you decide to call it.

Make up three plant family names and write them down in the spaces provided.

List each plant beside one of the plant family headings.

SNEAKY SNIFFERS



You Need: Sneaky Sniffers Record Sheet
6 Numbered Tags
6 Numbered Paper Bags
Pencil

Your Task: To smell the leaf in each bag and match it with the correct tree.

Get a friend to mark six different trees with a numbered tag, and place a leaf from each tree in a numbered bag.

Put your hand into each bag and squeeze the leaf inside. Smell your fingers and decide which of the tagged trees the leaf came from.

Write the bag numbers beside the correct tree numbers shown on your Record Sheet, as well as a word that describes each leaf scent.

Guild League Environmental Starters

SNEAKY SNIFFERS

RECORD SHEET



= Bag No.

*smell:



= Bag No.

*smell:



= Bag No.

*smell:

*Here are some "smelly" words you could choose from :

spicy, sweet, sour, sickly, heavy, thick, nasty, pleasant, disgusting, bitter, sharp, faint, strong.



= Bag No.

*smell:



= Bag No.

*smell:



= Bag No.

*smell:



RECORD
SHEET

	SOUND	OBJECTS
1		
2		
3		
4		

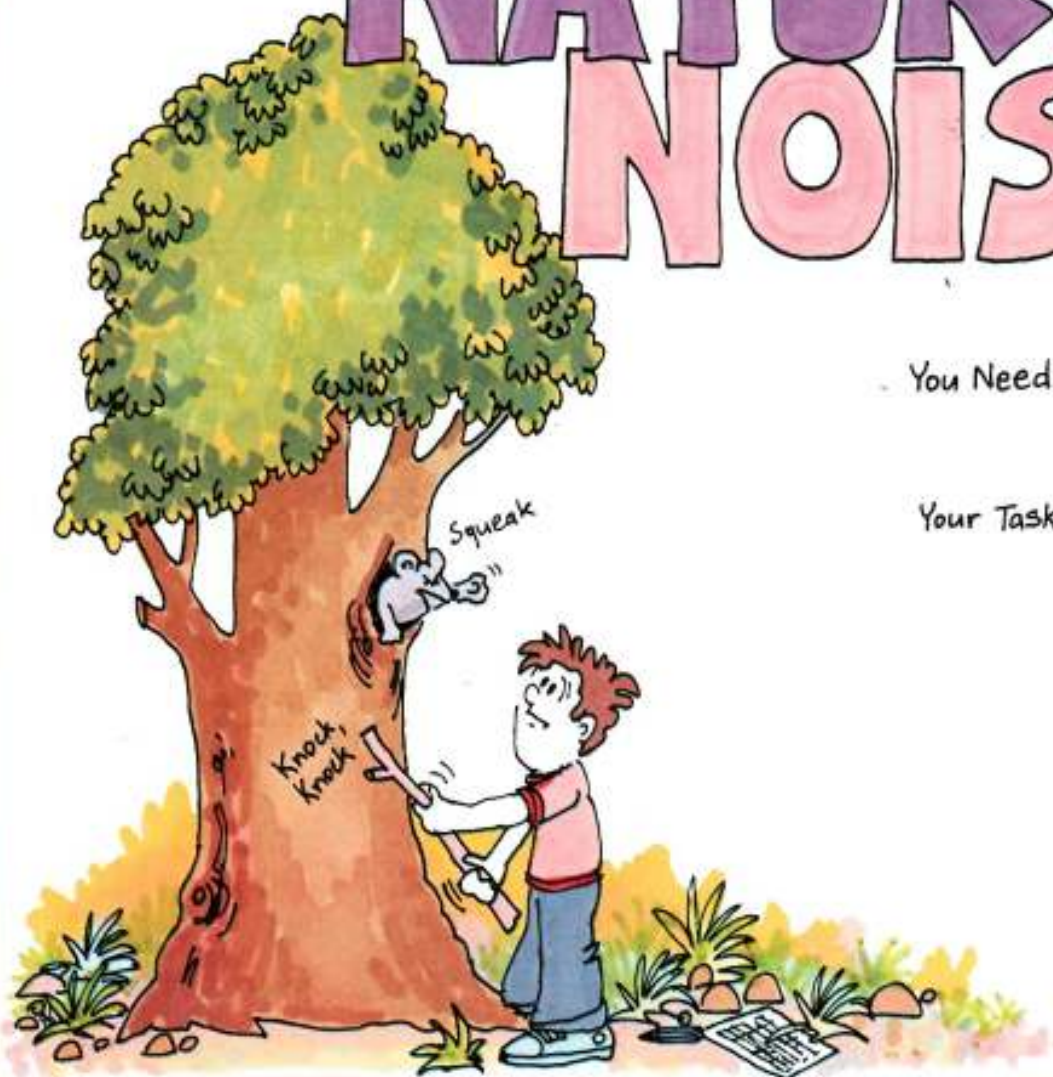
	SOUND	OBJECTS
5		
6		
7		
8		

Here are some sound words you could choose from:

scrape, rustle, twang, crackle, thud, rattle, squeak, plop, swish, rumble, clatter.



NATURE'S NOISES



You Need: Nature's Noises Record Sheet
Pencil

Your Task: To find around you objects that can be used to make a number of different noises.

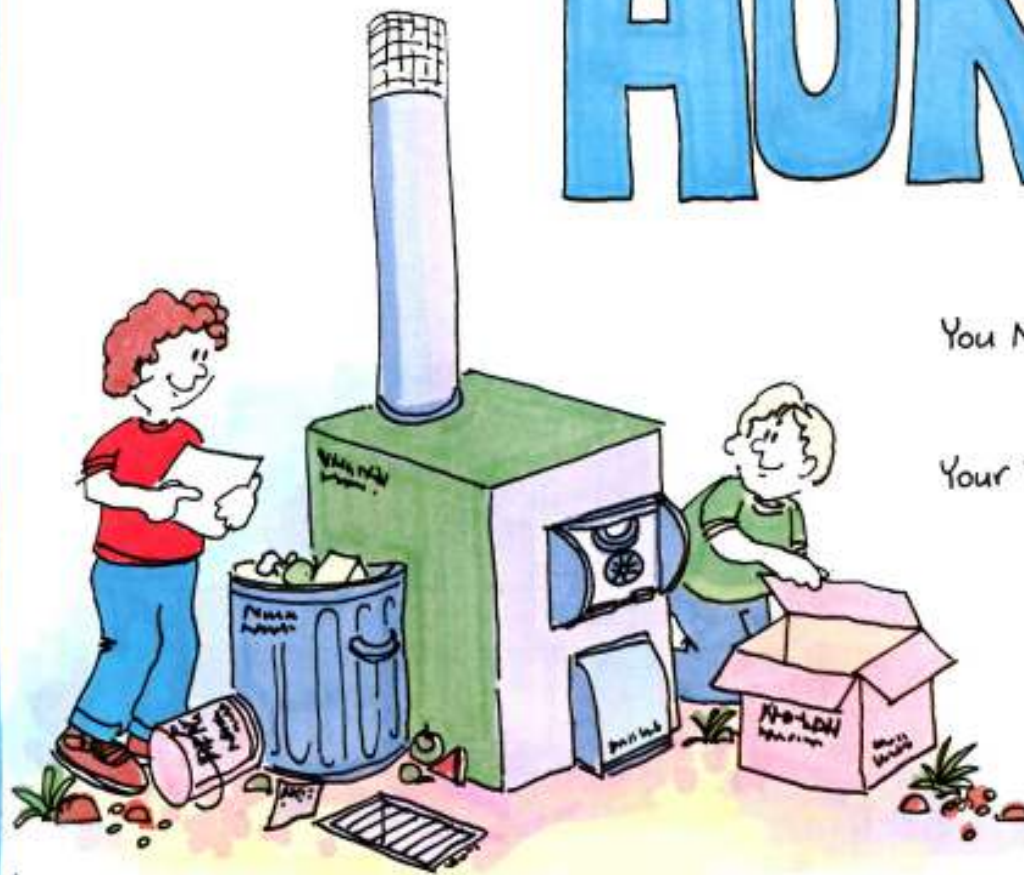
Choose objects with which you can make a range of sounds that scrape, squelch, rustle, twang, crackle, thud, rattle, squeak or plop.

On your Record Sheet list eight sounds you can make and draw each of the objects used.

Compare your work with a friend's.

Gould League Environmental Starters

WORD HUNT



You Need: Word Hunt Record Sheet
Pencil

Your Task: To look for words that appear on
different objects around you.

Look for the types of words listed
on your Record Sheet, and write
them down in the spaces provided.

Compare your work with a friend's.

WORD HUNT

RECORD SHEET

The number of words you see around you in one minute.

List words written on four different materials.

List four words that are each in a different color.

List four words that you can see on posts.

Any "command" words that tell you to do something e.g. Beware.

Any abbreviated words you can see eg. Rd. or Vic.

The word written in the largest letters.

The word written in the smallest letters.



HOOP

STUDY

RECORD SHEET

GRASS COUNT

INSECT COUNT

GRASS HEIGHT

1

2

3

GRASS COUNT

INSECT COUNT

GRASS HEIGHT

4

5

6



HOOP STUDY



You Need : Hoop
Hoop Study Record Sheet
Pencil

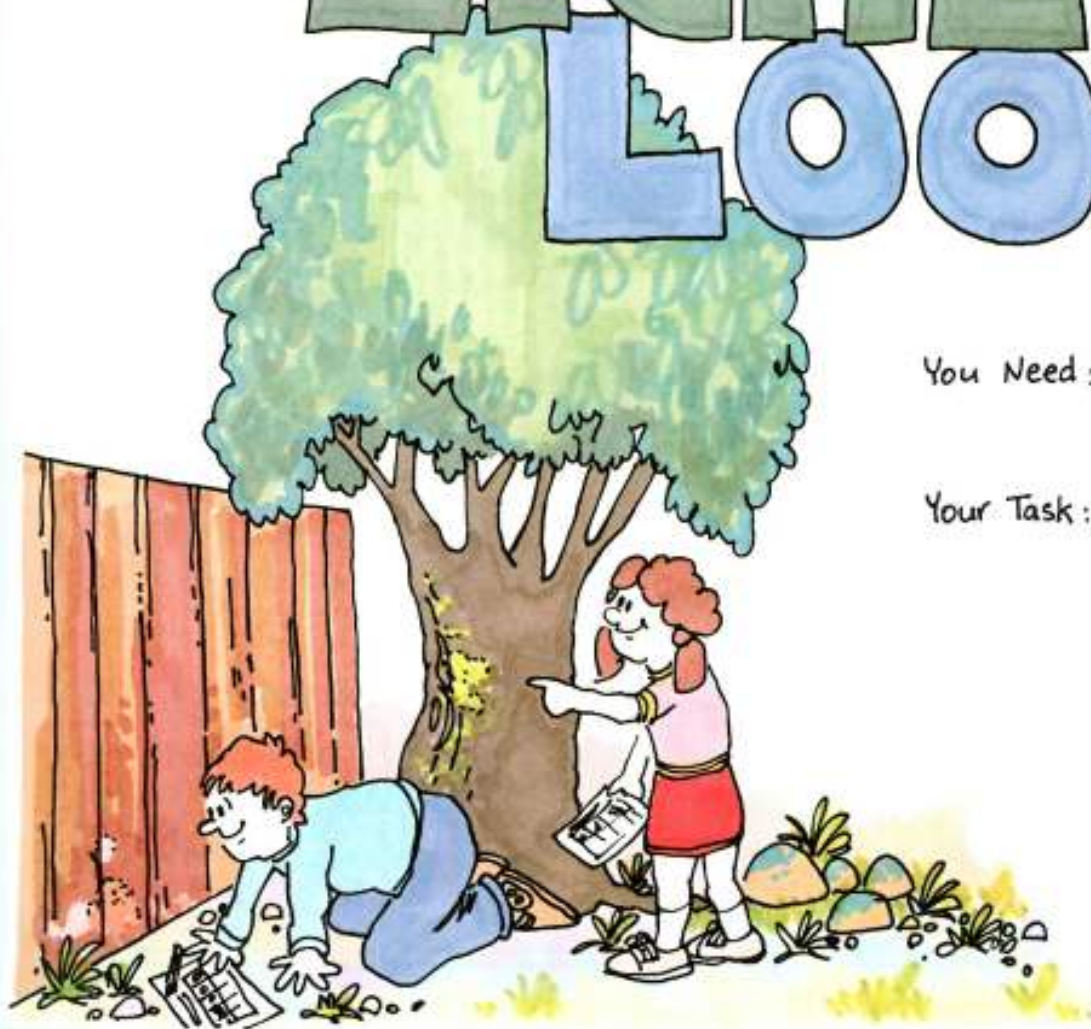
Your Task : To study the life you find on the ground
in six different areas.

Choose six areas that are very different to each other. Lay your hoop down over the first area and look for any insects that may be living there. Count the number of grasses within your hoop and measure the height of the tallest type of grass.

Write your answers for each of the six areas in the spaces on your Record Sheet.

Gould League Environmental Starters

LICHEN LOOK



You Need: Lichen Look Record Sheet
Pencil


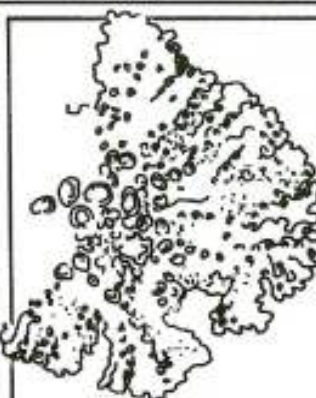



Your Task: To look around you for some different types of lichens.

Lichens can be found growing on stone, concrete, tree trunks and rotting wood. The leafy and shrubby lichens need cleaner air than the crusty ones.

Look for the types of lichen shown on your Record Sheet. Write down some words that describe each of the different lichens you see and list where each was found.

Gould League Environmental Starters

LICHEN LOOK RECORD SHEET

 <p><u>Lecanora (conizaeoides)</u> - grey-green</p>	 <p><u>Xanthoria (parietina)</u> - bright orange</p>	 <p><u>Parmelia (physodes)</u> - grey (others may be yellow-green)</p>	 <p><u>Ramalina</u></p>	 <p><u>Usnea</u></p>
DESCRIPTION				
PLACE				



PEBBLE PUZZLE

RECORD SHEET

Arrange your nine stones, with one in each square.

Try to match up three in a row with some of the following :

smallest to largest

darkest color to lightest color

smoothest to roughest

cleanest to dirtiest

lightest to heaviest

softest to hardest

roundest to flattest

least interesting to most interesting

least colorful to most colorful

Number

(.....)

(.....)

(.....)

(.....)










(.....)

(.....)

(.....)

(.....)

(.....)

			→ 6
			→ 5
			→ 4
↓ 1	↓ 2	↓ 3	

PEBBLE PUZZLE



You Need: Pebble Puzzle Record Sheet
Pencil

Your Task: To find nine stones or pebbles nearby
and to sort them into rows of three.

Place a stone on each square of your
Record Sheet in such a way that the
stones line up to match some of the
headings . eg. smallest to largest.

Write the row numbers after each of the
headings you can match with your rows
of stones.

Show your puzzle to a friend and then
return the stones to where you
found them.

Gold League Environmental Starters

FOLLOW-UP..

Once we've started a program by means such as this, it is important to see where it leads us. A "once-off," "whizz-bang" approach to getting the activities "done" will overlook many discoveries and techniques. To do so would be to study an environment in one dimension only. On the other hand, the "Starters" could be used to develop a deeper awareness of the same area. For instance, information recorded about one environmental aspect can be compared with repeated recordings in the same place. Compiled over twelve months, this data will provide a basis of comparison over the next season. By such a simple but regular monitoring technique students develop the knowledge of what is actually going on in their environment and if some phenomena occur earlier one year, or not at all, the question,

"Why?" will form the beginnings of broader environmental education.

Some other ways of extending the work of the "Starters" might include:-

- Adapting the activities to invent new environmental games. Once identified or given original names, leaf and grass cards can be used in relay or "tag" games.
- Trailing - by repeating one of the activities in a variety of different "stations" you can set up a trail on themes such as color, damage, age or texture.
- Carrying out local surveys, eg. bird-life, grass and weed growth in schoolgrounds, local parks or vacant lots. See Gould League's "Environmental Measuring Techniques."

- Building up a nature timeline - include observations on weather as well as wildlife - perhaps using the Gould League's "Environmental Log Book" which is specially designed for this purpose.

- Identification of plants and animals using such publications as the Gould League's "Urban Survival" and "Urban Discovery Book".

- Sending census or survey results to such organizations as C.S.I.R.O. Wildlife Division, or comparing results with schools in different environments.

These are only a few of the many directions which would lead to a more complete approach to environmental education. You'll be surprised at the flow of ideas once you get "Started".

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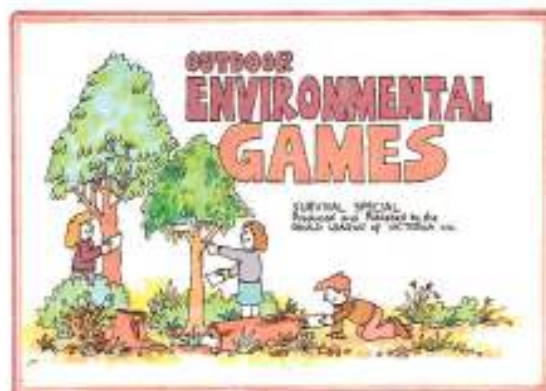
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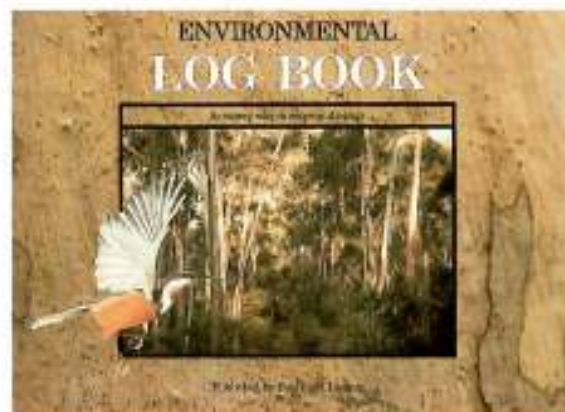
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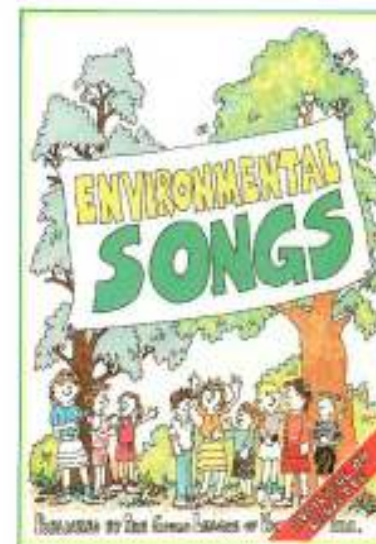
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