

Environmental Study

Unit 7

This one-day investigation is a combination of science and geography activities. The activities could also be used as extension materials or evening activities for other units such as trees, non-flowering plants, rocks and soil, change in the environment.

Summary of the Day

0900	Introduce the investigation
0930	Outdoors - play the colour game environmental treasures find the tree - senses game
1200	Children to discuss together what they have noticed/observed about the Red Ridge environment, so far
1230	Return to Centre for lunch, or have a packed lunch
1330	Prepare string trail
1400	Continue investigations drawing string game mini-environments
1600	Return to classroom for the discussion activities
1700	End
1800	Dinner
Evening	Extension activities

These activities have cross-curricular strands which involve science, geography, art and English

Introduction

This unit is essentially an attitudinal one. That is, its purpose is not to teach information or skills but to help the process of developing the children's understanding that the world is their world, is all we have, and needs looking after. That is why many of the activities are about sensitising children to the diversity of the world around them.

This unit could be introduced by considering issues to do with pollution (either generally or in the Red Ridge area in particular).

Aims: To help children understand that:

- in any environment the animals and plants are dependent on each other;
- we have a responsibility for caring for the environment;
- to develop careful observation skills through the use of the senses.

Organisation The unit can be followed as a class or large group investigation, or one or two of the activities could be selected as evening or follow-up sessions to fit in with the other units, such as trees, non-flowering plants, rocks and soil.

Resources Frisbee or paper plates
Postcards or similar cut out to make picture frames
Postcards or similar with a band of double sided tape across the centre
Metre lengths of string
Blindfolds and string for string trail
Collections of twigs, stones, plants
Paper, soft pencils or charcoal
Paints for posters

Time This could be taken as a whole day activity

Method:

- 1 In the classroom the children need to be introduced to this study, in order to think about the environment, both at their school and at Red Ridge.
- 2 Take the children out of doors and begin by playing the game COLOURS. This activity encourages the children to notice the variety of colours in the environment. You can introduce it, if appropriate, with an imaginative story explaining how a rainbow once fell to Earth, shattering and scattering its pieces far and wide. The children's task is to find the chips and reassemble the rainbow. Pair the children and issue pieces of card, about postcard size, across the centre of which there is a strip of double-sided tape.

The children collect tiny pieces of natural colour - a common leaf, a blade of grass, earth, weeds, flowers and so on. (Ask the children not to pick protected wild flowers). When they have a collection, they tear tiny pieces off and stick them onto the tape, changing the colours (rainbow style) as they cross the card.

The different seasonal colours make natural variations possible.

- 3 The second game to be played is ENVIRONMENTAL TREASURES. Bring the children together and arrange into groups of eight to ten. They number themselves and number one throws a Frisbee (or paper plate) across open ground. Number two lifts the Frisbee/plate and finds a natural 'treasure'. Number two throws the Frisbee and number three finds a different treasure. This continues until the last child throws for number one. All the children bring their treasures together and explain why they are precious, such as:

'My blade of grass is precious because it is one of the millions on this field and without them this field would be muddy and brown.'

This works well at any time of year.

- 4 Now split the children into pairs again. One is blindfolded and their partner walks them around to disorientate them and then leads them to a tree. (Watch for low branches; emphasise responsibility for each other).

The blindfolded child can use any sense except sight - to identify and recognise the tree as special.

Where are the branches?

What shape are they?

How do they grow from the trunk?

What does the bark feel like?

Does it have a smell?

Touch the leaves (if any)

What do they feel like?

Can you feel their shape?

Do they have a smell?

Listen to the tree

Does it make any sounds?

Do the branches creak?

What does the trunk sound like as you draw your fingers across it?

Now the blindfolded child is led away from the tree and the blindfold is removed. Now the child has to find 'their tree' using their eyes.

Do you recognise the shape, the smell, the feel? If there is time, the second child in the pair is blindfolded and finds a different tree.

- 5 Draw the children together to discuss their observations after playing these three games.
- 6 Prepare a string trail by loosely knotting a string at child's waist height from tree to tree in a small area, or use a couple of posts if you choose to do this in an open area. Make sure that none of the string runs under low hanging branches. It can help to tie a knot or a PE band to the string just before an obstruction.
- 7 Whilst the children are waiting to take their turn on the string trail, provide the children with cardboard frames of postcard size, drawing papers, soft pencils or charcoal.

Use the frame to enclose something you wish to draw - whether it is a view, a tree or a tiny blade of grass. The frame delineates it, makes composition possible and focuses attention on the object.

Distant or close-up use is possible. The frame can be held by a partner or pinned to an upright or simply laid on the ground.

If the weather is poor, the frames can be used from any window - hand-held or lightly taped to the glass.

- 8 The children then work in pairs again. One child, who is blindfolded, travels along the string trail, following the string and negotiating the obstructions. They can be asked to remember, say the order of the trail, or to collect things that you have put out, as they go. Their partner may help them to carry these things once they are collected and to ensure that they are safe.

This activity will encourage children to use their senses, other than sight, to become aware of their environment and surroundings and to build confidence in themselves and the planning of others.

Do not use this activity with a whole-class, as it is time-consuming.

- 9 If it is wet, a string trail can be rehearsed indoors. It can add an extra dimension, to tie the string around tables, chairs, apparatus, etc. The children climb through and round the obstacles with directions from their partner.

A variation is to tie simple natural objects to the string at intervals, a knot in the string warns the children that something is ahead of them. Try branches, feathers, pine cones, etc.

- 10 The children can make a mini-environment. They each take a metre of string, tied in a loop. They put it around a small area of ground and this becomes their nature reserve. They can put inanimate objects in it, such as twigs, stones; and they can make paths for miniature visitors.

Groups of children share their reserves, describing the contents to each other.

This activity helps children to become aware of the beauty of a small area.

- 11 Return to the classroom and ask the children to work in pairs or small groups to compile a list of the things about the environment around Red Ridge.

- List the dangers to this area;
- List all the ways that we can help to protect Red Ridge.

Discuss the findings as a whole group. Now ask the children to consider how they can encourage people to protect the Red Ridge area. Ask each pair to design a poster.

National Curriculum References

Science	AT1	1a, b, c 2a, b, c 3b, c, d, e
	AT2	3a 5a, b
Geography		1a, b 2a, b, c 10b

Extension Activities

- 1 Ask the children to work in groups to design a nature reserve.
- 2 Ask the children to design a garden, playground, or an improvement to the school. This should be related to real life and involve the ideas about conservation that they have experienced in this unit.

Alternative Activity

- 1 Take a metre of string and a long strip of paper. Lay the metre of string across the ground, at right angles, to a wall, hedge or fence.

Lay the paper strip next to it and carefully draw everything that touches the string - every plant twig or stone.

What do you notice?

Are both ends of your picture the same?

What are the differences?

Why is this?

What grows best in the shade of the wall/fence/hedge?

What grows best in the open?

This activity helps to show that even the smallest environment can vary. What grows close against the base of a wall, hedge or fence is different from what grows even a few centimetres away from it. Such variations can be seen in every environment, on large and small scales.