

## Worm study

1. Discuss and predict the best ways of attracting worms
2. Mix substances in order to attract worms
3. Use quadrat to see which solutions are best at attracting worms
4. Record findings

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Nature of Science 1.2.3.  
Communication 1.2.  
Investigative 1.2.3.6.7.8.9.11.12.13.14.
- Sc2. Life Processes 1.  
Humans and other animals 8.  
Living things 1.2.3.4.5.



## Feeding relationships

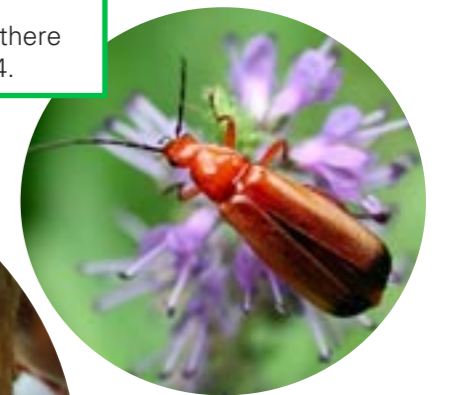
1. Discuss food chains using appropriate language
2. Investigate various areas around the site to note different habitats and feeding relationships
3. Create food chains in class using pictures
4. Investigate the environment and produce a virtual reality food chain which exists in ponds

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Living things in their environment 3.4.



## Water cycle

1. Discuss importance of water in our everyday lives
2. Identify stages of water cycle using the interactive c.d.
3. Explore dissolving using the variable of temperature
4. Evaporate a salt solution to determine the waste product
5. Create own filters to clean a sample of muddy river water
6. Listen and identify watery sounds

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Nature of Science 1.2.3.  
Communication 1.2.  
Investigative 1.2.4.6.7.8.11.12.13.14

- Sc3.. Grouping 1.5.  
Changing 2.5.6.7.8.  
Separating 1.2.3.4.

#### English

- Oracy range 1.2.3.4.  
Skills 1.2.4.6.  
Language development  
2.3.4.5.6.



## Key Stage 2 (age 7-11)

AT  
ALWEN ENVIRONMENTAL &  
EDUCATION CENTRE  
the KEY SKILLS of  
ORACY, READING and WRITING  
are integral to all lessons,  
along with  
ICT, MATHS  
and of course  
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## Plant survey

1. Discuss the best way of taking random samples
2. Use a quadrat to collect random samples from two different environments
3. Make a key to record findings
4. Compare the plant life in the different environments

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Nature of Science 1.2.3.  
Communication 1.2.4.  
Investigative 1.2.3.4.5.6.7.8.9.11.12.13.14
- Sc2. Life processes 2.  
Green plants as organisms 1.2.3.4.  
Living things in their environment 1.2.5.



## Soil

1. Brief classroom discussion on the importance of soil
2. Looking at soil; what is soil made of and soil drainage experiment
3. Compare soil samples from three different locations - by testing for pH.
4. Use soil as a basis for a soil painting

### Curriculum Links

Some or part of the following:

#### Science

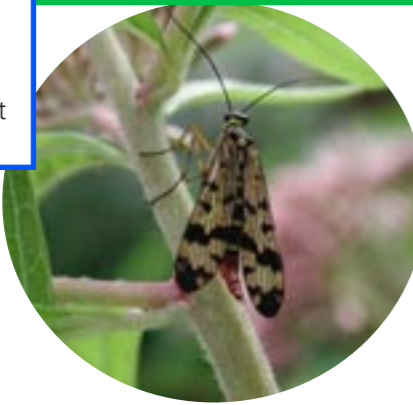
- Sc1. Nature of Science 1.2.3.  
Communication 1.2.4.  
Investigative 1.2.4.6.7.8.9.11.12.
- Sc3.. Grouping 1.4.  
Separating mixtures of materials 1.

#### Mathematics

Ma measurement 1.

#### Literacy

Oracy 1.3.4.  
Skills 1.2.5.6.  
Language development 3.4.5.6.



## Minibeasts

1. Discuss 7 characteristics of all living things
2. Predict which creatures will be found, what groups they will belong to, where they live, why they live there and how they are different to other animal groups
3. Discuss how seasons/weather effect animals and where they live
4. Collect creatures from two different habitats and identify using keys and microscopes
5. Record findings and use computer-linked microscope to enlarge and take pictures of specimens
6. Return minibeasts to their habitat

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Scientific enquiry  
Nature of Science 1.2.3.  
Communication 1.2.4.5.  
Investigative 1.2.3.5.6.7.8.11.12.13.14
- Sc2. Life processes and living things  
Life processes 1.  
Humans and other animals 2.8.  
Living things in their environment 1.2.3.5.



#### English

Oracy range 1.3.4.  
Skills 1.4.6.7.  
Language development 1.3.4.6.  
Reading range 1.  
Skills 7.8.

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Nature of Science 1.2.  
Communication 1.2.  
Investigative skills 6.7.8.
- Sc3. Separating materials 2.3.

#### Geography

Geographical skills 1.3.4.  
Places 1.2.3.4.5.6.7.  
Themes 1.2.3.4.5.



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**Key Stage 2 (age 7-11)**

## Trees

1. Collect leaf/seed samples and use keys to discover identities of trees
2. Measure height/age of chosen tree
3. Leaf/bark rubbing
4. Locate and identify deciduous/evergreen trees
5. Identify trees on a short walk



### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Nature of Science 1.2.3.  
Communication 1.2.4.  
Investigative 2.3.6.7.8.9.11.12.13.14.
- Sc2. Life Processes 2.  
Green plants 1.2.3.4.5.6.  
Living things 1.2.3.4.5.

## Materials

1. Discuss different properties of materials
2. Investigate Natural and Man-made materials at the centre
3. Sort materials and test whether they're waterproof or absorbent
4. Look at the fibres of materials which are made from plants under the microscope
5. Investigate which brand of tissue paper is the best
6. Determine the wet strength of paper
7. Understand the irreversible reaction which occurs when paper is burnt

### Curriculum Links

Some or part of the following:

#### Science

- Sc1. Nature of Science 1.2.3.  
Communication 1.2.4.  
Investigative 1.2.3.4.6.7.8.9.11.12.14.
- Sc3. Materials and their properties  
Grouping 1.  
Changing 1.3.4.

#### English

Oracy range 1.3.4.  
Skills 1.2.5.6.  
Language development 3.4.5.6.

#### Mathematics

Ma1. Measurement 1



## Tour of Alwen Clean Water Treatment Works

1. Experiment with some of the processes used at the works to clean water including settling, screening coagulation and dissolved air floatation
2. Visit the treatment works
3. Fill in a questionnaire to assess knowledge gained
4. View the Alwen exhibition of clean water treatment