

# **Mote Park Nature Trail Activity Pack**



**Key Stage 2**

### **Before you go**

There are seven activities that can be completed along the trail. Each activity should take about 45 minutes to an hour and one can be run independently of each other. The pack has been designed so activities can be selected depending on subjects being studied. All of the activities have sheets of questions/activities and notes for the group leader with suggested extension activities.

### **What to bring**

The equipment required for each activity is listed at the beginning of the leader's notes page. Some just require the worksheet to be printed and photocopied for the whole class and some require more specialist equipment such as nets and binoculars. Medway Valley Countryside Partnership has kits available to borrow. They include enough equipment to carry out activities such as pond dipping, minibeast hunting, tree identification, bird watching and mammal tracking for a class. If you would like to borrow them for your trip to Mote Park please contact Medway Valley Countryside Partnership.

### **What to expect**

The nature trail in Mote Park has been installed and managed so that it is accessible for school groups. A site visit is possible without the need for a member of Mote Park staff to be present as the site is open to the public. Public toilets are available at the start of the trail along with picnic facilities, car parking and a kiosk which serves snacks and drinks during the summer period (no hot food served at kiosk).

If you would like to arrange an accompanied site visit, please contact Maidstone Borough Council Parks department or Medway Valley Countryside Partnership.

### **How the pack works**

The pack is designed so that walks can be self guided around the park. The activities within this pack have been linked as far as possible to National Curriculum targets for Key Stage 2. The curriculum links for the activities are listed at the beginning of the leader's notes and are current to 2013. If you decide that you would like a wildlife expert to lead the group around the trail, please contact Medway Valley Countryside Partnership or Maidstone Borough Council, who can arrange a guided trip for the group. Please note that there will be a charge for this service and costs

will depend on which organisation is available to take the lead. The contact details for each organisation are listed at the end of this section.

**We ask that you book your visit with us by emailing**

**ParksandLeisure@maidstone.gov.uk regardless of weather you are self leading or booking a guide. It is important for us to know who is using this area and when.**

**Health and safety –risk assessment**

It is advised that group leaders complete all appropriate risk assessments before coming on to the site for the activities. A completed risk assessment is available at the end of the pack. This has been completed with the site in mind and includes extra space to add any further considerations of risk you may have. All leaders from Medway Valley Countryside Partnership and Maidstone Borough Council will complete their own risk assessment for the chosen activity. Leaders are first aid trained and have been checked by the Criminal Records Bureau. Certificates can be produced on request.

Please note that the paths are not surfaced around the trail so the site may not be accessible to groups in periods of prolonged wet weather. The site crosses through a wooded area and so may be unsuitable in periods of high winds; if you are unsure please contact Maidstone Borough Council for advice.

**Contact details**

**Medway Valley Countryside Partnership**

3 Lock Cottages, Lock Lane, Sandling, Maidstone, Kent ME14 3AU

Tel: 01622 683695

Email: medway@kent.gov.uk

**Maidstone Borough Council**

Maidstone House, King Street, Maidstone, ME15 6JQ

www.maidstone.gov.uk

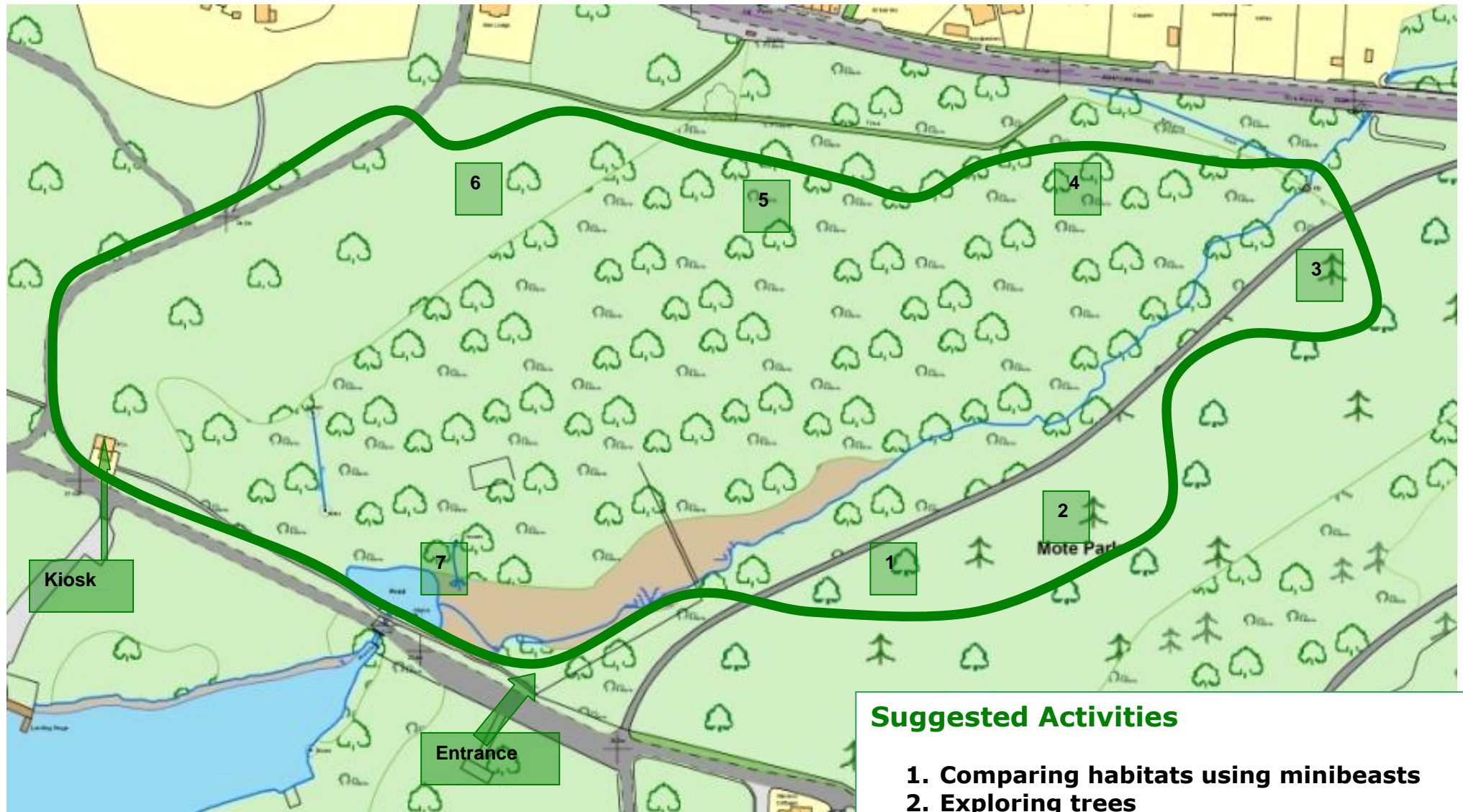
Tel: 01622 602747

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## Nature Trail Map



### Suggested Activities

1. Comparing habitats using minibeasts
2. Exploring trees
3. Birds, survey and life cycles
4. Green plants
5. Habitats and keys
6. Mammals, habitats and adaptation
7. Food chains and webs with pond dipping



## Activity One: Minibeast hunt, experiment to compare habitats

What creatures do you think you will find in the grassland?

--

What creatures do you think you will find in the trees?

--

Do you think you will find more animals in the trees or in the grass? Why?

--

How many creatures did you find in the grass? Identify and list them below:


Select one creature

How has it adapted to living in the grass?

How many creatures did you find in the trees? List the creatures you found in the trees.


Select one creature

How are they adapted to living in the trees?

--

Where did you find the most animals?

--

Why do you think this is?

--

Did you find what you expected to?

--

What was the same and what was different?

**Same**

--

**Different**

--



## Activity One: Leader's notes

### Curriculum links

Sc1 Scientific enquiry

Sc2 Life Processes and living things

### Equipment list

Bug magnifier pots

Clean white sheet

Sweep nets

Invertebrate identification sheet

### Aims

To think about two habitats and explain what they expect to find and why; to carry out two surveys in different habitats and compare the results from each; to think about how the creatures found have adapted to where they are living and why. The activity is designed so that the class can plan, investigate and evaluate a small experiment comparing two habitats.

### How to do the survey

#### Grassland survey

Using sweep nets and bug pots, gently sweep in the grass with the nets and place what has been caught in the pots. This is best done on a sunny, dry day. Try to avoid putting slugs and snails into pots with any other creatures and put the creatures back where they were found. Creatures can be identified using a chart.

#### Tree survey

Place the white sheet below a branch that can be easily reached. The sheet can be held by four volunteers. Shake the branch for about 30 seconds and see what falls out. This experiment works best on native trees as these support a greater variety of species than non native or ornamental species. Creatures found can be identified using a chart.

You will be comparing the creatures found in the grassland and in the trees. Using this activity to make a direct comparison between two habitats, introduce the concept of habitats and discuss what habitats can be seen from where they are standing.

**What creatures do you think you will find in the grass?**

Ask the class to think about the creatures that they would find in this habitat. Invite them to think about the insects and invertebrates that would live there. Ask them why they think they would be there and what the creatures would eat etc.

**What creatures do you think you will find in the trees?**

Ask the class to think about the creatures that they would find in this habitat. Ask them to think about the insects and invertebrates that would live there. Ask why they think they would be there, what the creatures would eat, how they get into the trees, what colour they might be and why.

**Do you expect to find more animals in the trees or in the grass?**

**Why?**

Introduce the concept of variety of species in each habitat. Would there be lots of one type of creature or a large variety of creatures in each area? What could cause and have an affect on this variety?

**How many creatures did you find in the grass? Identify and list them below.**

Use the identification sheets to help identify the creatures. This does not have to be down to species level, just family - for example, grasshopper, cricket and beetle.

**Select one creature**

Working in pairs the class could choose one of the creatures they have caught; if possible it would be best for each pair to look at different creatures and then work through the following questions.

**How has it adapted to living in the grass?**

Has it got long legs, sticky feet, powerful jaws or sucking mouthparts? What colour is it (introducing the concept of camouflage)?

**How many creatures did you find in the trees? List the creatures you found in the trees.**

Repeat the same process for the trees as was used for the grasslands.

**Select one creature****How has it adapted to living in the trees?**

Has it got long legs, sticky feet, powerful jaws or sucking mouthparts? What colour is it? (Introducing the concept of camouflage)

**Where did you find the most animals?**

A direct comparison of the two habitats can be made. Where were the most found? You could also introduce variety here. Which habitat had the most variety of insects? This may not be the same one that had the highest number of insects.

**Why do you think this is?**

Are there more places to hide? Is there more food available? Is there a larger diversity of plant species in the grass than in the trees?

**Did you find what you expected to?**

So the class can reflect on what they expected to happen before the experiment started, ask if this is what actually happened.

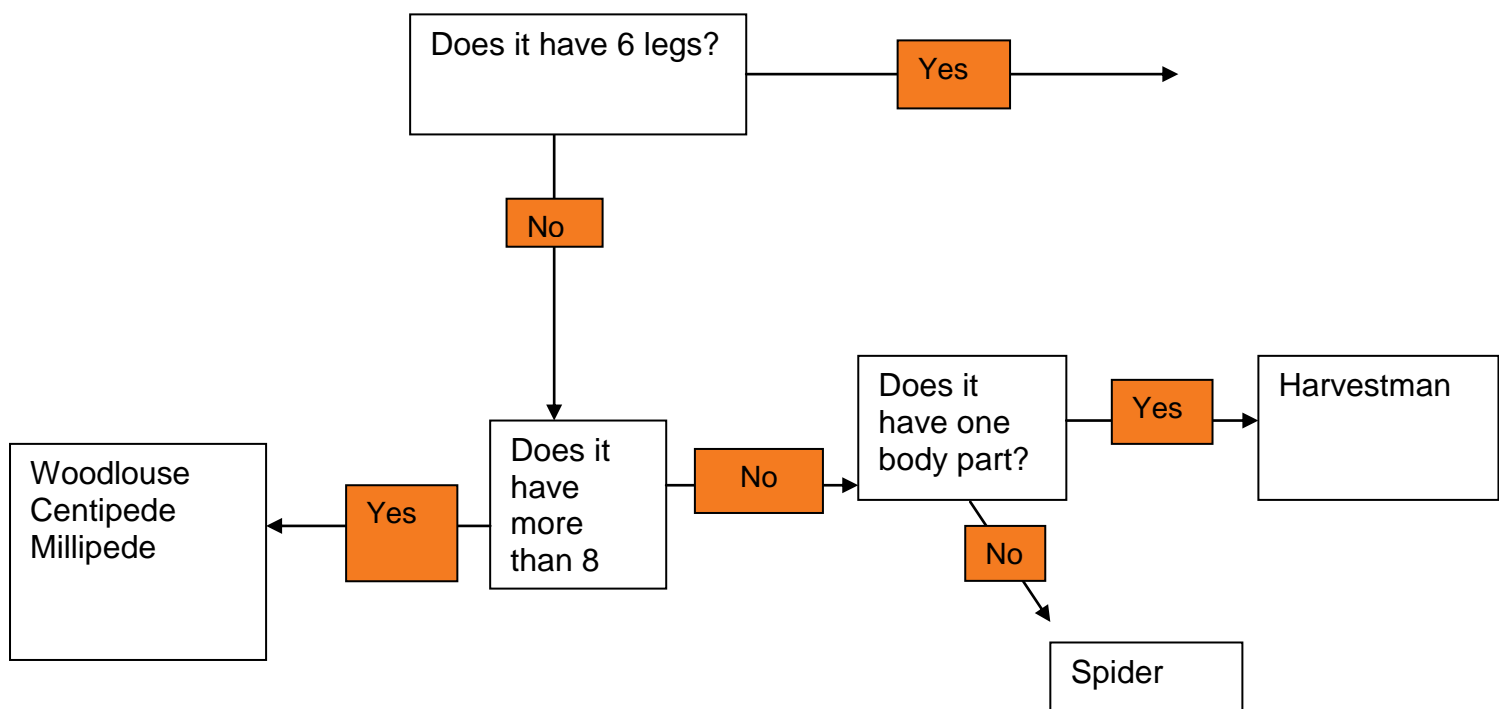
**What was the same or different about what you expected and what you found?**

Qualify the differences. If numbers can be used they can then be compared back in class using maths including graphs and pie charts to illustrate the changes.

## Classroom activities

Create graphs and pie charts to illustrate:

- What was expected
- What was found
- The number of creatures found in the grass
- The variety of creatures found in the grass
- The number of creatures found in the trees
- The variety of creatures found in the trees
- Create a key to help with identifying the invertebrates  
(complete the one started for you below)



## Activity Two: Meadows and meadow survey

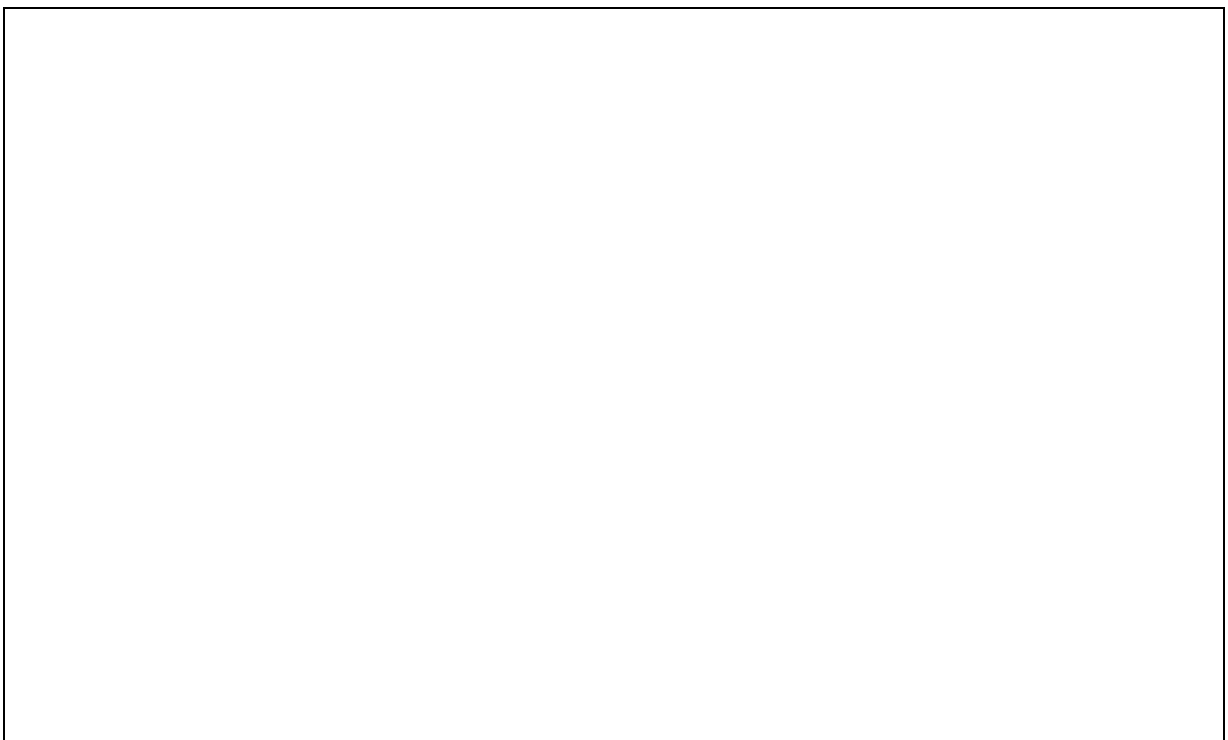
How many different types of plant can you find in your quadrat?



Identify the plants and list them below



Draw one of the plants in the space below and label the parts of the plants.





## Activity Two: Leader's notes

### Curriculum links

Sc2 Life processes and living things

### Equipment list

Quadrat

Flower ID chart

### Aims

To survey a small area of grassland for flowering plants.

**How many different types of plant can you find in your quadrat?**

**Identify the plants and list them below.**

Identify using the charts provided.

**Draw one of the plants in the space below and label the parts of the plants.**

Include: petals, stems, leaves, stamen and anthers.

## Activity Three: Birds



Spend some time looking and listening for birds in this area.

What birds did you see/hear? If you see a bird, fill in as much of the survey sheet below as you can.

Feature	Details
Size (small, medium, large)	
Body shape	
Shape of tail	
Size and colour of beak	
Pattern and colour	
What is the bird doing (eating, flying)	
In words describe the song if you can hear it (squawk, tweet, melodic)	

Use the identification sheet to see if you can identify the bird you have been looking at.

### **Birdie Quiz!**

Here are six pieces of writing about the birds you may have seen during your study. Match the descriptions with the bird names below.

1. I am very small. I have a blue head. I eat seeds and caterpillars. I often visit bird tables.

I am a \_ \_ \_ \_ \_

2. I am small. I have a red breast. I eat mini-beasts. I sing all year round.

I am a \_ \_ \_ \_ \_

3. I am medium sized. I have a pink breast and blue wings. I eat acorns in winter. In springtime I eat other birds' eggs and chicks.

I am a \_ \_ \_

4. I am medium sized. I have a spotty chest. I mostly eat worms, but also berries in winter. My eyes are at the side of my head so I can look out for danger.

I am a \_ \_ \_ \_ \_

5. I am a big bird. I have special eyes and ears. I have very soft feathers so that I can fly silently. I hunt mice at night.

I am an \_ \_ \_

6. I am a very big bird. I have sharp claws and a hooked beak. I fly high in the air. My eyes are like binoculars. I can see things from high in the sky. I hunt rabbits but I mostly eat dead things.

I am a \_ \_ \_ \_ \_

## Activity Three: Leader's notes

### Curriculum links

Sc2 Life processes and living things (4b,5b)

### Equipment list

Binoculars

### Aims

To observe the birds that are present along the nature trail, to look at the birds and listen to them. When possible, to carry out a bird survey and write down observations about the birds seen. This can be done in two habitats, looking for songbirds on the edge of the woodland and water birds over the lake.

Spend some time looking and listening for birds in this area.

**What birds did you see/hear? If you see birds, fill in as much of the survey sheet below as you can.**

This is a simple survey exercise to enable the class to concentrate on looking at one particular bird and noting down the features. This can later be used in class to see what birds are in the playground. By conducting a simple survey or conducting a long term survey, the birds in the school grounds could be identified and monitored.

This study could be extended by making bird nest boxes and feeders or feeding the birds in the school grounds to encourage numbers.

Here are six pieces of writing about the birds you may have seen during your study. Match the descriptions with the bird names below.

1. I am very small. I have a blue head. I eat seeds and caterpillars. I often visit bird tables.

I am a Bluetit

2. I am small. I have a red breast. I eat mini-beasts. I sing all year round.

I am a Robin

3. I am medium sized. I have a pink breast and blue wings. I eat acorns in winter. In springtime I eat other birds' eggs and chicks.

I am a Jay

4. I am medium sized. I have a spotty chest. I mostly eat worms, but also berries in winter. My eyes are at the side of my head so I can look out for danger.

I am a Thrush

5. I am a big bird. I have special eyes and ears. I have very soft feathers so that I can fly silently. I hunt mice at night.

I am an owl

6. I am a very big bird. I have sharp claws and a hooked beak. I fly high in the air. My eyes are like binoculars. I can see things from high in the sky. I hunt rabbits but I mostly eat dead things.

I am a Kestrel

### **Classroom activities**

- Carry out surveys of birds in the school grounds
- Encourage the class to feed the birds
- Construct bird tables, feeders and nesting boxes and encourage the class to monitor them and note the differences in numbers of birds at different times of the year.



## Activity Four: Green plants

Look at a plant in this area - you do not need to pick it, just look at it.

Count how many flowers of different colours you can see and write the numbers of each below

**Red**

**Pink**

**White**

**Yellow**

**Blue**

**Purple**

Plants reproduce by passing pollen from one plant to another; this is called pollination. The pollen is usually yellow and contained in the flowering part of the plant.

Can you see pollen on the flower?

Where is it?



Flowers are pollinated in different ways; which ways do you think flowers can be pollinated?



Some plants have very pretty flowers; why do you think this is? what are they trying to attract?



Draw the plant you are looking at and label the following parts:  
Petals, pollen, stem, leaves, stamen, and stigma.



## Activity Four: Leader's notes

### Curriculum links

Sc2 Life processes and living things

### Equipment list

Magnifying Glass

### Aims

To look at green plants in the field and to recognise and identify the reproductive system of a flowering plant, understanding pollination and the different ways plants pollinate using observations in the field and games.

### Organise the group to play the pollination game

This can be played before the activity in the field, at school as preparation for the trip or afterwards back at school. It will help to illustrate the pollination of a plant.

How to play the pollination game

Equipment/roles needed

- Petals - 2 sets of 4 shaped and coloured petals made from stiff card (about 50 cm or more in length). Each petal should be tapered at the base, so that a child can hold it up.
- Socks - 4 pairs (or more) of long socks. These are worn on the hands of the children representing the stamens (one pair of socks per child and at least 2 children per flower)
- Ping pong balls - 40 or more ping-pong balls with Velcro strips on them (to stick to the socks). These represent the 'pollen grains'. You can use rolled-up sticky tape, but it is not quite so effective.
- 2 woolly 'bobble' hats, worn by the two children who represent the stigmas.
- Cans or cartons of drink, one for each flower, to represent the nectar.

- 'Pollinator'- A bee costume could be as simple as some wire for antennae, a stripy sweater and some cardboard wings. You could also make a butterfly costume.
- Drinking straws: each pollinator should have a drinking straw, to represent the insect's mouthparts.

Some of the equipment listed here is desirable rather than essential.

However, the more visual the game, the more the children become involved and interested. Part of the exercise can be to ask children what parts of the plant they think may be necessary for the process and involve the class in designing and making the items required.

### **How to play**

Two sets of five children each hold up a petal and each group forms the outermost circle of each flower.

Children representing stamens should share out the 'pollen grains' evenly between them, sticking them onto their sock-covered hands. They should then stand inside the petal ring and hold up their hands to present the 'pollen'.

Each 'stigma' child stands in the centre of a flower and holds up his/her bobble hat-covered head to receive pollen.

Drink cartons should be put by the feet of the 'petals' . This is where the visiting pollinator might like to come and sip 'nectar'.

The children act out the process of pollination by playing the role of various flower parts or by being the pollinating insect. One child takes the part of the pollinator and 'flies' between two 'flowers', removing pollen from the stamens of one and placing it on the stigma of the other. The pollinator may then transport pollen of the second plant back to the stigma of the first plant, etc.

Encourage the children to discuss what they have just acted out. The process can be developed further by discussing the stages of fertilisation, seed growth and dispersal.

### **Modifications**

Have boys being stamens and girls being stigmas, to emphasise that some parts of the flower are male and some female.

Some types of plants have male-only and female-only flowers. These could also be represented.

Have more than two flowers, so the pollinator has to choose which to visit, based on how pretty the petals are or how tasty the carton of drink ('nectar') is. Allow the 'petals' to call out encouragement then discuss how plants attract the attention of pollinators without being able to shout (e.g. bright colours, sweet scents, and flowers that 'dance' in a breeze).

Some flowers are only pollinated by insects with long tongues (e.g. butterflies). In a game with two 'pollinators', a butterfly and a bee, the 'bee' only has a very short drinking straw, while the 'butterfly' has a long one. The juice carton ('nectar') could be hidden at the centre of the flower with the child who is the 'stigma', who only lets the 'butterfly' with the long straw reach it (and transfer pollen to her head) whilst not letting short-tongue bees near.

### **Life cycle of plants**

Look at a plant in this area; you do not need to pick it, just look at it at this stage.

### **What colour is the plant?**

Recap or introduce the concept of green plants, chlorophyll and photosynthesis.

Plants reproduce by passing pollen from one plant to another - this is called pollination. The pollen is usually yellow and contained in the flowering part of the plant.



**Can you see pollen on the flower?**

**Where is it?**

This will be on the stamen

**Flowers are pollinated in different ways; which ways do you think flowers can be pollinated?**

Bees, wind, people, other animals

**Some plants have very pretty flowers; why do you think this is, what are they trying to attract?**

To attract the bees or butterflies (pollinating insects)

**Draw the plant you are looking at and label the:**

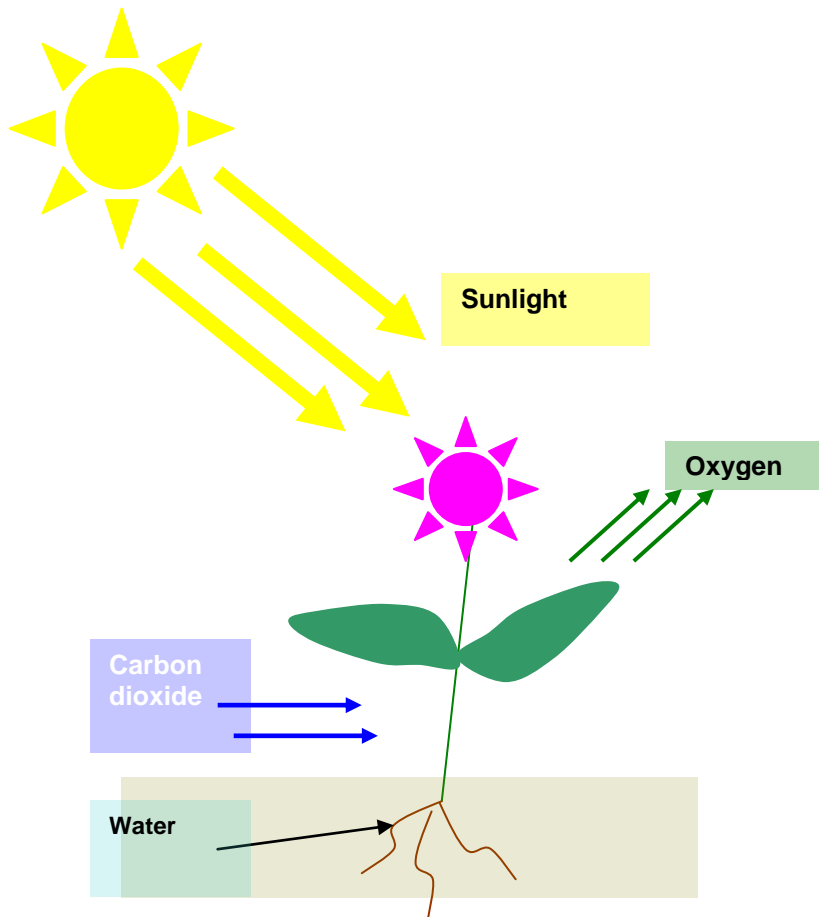
Petals, pollen, stem, leaves, stamen, and stigma.

**Classroom activities**

Look at a real plant close up and dissect the different parts.

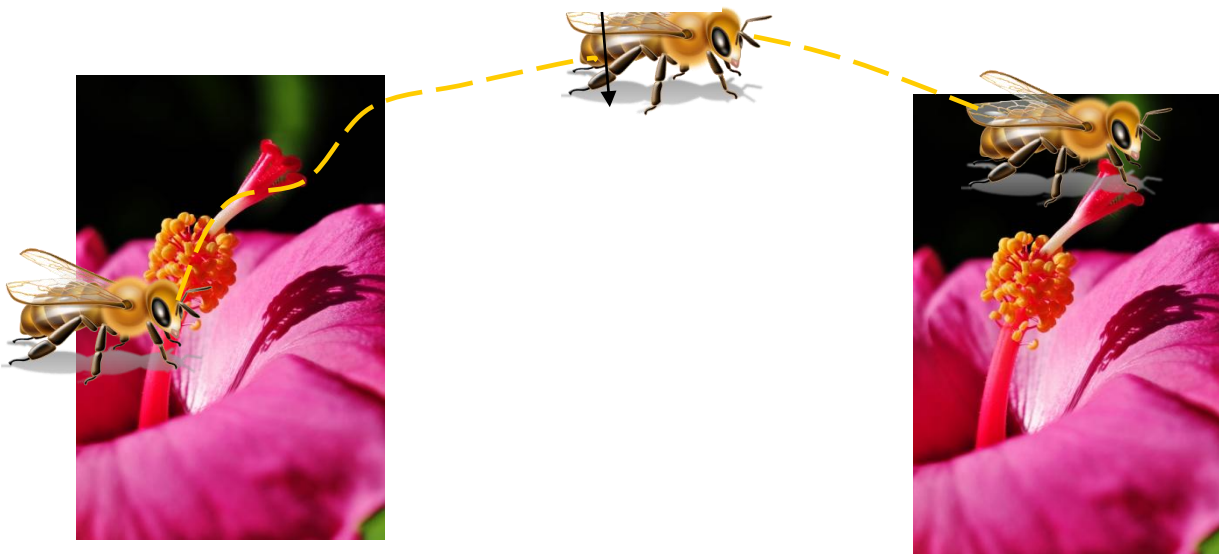
## Further resources

### Diagram of Photosynthesis



### Diagram of pollination

Pollen on bee's knee

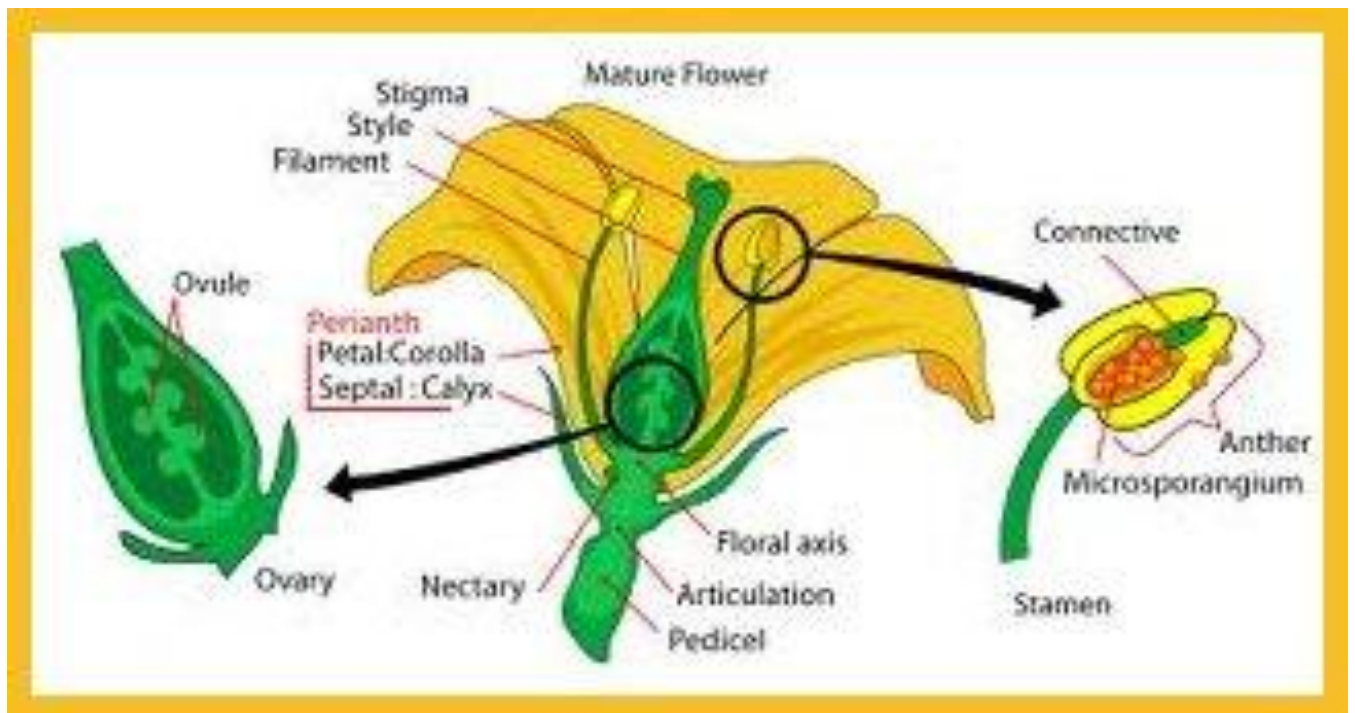


Pollen from the stamen sticks to the bee as it visits the stamen to collect food. The stamen is the boy part of the flower.

Pollen carried by the bee sticks to the pistol of the other plant. The pistol is the girl part of the flower.

The pollen then travels down the pistol and make seeds from which new plants grow,

## Diagram of plant anatomy




## Activity Five: Woodland scavenger hunt



Solve the clues below to discover what object you are looking for. When you have solved the clues, look for the object in the woods.

Riddle	What am I looking for?
<p>My first is in nice but not in rice</p> <p>My second is in cup but not in cap</p> <p>My third is in tear but not in ear</p>	
<p>Solve the anagram. Clue - it is something squirrels might like to eat:</p> <p>NORCA</p>	
<p>My ----- is worse than my bite</p>	
<p>What am I? I am green in the summer and brown in the winter; I produce food for a tree and provide food for insects and birds.</p>	
<p>Bottles, packets, hats and macs can all be made of this.</p>	

<p>I am used by the birds to help them fly, I was used to write with in days gone by. I am light, fluffy and hollow. What am I?</p>	
<p>This green plant that grows on logs and stones in damp places rhymes with Ross.</p> 	
<p>Solve the anagram below. Clue - it is something round and very hard, most commonly found on the beach.</p> <p>TNOES</p>	

**Once you have found all of the objects classify them into the following categories:**

**Part of a Tree**

**No use to nature**

**Soft**

**Round**



## Activity Five: Leader's notes

### Curriculum links


Sc2 Life processes and living things ( 4b,4c)

### Equipment list

### Aims

To work out the riddles and then to find the objects they describe. To classify the objects into type.

Riddle	What am I looking for?
<p>My first is in nice but not in rice</p> <p>My second is in cup but not in cap</p> <p>My third is in tear but not in ear</p>	Nut
<p>Solve the anagram. Clue it is something squirrels might like to eat:</p> <p>NORCA</p>	ACORN
<p>My ----- is worse than my bite</p>	Bark

<p>What am I? I am green in the summer and brown in the winter; I produce food for a tree and provide food for insects and birds.</p>	<p>Leaf</p>
<p>Bottles, packets, hats and macs can all be made of this.</p>	<p>Plastic</p>
<p>I am used by the birds to help them fly, I was used to write with in days gone by. I am light, fluffy and hollow. What am I?</p>	<p>Feather</p>
<p>This green plant that grows on logs and stone in damp places rhymes with Ross.</p> 	<p>Moss</p>
<p>Solve the anagram below. Clue - it is something round and very hard most commonly found on the beach.</p> <p>TNOES</p>	<p>Stone</p>

This is a relatively simple exercise in classification. Separate the class into two ask one half to work out what the riddles are referring to and then ask the other half to find the objects around the trail. Collectively, the class can then classify the objects into the categories below:

Tree: *Nut, acorn, bark, leaf, moss*

No use to nature: *Plastic*

Soft: *Feather, moss*

Round: *Stone, nut, acorn*

Some items can be classified into more than one category.

Facts about decomposition rate of litter:

A number of litter items are listed below along with the rate at which they decompose. This is a good way to talk about littering and why litter should be placed in a bin or composted to prevent it from being left in the woodland

- Paper aeroplane 1-5 months
- Aluminium can and tags 80-100 years
- Plastic 6 pack holders 450 years
- Orange and banana peel 2 years
- Plastic bags 10 -20 years
- Nylon 30-40 years
- Leather 50 years
- Tin cans 100 years
- Wool socks 1-2 years
- Glass bottles unknown
- Polystyrene NEVER

This could open up a discussion about how these items of litter can be beneficial or detrimental to wildlife.

### **Classroom activities**

Ask the class to make up their own riddles and clues to describe things. These can be things seen on their field trip or perhaps things in the classroom.

Ask the class to present their riddles to the rest of the class to see if they can guess which object is being described. Then classify the objects into type by colour, shape or function.

### **Classification background**

The millions of living things can be organised into categories, where we group together organisms with similar features. This is called the classification system.

In the eighteenth century Carl Linnaeus started the modern system of putting species of organisms into certain groups and giving them scientific names. Each species is given a name using Latin words, so that the same name can be used all over the world.

For example, the scientific name for human beings is 'homo sapiens'.

In the simplest terms living organisms can be classified into the following categories:

Plants

Animals

Fungi

Bacteria

Why not learn more about Linnaeus and his work in classification of living things?

## Activity Six: Mammals and adaptation

You may see a squirrel in the woods.



How has a squirrel adapted to where it lives?

Think about the list of creatures below. Think about how they have adapted to survive. Using this information write down where you think they might live.

Badger

Otter

Mole

Squirrel

## Activity Six: Leader's notes

### Curriculum links

Sc2 Life processes and living things

### Equipment list

### Aims

Learn about how mammals are adapted to live in different habitats.

Use this activity to introduce adaptation and habitats to the class. Stay quiet and see if you can see a squirrel. Studying how it moves amongst the trees will help to look at the adaptations.

If you do not see a squirrel discuss how we are all adapted to where we live and then translate this theory to other animals.

**You may see a squirrel in the woods.**

**How has a squirrel adapted to where it lives?**

1. Long tail for balance
2. Good at climbing
3. Not afraid of heights
4. Difficult to see in the leaves
5. Agile

There are many others that may be thought of here.

**Think about the list of creatures below. Think about how they have adapted to survive. Using this information write down where you think they might live.**

Badger lives underground in a sett

- Big claws for digging
- Good sense of smell
- Big teeth
- Well camouflaged

Otter Lives in rivers

- Webbed feet
- Stream lined body
- Camouflaged
- Water resistant fur
- Long rudder-like tail
- Likes to eat fish

Mole lives underground

- Big feet for digging
- Good sense of smell
- Small eyes
- Silky fur

Squirrel

- See above

## 1 Fox and Mouse Game

Animals often use their sense of hearing to help them find food and avoid danger. This Fox and Mouse Game will help you and your friends sharpen your ears.

The fox is one of nature's most clever animals. It uses its large ears to help hunt for food.

Here's how you can be as cunning as a fox:

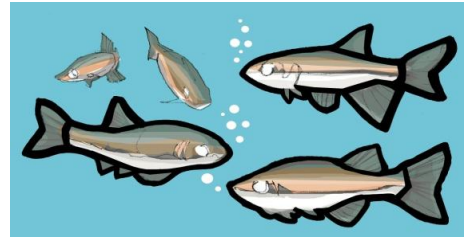
Ask a group of friends -- at least four -- to stand in a circle. Pick one person to be the fox. That person will stand in the middle of the circle with his or her eyes closed. Have a mouse (one of the people in the circle) walk in an inner circle around the fox and then return to his or her place in the outer circle. The fox must try to guess who the "mouse" was, using sounds as clues. If the fox guesses correctly, the mouse takes a turn as the fox

### **Classroom activities**

Ask the class to create an animal from their imagination, think about where it lives and how it has adapted to where it lives. This can be a great exercise to use the imagination and create an animal that is perfectly adapted to its surroundings.



## Activity Seven: Pond dipping



How is energy produced?

How is energy moved form one part of the food chain to another?

Do some pond dipping

Look at the creatures you have caught. Pick one and write its name below:

Circle below where you think this creature would be in the food chain:

Producer, primary consumer, secondary consumer, tertiary consumer, top predator, decomposer.

Why do you think this?

What do you think this creature would eat?

Why? How has it adapted to eat this?

Which creature is the most deadly of all of the predators?

Which creature is the most deadly in the food chain?

## Leader's notes

### Curriculum links

Sc2 Life processes and living things

### Equipment list

List of creatures cut out (see below)

Pond dipping nets

Pond dipping trays

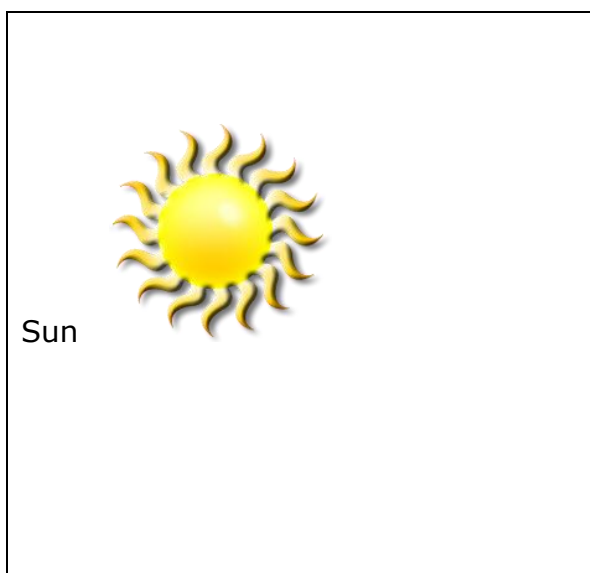
ID sheets

### Aim

The aim of this activity is for the class to be familiar with the concept of a food chain by using a simple game. It aims to translate this knowledge into practice by looking at creatures and deciding where they would be in the pond's food chain.

### List of creatures for food chain game

#### Producer



**Primary consumers (take energy from the sun)**



Pond weed



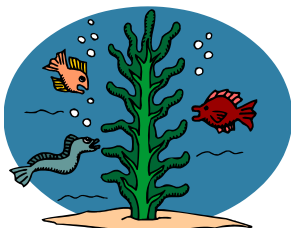
Water lily



Water doc



Willow  
tree



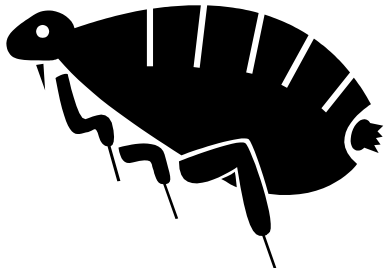
algae



mud

**Secondary consumers (take energy by eating the primary consumers)**

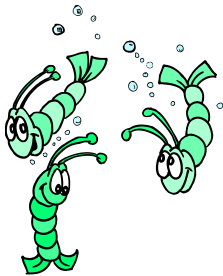
Water flea



Water louse



Water shrimp



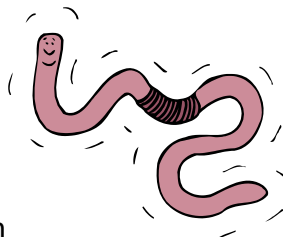
Pond snail



Mayfly Nymph



Blood worm



**Tertiary consumers (take energy from eating the secondary consumers)**



Dragon fly larvae



Leech

Caddis fly larvae



Water boatman



Water beetle



Bullhead



Stickleback



Frog



Newt



Toad



**Top consumers (take energy from eating the tertiary consumers.  
They are top of the food chain)**

Bear



Wolf



T rex



Human



Cat



Gull



Owl



Hawk





Badger



Fox



### **Play the food chain game**

Every child takes a card with a name of an animal on it. They must then organise themselves into groups according to which type of consumer they are. Ask the children questions as you go along.

### **How is energy produced?**

From the sun

### **Do some pond dipping**

Use the nets to scoop some creatures up and identify them using the guides.

### **Look at the creatures you have caught. Pick one.**

Use the charts to identify the creatures that have been captured.

### **Circle where you think this creature would be in the food chain?**

Producer, primary consumer, secondary consumer, tertiary consumer, top predator

### **Why do you think this?**

**What do you think this creature would eat?**

What would it eat; who would it be eaten by.

**Why? How has it adapted to eat this?**

Does it have big jaws? Is it very fast? etc

**What creature is the most deadly of all of the predators?**

Man. Introduce the concept of man being the top predator. This can be followed up by learning about environmental impacts of humans and what can be done by the class to reduce their impact on the environment.

Discuss the impacts of introduced species on the food chain. You could discuss the American mink as a top predator for wetlands or non-native invasive plants such as floating pennywort, Giant hogweed and Japanese knot weed. Lots of information on non-native species can be found at [www.nonnativespecies.org](http://www.nonnativespecies.org). This can be part of research and display projects to raise awareness of non-native species and their impact on food chains and the balance of ecology.

**Classroom**

Draw a simple food web using the creatures found during the pond dipping session. Start with the sun and work through the stages.

## RISK ASSESSMENT

<b>ACTIVITY LOCATION:</b> <b>Mote Park, Maidstone</b>		<b>ACTIVITY:</b> <b>Mote Park education pack activities</b>		<b>ASSESSMENT DATE:</b> <b>2012</b>		<b>ASSESSED BY:</b> <b>Mary Tate</b>	
<b>GENERIC ASSESSMENTS USED:</b>		<b>TASK DATE:</b>		<b>NEXT ASSESSMENT DUE:</b>		<b>APPROVED BY:</b> <b>MVCP</b>	
<b>HAZARD</b>	WHO'S AT RISK?	RISK LEVEL	PRECAUTION	WHE N? (B or D)	NE W RI SK		
<b>Weather</b>	Staff and pupils	M	<ul style="list-style-type: none"> <li>Advise everyone to bring appropriate clothing and footwear</li> <li>Bring wet weather gear</li> <li>Ensure hats are worn in hot weather</li> <li>Ensure sun screen is worn in hot weather</li> <li>Bring plenty drinking water in hot weather</li> <li>Bring warm clothes in cold weather</li> <li>Bring a change of clothes in</li> </ul>	B + D	L		

			wet, cold weather		
<b>Proximity to water</b>	Staff and pupils	M	<ul style="list-style-type: none"> <li>• Advise of water nearby and have throw rope (staff)</li> <li>• Do not get too close to the water</li> <li>• Work in pairs</li> <li>• Ensure hands are washed after working near water and before eating or drinking</li> <li>• Cover any cuts on hands with water proof plasters</li> <li>• Carry throw rope and life jacket</li> </ul>	B + D	L
<b>Adders</b>	Staff and pupils	M	<ul style="list-style-type: none"> <li>• Be aware of their presence</li> <li>• Do not pick up, poke or disturb adders</li> <li>• Avoid places where adders may rest</li> <li>• Carry mobile phone</li> </ul>	B+D	L

<b>Children</b>	Staff and Pupils	M	<ul style="list-style-type: none"> <li>• Children must be accompanied by responsible adults</li> <li>• Count children at the beginning of the event and throughout the duration</li> <li>• Work in pairs</li> </ul>	D	L
<b>Walking along tracks of Mote Park</b>	Staff and pupils	M	<ul style="list-style-type: none"> <li>• People to be aware that cars/ bikes may be using route</li> <li>• People to keep together in one group</li> </ul>	D	L
<b>Personal attack</b>	Staff and Pupils	M	<ul style="list-style-type: none"> <li>• People to remain together and numbers recorded at beginning and end of the walk</li> </ul>	D	L
<b>Slow emergency response</b>	Staff and Pupils	M	<ul style="list-style-type: none"> <li>• Carry First aid kit</li> <li>• Mobile phones to be carried by staff</li> <li>• Record grid reference and route that you will be taking so emergency</li> </ul>	D	L

			services can be informed of your location		
<b>Stinging insects</b>	Staff and pupils	M	<ul style="list-style-type: none"> <li>• Ensure a safe distance is kept between public and any stinging insects</li> <li>• Warn the group that there may be stinging insects around</li> <li>• Advise people with allergies to stay away from the insects</li> </ul>	D	L
<b>Uneven ground and wet areas Roots and wet area and woodland</b>	Staff and students	M	<ul style="list-style-type: none"> <li>• Wear suitable footwear for the event</li> <li>• If people attend with inappropriate footwear staff to inform of risk</li> <li>• Staff to make pupils aware of walk distance and length at beginning</li> <li>• Walk unsuitable for pushchairs and only partially suitable for wheelchairs.</li> </ul>	B +D	L

			<ul style="list-style-type: none"> <li>• Staff to be informed before event of any disabilities to arrange where feasible a route.</li> </ul>		
<b>Dogs</b>	Staff and Students	M	<ul style="list-style-type: none"> <li>• Keep together in one group</li> <li>• Have one member of staff at the front and back of the group at the very least</li> <li>• Warn pupils to stay away from dog faeces</li> <li>• If come into contact with dog faeces, wash hands immediately.</li> <li>• Avoid areas where dog walkers accumulate</li> </ul>	B + D	L
<b>Falling branches</b>	Students and staff	M	<ul style="list-style-type: none"> <li>• Avoid the site on days with high winds.</li> <li>• Inspect site day before arrival for safety</li> </ul>	B + D	L
<b><u>PPE needed:</u></b>	<u>Provided by:</u> Staff leading	<u>Level of First Aid provision</u>	<u>First Aiders:</u> Mary Tate		

<b>1<sup>st</sup> aid kit</b> <b>Hand sanitiser</b> <b>Throw rope</b> <b>Life jacket</b>	on event	<u>needed:</u> FAAW			
<u><b>Nearest telephone:</b></u> <b>Staff mobiles</b>	<u>Nearest 24 hospital and/or doctor:</u> Maidstone Hospital (01622) 729000 Hermitage Lane TQ 735 553 Barming Maidstone				