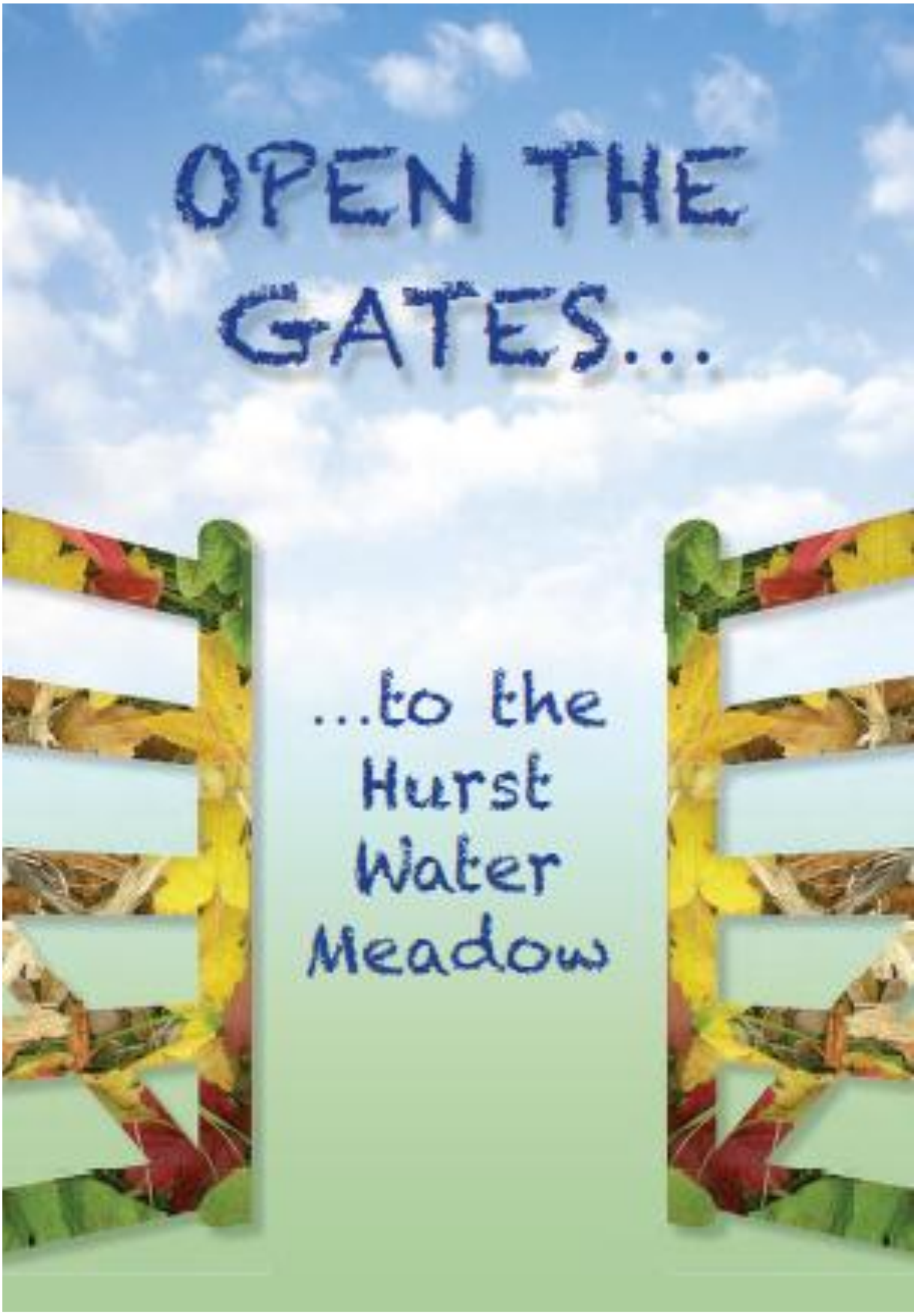

OPEN THE GATES...
...to the Hurst Water Meadow

Learning outside the classroom

'An increasing number of parents and ... schools are realizing the importance and the magic of providing hands-on, intimate contact between children and nature as a larger part of a child's education.'

(Richard Louv, Last Child in the Woods)

There is increasing evidence of the benefits of learning outside the classroom in raising standards and improving pupils' physical health, personal and social development and behaviour. Oxfordshire is a county which has a strong tradition of outdoor education and learning; the Hurst Water Meadow is an ideal 'outdoor classroom' for schools to provide richer learning opportunities for children and young people.

The Hurst Water Meadow Trust is a registered charity that owns and manages two meadows on behalf of local people.

The Hurst Water Meadow in Dorchester-on-Thames is in fact an island, between the River Thame and the Overy mill-stream, popular with families, fishermen and dog walkers. Because it floods once or twice a year, the meadow has an abundance of habitats for numerous plants and animals. It is a picturesque site with a backdrop of Dorchester Abbey and the Wittenham Clumps making it an ideal place for groups to visit as part of a whole day of exploration in the local area.

Contact details:

The Hurst Water Meadow Trust
Hon. Secretary: David Wilkinson
Please email in the first instance to: hurstwatermt@gmail.com
http://www.hurst-water-meadow.org.uk

Photographs on pages 9,14 and 16 by kind permission of LEAF

Making it count

Some of the activities require little preparation and few resources; others are more complicated, and you will need time to prepare. However, all activities will have natural links to your curriculum.

These activities allow all children to engage with the natural environment and enhance their learning through hands-on experiences.

Hurst Water Meadow Trust Education Team

It is always wise to try the activities out first and have a spare one in reserve.

Stop, look and listen

These activities are suitable for all school ages and are designed to encourage full use of all the senses including common sense.

Colour and collecting strips

You will need

- Double sided sticky tape
- Card cut into strips wide enough for the tape
- One card strip per child



This activity can be done throughout the year but when there is a rich selection of wildflowers, grasses and coloured leaves the results are more spectacular. It is a simple but effective activity requiring little preparation and time, but it encourages children to look closely at the world around them: noticing the variety of plants leaves and flowers.

Whilst doing this the children will notice all the wildlife flying, creeping and crawling in different habitats.

Suggested extended learning

- Mixing paints to match the natural colours
- Descriptive language for colours
- Making paint from natural materials e.g. mud, berries and flowers
- How animals use colour for camouflage

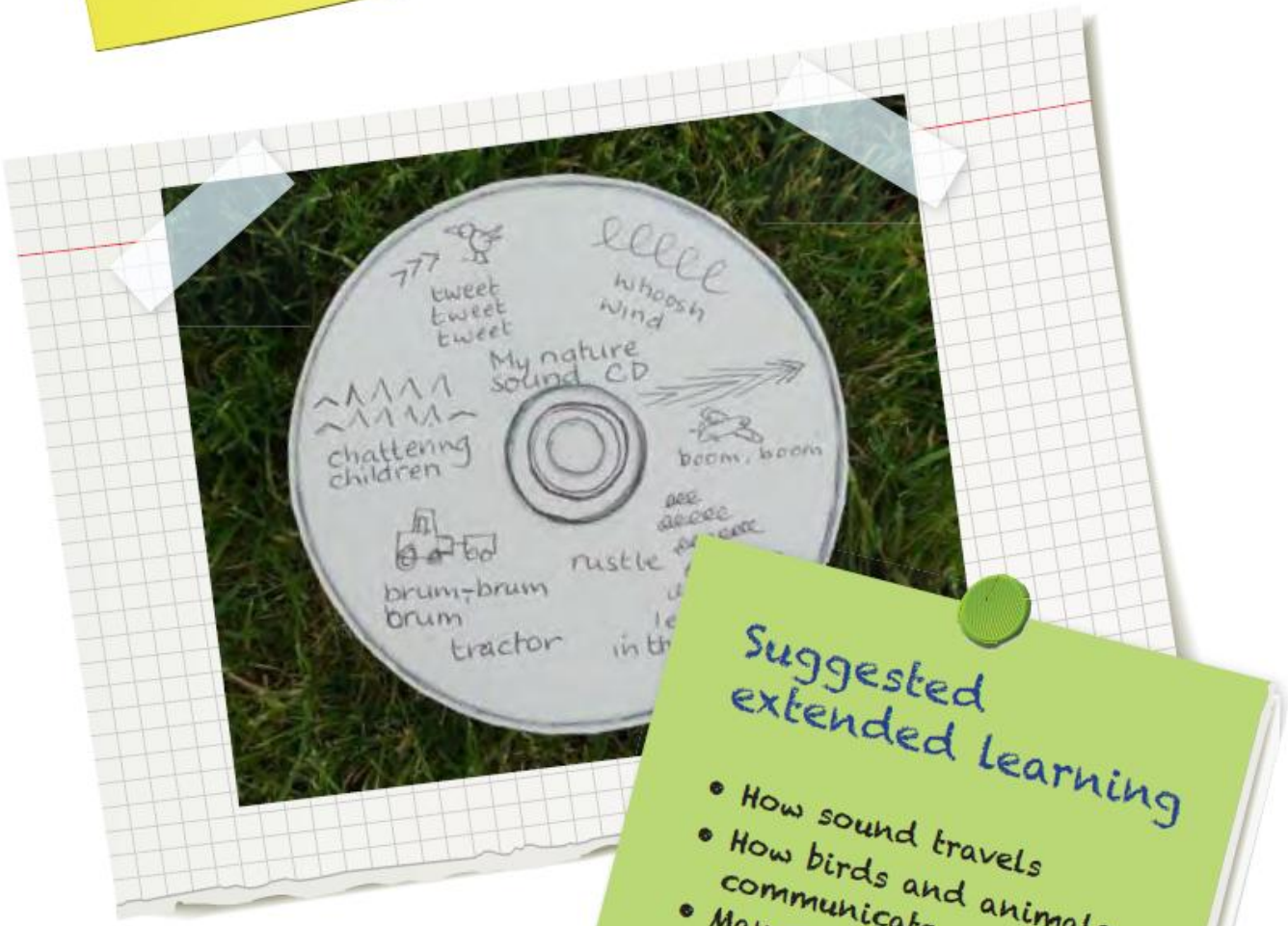
Stop, Look and Listen

Capture the sounds

You will need
- Photocopied image of a CD on stiff card
- Pencils

Explain to the children that they are going to make a recording of the natural sounds they can hear on the card CD.

Ask the children to find a quiet spot away from each other (but within your sight!). Using the pencil they can either write what is making the sound, e.g. bird singing, leaves rustling, or use symbols to represent the sound as in the diagram.



Suggested extended learning

- How sound travels
- How birds and animals communicate
- Man-made and natural sounds
- Communicating through sign language
- Making instruments from natural materials

The countryside becomes a cocktail cabinet.

After putting a splash of magic potion (which of course exaggerates the natural aromas!) into the plastic cup, ask the children to collect small pieces of vegetation to add to the potion. Use the stick to crush and stir the potion releasing the smells, which may be nice or nasty depending on what they find.

At the end, gather the children into a circle and swap cups. The children can make up names for their mix, e.g. 'Hurst Hullabaloo'.

Whiff and pong

You will need

- Plastic cups
- Magic potion (water with food colouring)
- A 'cocktail stick' collected from the surrounding area



Suggested extended learning

- Food from the wild
- Animal scenting and marking
- Scent poems

Stop, look and listen

Prickly or tickly

You will need

- Egg boxes (for 6 eggs), painted, preferably using acrylic paint
- Cards with 'touch' words, e.g. rough, smooth, hard, soft

Put the children into groups and give each group an egg box. Depending on the age of your group, either give them cards with words on or whisper the words to them. Reiterate that they should not tell the other children their word; it must be a secret.

The children should then collect objects that feel like the word you gave them, e.g. a smooth pebble, a prickly leaf or a soft seed. When their boxes are full gather the group and ask the children to swap boxes and guess what word best describes the objects.



Suggested extended learning

- Create a display of opposites
- Write a story which includes the different objects
- Make your own feely boxes
- Kim's game

Natural art

Suitable for children of all ages.

Natural artists

You will need

- Secateurs
- Natural string or wool
- Examples of Environmental Art to show the group
- Camera for recording



Begin by showing the group examples of work from artists such as Andy Goldsworthy.

Get them to start thinking about how the environment makes them feel. Would sculptures improve the Hurst for people or not? What type of sculpture would fit in best with the surroundings?

Explain to them that they are to collect materials to create their own sculpture, and ask them to be imaginative in their choice of objects. Once the sculptures are complete get them to comment on their own work; photograph them as a record.
In the examples here, the leaves on the log have been fixed using hawthorn thorns.

Suggested extended learning

- Fibonacci sequence and patterns in nature
- Why do leaves change colour?

Compare and Contrast

A closer look at the diverse habitats of the Hurst.

To get the most out of your visit divide the class into half. One half investigates the meadow whilst the other half river dips. Then swap over.

Beating and sweeping

You will need

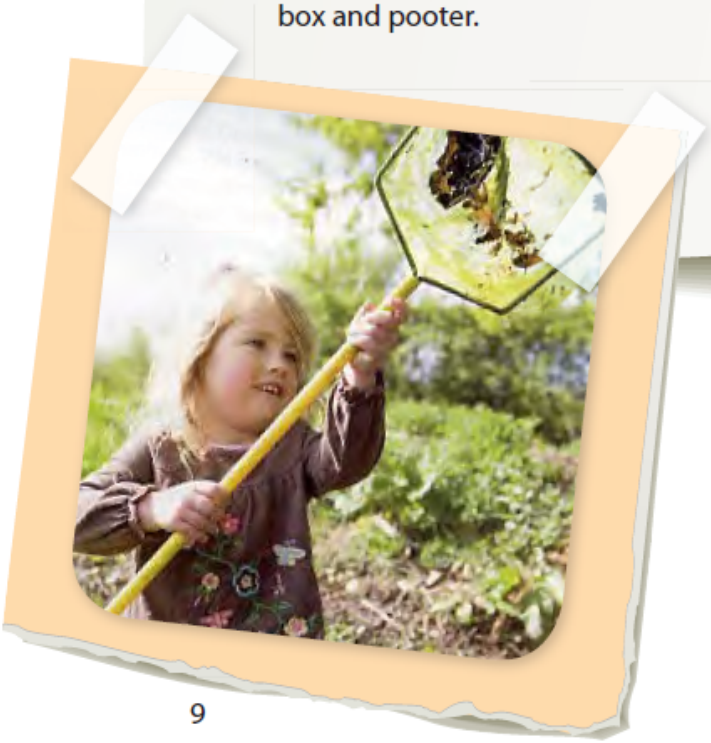
- Nets for grass sweeping (can be borrowed from the Hurst Water Meadow Trust)
- White trays or plastic boxes
- Bug boxes
- Pooters (specialist equipment for sucking up insects safely)
- White sheets
- Short wooden sticks
- Identification sheets
- A recording method

Sweeping

Begin by explaining how to use the net, best done in longish grass and dry weather. Move the net in a figure -of -eight motion through the grass. Do this several times. Look into the net to see what has been caught. Carefully using the pooter or bug box remove the creatures for closer examination. Do this in different parts of the meadow, noting variety, colour, shape and size.

The children can record using various methods. Example sheets can be found on page 17. Divide your class into small groups, each group with a net, tray, bug box and pooter.

Beating is a method of collecting minibeasts from hedgerows and trees. Ask the children to hold the white sheet under the branches of a tree and gently hit or shake the branch. Minibeasts will fall onto the sheet and the children will be able to collect them using the same methods as before. (If they are quick enough.)



Compare and contrast

The stretch of the River Thame that runs through the Hurst has several places suitable for dipping.

River dipping

You will need

- Long-handled nets (can be borrowed from the Hurst Water Meadow Trust)
- Deep white trays
- Plastic spoons
- Identification sheets
- Your chosen method of recording
- Magnifying glasses/ hand lenses



Before you start dipping fill the trays with water. Dip close to the bank and after each 'dip' empty the net by turning it inside out into the white tray. Alternatively remove creatures with a plastic spoon.

After a number of dips encourage the children to look at the variety of their catch including the plants.

Return wildlife as quickly as possible to the river.
Record in your chosen way.

Suggested extended learning

Compare Hurst habitats with

- School grounds
- Different locality/country, e.g. safari on the Hurst, safari in Africa

Also:

- Look at how animals have adapted
- Create your own river in your grounds
- Make giant models of the creatures found (look at the work of Sally Matthews)
- Discuss the importance of the Hurst for wildlife diversity

Plantastic!

Discovering more about plants.

Hoopla

You will need

- 1 hoop between 3 children
- Identification sheets
- A method of recording

This is a very simple way of sampling. It will demonstrate the variety of plant life and the effect of human activity. There will be fewer plant species on or near the path. Can the children work out why this is?

Encourage the children to throw the hoop to land into three different areas, e.g. long grass, short grass and on a path.

Each time it lands count the different shaped leaves and flowers. Can they identify any of the plants?

One way of recording is to stick each different shaped leaf onto a piece of card with double-sided sticky tape. If the children record by drawing the different shaped leaves this could be used as the basis of art work.



Plant Olympics

You will need
- A recording sheet (example on page 13)
- Rulers/tape measures

A simple activity for small groups or to encourage independent learning. It can lead to further investigation about plant adaptation. The children will be looking for the tallest plant, the smallest plant, the smoothest leaf, the smelliest leaf, etc. This is an opportunity to discover the whole of the Hurst and really encourage children to engage with the outdoor environment. Obviously the tallest plant will be a tree.

tallest

One way to measure the height of a tree is to walk away from the tree but at regular intervals bend forward and look through your legs back to the tree. Stop when you are at a point where you can just see the top of the tree and measure the distance along the ground from the tree to you. This is roughly equal to the tree's height. This is great fun and allows for some great photo opportunities.

smelliest

roughest

This relies on trigonometry (and suppleness!) and the fact that if you view a tree top at a 45 degree angle then the height of the tree is equivalent to the distance that you are from that tree.

smoothest

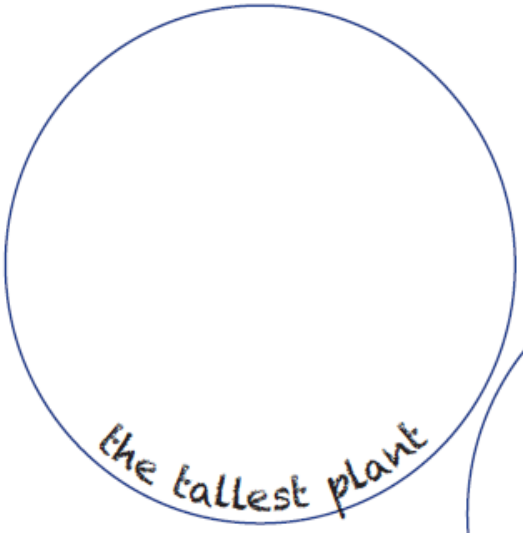
smallest

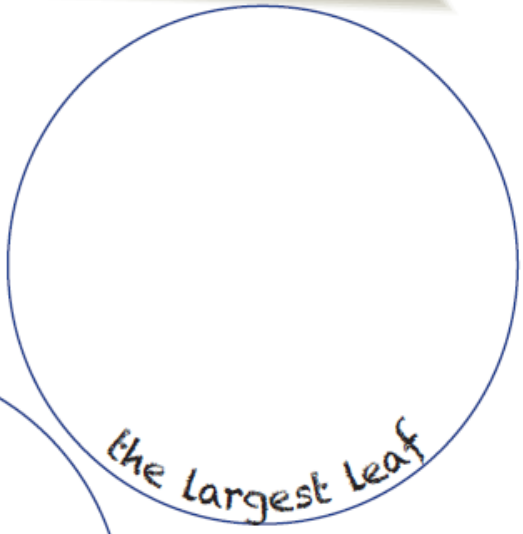
Suggested extended learning

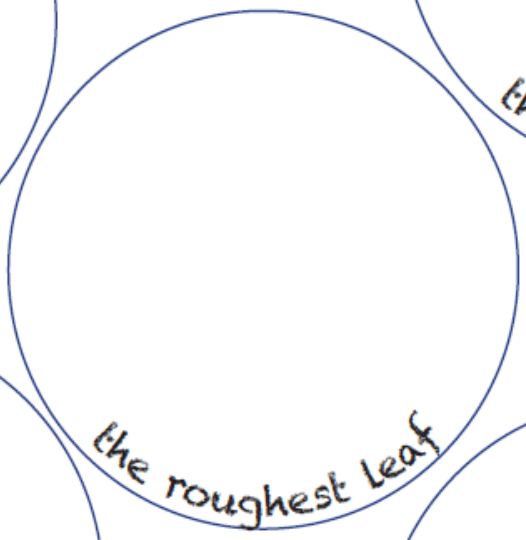
- Create an animal Olympic sheet
- Produce a booklet about the trees in your school grounds
- Research useful plants

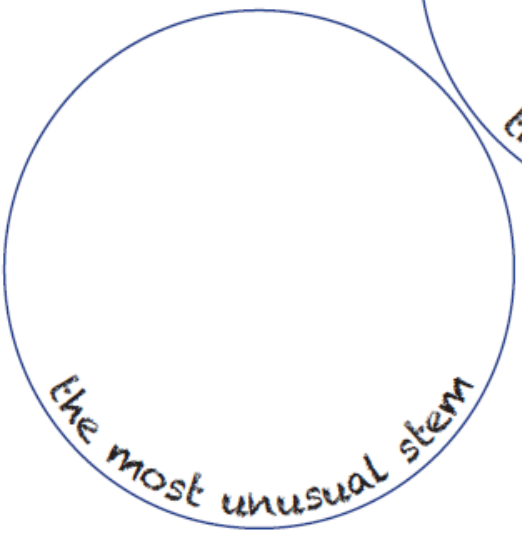
Plant Olympics

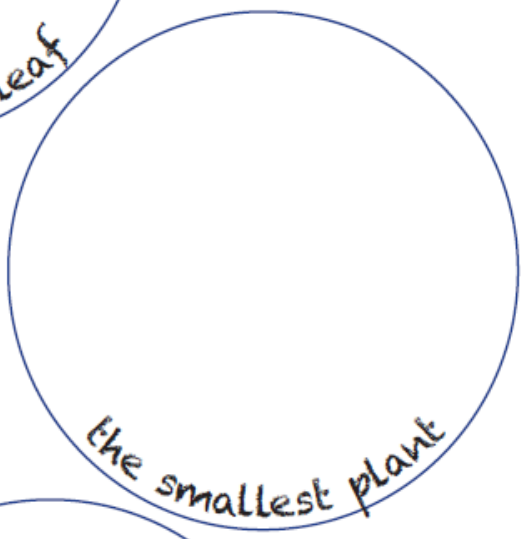
Use the circles to draw in…

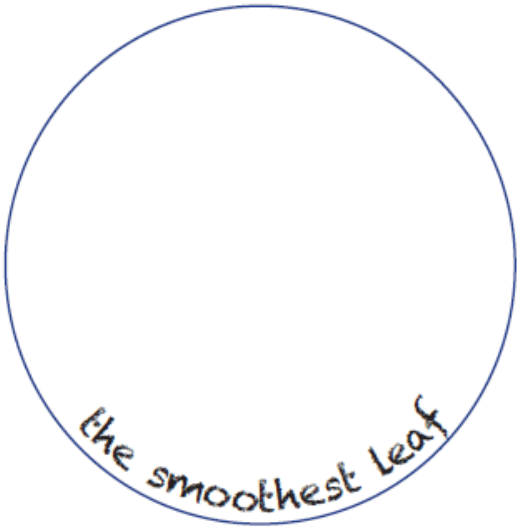


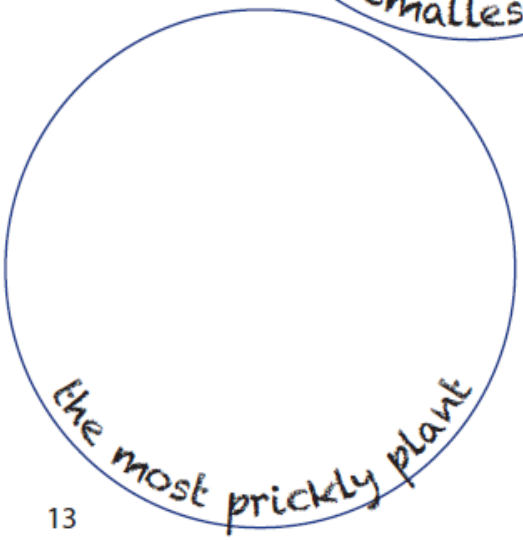












Look where I've been

A different way to map your journey around the Hurst.

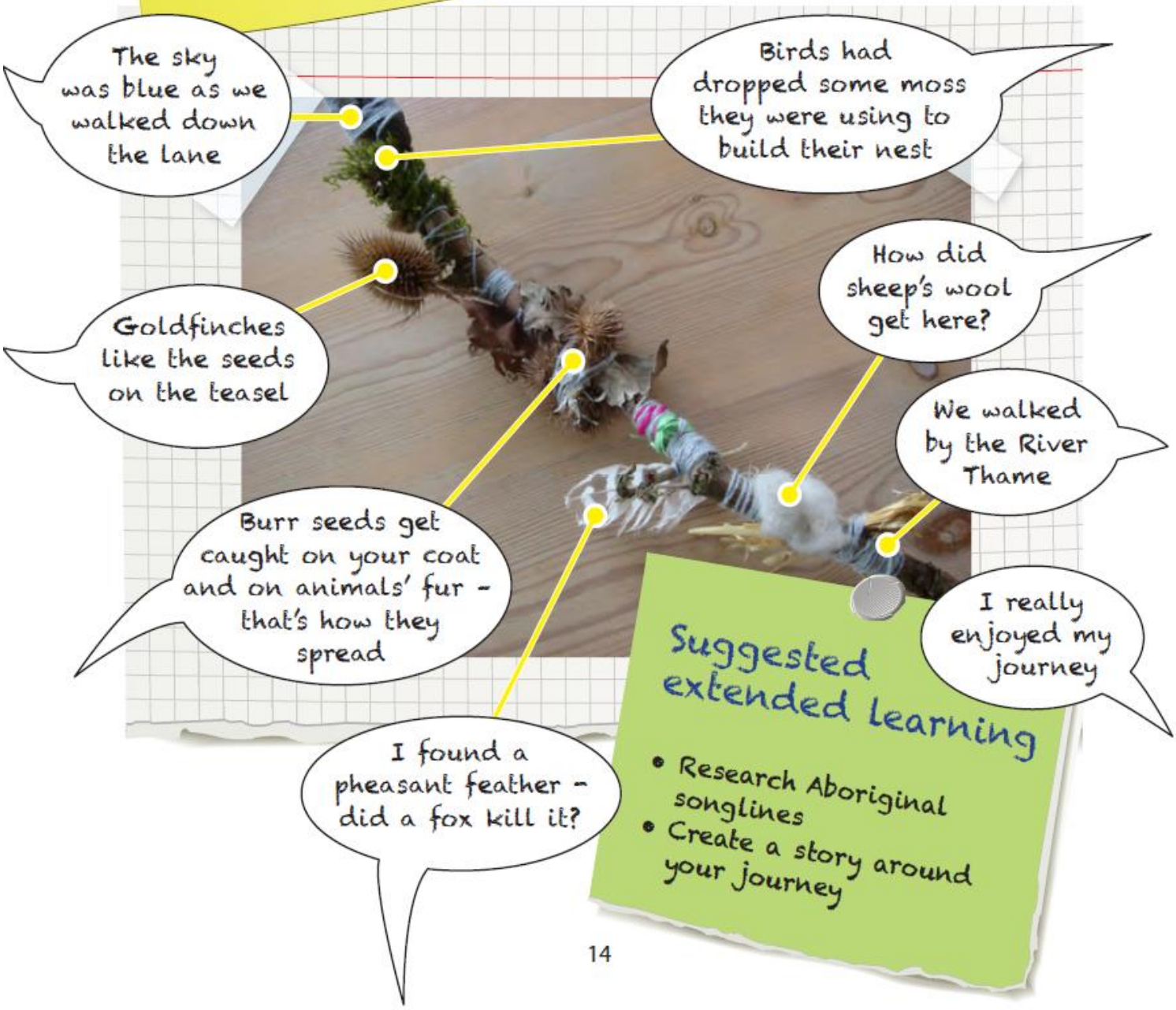
Journey sticks

You will need

- Sticks - collected from the Hurst
- Pieces of different coloured wool

As you walk around the Hurst, record your journey by tying objects to the stick to remind you where you have been, e.g. grass to represent the meadow, a leaf to symbolise a tree, some blue wool to represent the river. They could use wool to express their feelings.

At the end of the journey ask the children to recall their walk to each other using their journey stick.



Suggested extended learning

- Research Aboriginal songlines
- Create a story around your journey

Alphabet scavenger hunt

What can you see in the meadow today?

A .....

B .....

C .....

D .....

E .....

F .....

G .....

H .....

I .....

J .....

K .....

L .....

M .....

N .....

O .....

P .....

Q .....

R .....

S .....

T .....

U .....

V .....

W .....

X .....

Y .....

Z .....

Who eats who?

Activities to introduce children to food chains and webs.

Animal pizzas

You will need

- Either balls of clay or paper plates with double-sided sticky tape
- Cards with names and pictures of British wildlife, e.g. fox, badger, deer, mouse, rabbit



Start by giving each child a ball of clay or paper plate. If using clay, the children will have to squash the ball out into a flat pizza-shaped base. Explain that they will be making a pizza for an animal that lives at the Hurst. At this point you can talk about plant-eating animals (herbivores) and meat-eating animals (carnivores) and those that eat both (omnivores).

Suggested extended learning

- Explore predator-prey relationships
- Animal adaptations
- Design your own animal adapted to live in the Hurst

Hand out an animal card to each child (it is OK to have multiples of the same animal) and ask what type of things their creature will eat. Walk around the Hurst adding food toppings to their pizzas (a feather can represent a bird, etc.). Introduce the concept of food chains by lining the pizzas up together with their animal cards and talk about 'who will eat who'.

Compare and contrast

What colour are the creatures found in the meadow and hedgerows? Colour a square to match the colour of the creature found. Do you notice anything about those creatures in the grass compared to the creatures in the hedgerows?

Animal	Meadow	Hedgerow and under logs
Bug		
Beetle		
Woodlouse		
Butterfly		
Spider		
Earwig		
Snail		
Slug		