

Project Guide

Plants and Animals



Overview:

The 'Plants and Animals' project allows students to share information about their own domestic plants and animals. The weekly submission of text, images and data will enable students to analyse and compare results.

Students participate in a comparative bean growing experiment.

The project activities are designed to integrate ICT into other curriculum areas and to develop and extend ICT skills.

The project runs for four consecutive weeks. By following this project guide all participants will be able to share and compare the same results. Extension activities can be undertaken but are not required to complete the project.

During the registration period schools should update their group welcome message.

Week 1 Our Pets

- Discuss the difference between wild animals, domesticated animals and pets
- Conduct group surveys of the type of pets
- Discuss the needs of individual pets
- Write a collaborative analysis of the collected pet survey data
- Publish the work to the project web site

Week 2 Flora and Fauna Around Us

- Review Week 1 published work on the project web site
- Identify an area in the environment that surrounds the school
- Is it an area of natural habitat e.g. a nature garden?
- Is it a cultivated area e.g. an area of grass, that is cut regularly in the school grounds?
- In the identified area of the local environment the students observe and record the flora and fauna that are present

Week 3 Wild Life Around Us

- Review Week 2 published work on the project web site
- Identify a specific area within the school grounds for a minibeast search
- Observe and record the minibeasts that are present
- Write a description of one of the minibeasts
- Publish the work to the project web site

Week 4 What Have We Learnt?

- Use work published on the project web site to make comparisons
- Write a collaborative text account of the knowledge that has been acquired through the project
- Write a farewell collaborative text
- Publish the work to the project web site

The purpose of this week is for each group of students to plant their bean as part of the ongoing ‘Grow a Bean’ activity.

Students identify the differences between wild animals, domesticated animals and pets. By conducting a pet survey the students will collect, record and analyse numerical data. The students write a collaborative review of the collected data. The students write about the needs of their individual pets. These activities give the students the opportunity to write in a style that demonstrates an awareness of the intended audience.

Curriculum focus	Learning Objectives
Mathematics	<ul style="list-style-type: none"> To be able to collect, present and interpret data.
English	<ul style="list-style-type: none"> To be able to read a variety of texts. To be able to read for information. To be able to write for a wide audience. To be able to share written accounts.
Science	<ul style="list-style-type: none"> To recognise that plants need light and water to grow. To recognise similarities and differences between wild and domesticated animals.

Curriculum focus	Learning Objectives
Personal, Social and Health Education	<ul style="list-style-type: none"> To be able to take and share responsibility for looking after animals properly.
Geography	<ul style="list-style-type: none"> To be able to use maps and globes to find information. To have an awareness of the world beyond the near locality.
ICT	<ul style="list-style-type: none"> To be able to communicate and handle information. To be able to present information with an awareness of audience.

Each group of students plants a bean as part of the comparative “Grow a Bean” survey.

The main focus of this week is for students to collect and use data to find out about the animals they keep as pets.

Step	Title	Notes
1	Plant a Bean and Bean Diary	Step 1 of the “ Grow a Bean ” activity. Ongoing record of growth of bean plant.
2	What is the difference between a Wild Animal, a Domesticated Animal and a Pet?	Observations of similarities and differences.
3	Pet Survey	Whole class data collection.
4	What My Pet Needs	Individual text account.
5	Pet Portrait	Graphical representation of a pet.
6	Publish Our Work	Upload and publish the data collection results and text overview to project web site.

Resources
<p>Data collection sheets</p> <ul style="list-style-type: none"> • Pet Survey <p>Support sheets</p> <ul style="list-style-type: none"> • Bean Diary • What My Pet Needs <p>Optional</p> <ul style="list-style-type: none"> • Digital camera

Keywords
<p>Keywords support sheet</p> <p>tally graph chart list</p> <p>data total survey collect</p> <p>criteria label axis estimate</p> <p>pet pony rabbit snake</p> <p>terrapin tropical fish goldfish</p> <p>budgerigar cat dog parrot</p> <p>hamster gerbil guinea pig mice</p> <p>stick insect domesticated animal wild</p> <p>similarity difference observe physical</p> <p>interpret compare information complete</p> <p>publish audience collaborate</p>

Expectations for this week
<p>Most students will be able to</p> <ul style="list-style-type: none"> • use a tally chart to collect information • interpret data using a tally chart • recognise the difference between wild animals, domesticated animals and pets • describe the needs of a pet <p>Some students will be able to</p> <ul style="list-style-type: none"> • record data in different graphical forms • interpret data from a variety of graphs • solve problems using information displayed in graphical form

Objectives	Lesson Activities	Outcomes	Notes
<p>Students will know that the Internet can be used to share information.</p>	<ul style="list-style-type: none"> • Introduce the topic to the students. • Tell the students that, by using the Internet, they will be sharing the information they collect with schools around the world. • Outline the activities the students will be involved in. 	<p>The students are able to identify the location of other groups of participating students.</p> <p>Students know that the information they collect will be shared by others through the use of the Internet.</p>	<p>Show students examples of the introductions from other participating groups of students by logging onto learning-lincs.com</p> <p>Class activity using interactive white board or computer based activity.</p>
<p>Students learn to describe similarities and differences using appropriate language.</p> <p>Students learn how to establish a ‘fair’ test.</p> <p>Students learn about the effect of light, air, water and temperature on plant growth.</p>	<ul style="list-style-type: none"> • Let each student handle one of the beans. • Ask the students to share observable facts about the bean. • Ask the students to describe their bean in terms of size, colour, shape and texture. • Encourage the students to use appropriate words to describe the bean. • Explain the purpose of the bean growing investigation. • Ask the students to consider how a ‘fair’ test scenario could be established. • List the students’ suggestions of a ‘fair’ test. • These suggestions are to be included in the Bean Diary text account on Plants and Animals project publisher. • Show the students the resources for planting the bean. • Plant the bean. • Students record planting the bean. <p>Younger Students</p> <ul style="list-style-type: none"> • Record pictorially with suitable labels. <p>Older Students</p> <ul style="list-style-type: none"> • Show the students the How to Grow a Bean support sheet. • Record as the first step in an information leaflet ‘How to Grow Beans’ • Record the date when the bean was planted on the ‘Bean Diary’ support sheet. 	<p>Students are able to describe a bean.</p> <p>Students understand the meaning of an investigation.</p> <p>Students are able to suggest suitable requirements for a ‘fair’ test.</p> <p>Students are able to recognise a ‘fair’ test.</p> <p>Students are able to appreciate that an investigation can be ongoing.</p> <p>Students know the conditions that are needed to germinate a seed.</p>	<p>This activity is outlined in the Grow a Bean support sheet.</p> <p>Resources needed are</p> <p>Clear plastic container,</p> <p>Seed compost</p> <p>Bean (quick germinating such as a runner bean)</p> <p>Label</p> <p>Centimetre/inch measure</p> <p><i>Extension activity</i></p> <p>If a number of containers are available more than one bean could be planted. Discuss with the students the conditions needed for growth and use the extra plantings to investigate these needs.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to identify, and assign to groups, different types of animals.</p>	<ul style="list-style-type: none"> Show the students pictures of different types of animals. Ask the students to name the animals. Show the students the words wild, domesticated, pet. Establish the meaning of the words. Ask a student to select one of the pictures, name the animal and assign the animal to one of the words. <p>Younger Students</p> <ul style="list-style-type: none"> Sort the pictures asking the students if they agree with the sort. When the sort is correct students record the sort. <p>Older Students</p> <p>Students work independently on the picture sort.</p>	<p>Students are able to identify wild and domesticated animals</p> <p>Students are able to match information against a given criteria.</p> <p>Students are able to make sets using given criteria.</p>	<p>Collect pictures of a variety of types of animals.</p>
<p>Students learn to distinguish between a wild or domesticated animal and a pet.</p>	<ul style="list-style-type: none"> Show the students the ‘pets’ keywords. Ensure that students know each word and ask which students have the selected word as a pet. List animals that students describe as pets. <p>Younger Students</p> <ul style="list-style-type: none"> Give students Pet Survey data collection sheet Ask each student in turn to name type of pet they have. On enlarged Pet Survey worksheet show students how to tally information. Students record pets’ survey as tally chart. <p>Older Students</p> <ul style="list-style-type: none"> Students use Our Pets data collection sheet to tally information and then independently make bar chart. 	<p>Students are able to collect information as a list.</p> <p>Students are able to use collected information to construct a tally chart.</p>	<p>When conducting the pet survey tally the number of students for each type of pet.</p> <p>Definition of a pet: an animal kept for companionship, interest, or amusement.</p> <p>Use photocopier to enlarge Pet Survey or Our Pets worksheet.</p>
<p>Students learn how to enter information onto a data collection form.</p>	<ul style="list-style-type: none"> Enter the ‘Our Pets’ information onto the Plants and Animals Project Publisher. Class activity using interactive whiteboard. Look at the submitted data in graphical form and encourage the students to compose number statements to support their data analysis. 	<p>Students understand that numerical data can be presented in a graphical form.</p>	<p>Data is immediately displayed in graphical form.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to write a factual account.</p>	<ul style="list-style-type: none"> • Select one pet from the group list. • Ask the students who have that animal as a pet to describe their pet and how they look after their pet. • Use the enlarged What My Pet Needs worksheet to fill in given information. <p>Younger students</p> <ul style="list-style-type: none"> • Using individual What My Pet Needs worksheets students record the name of their pet, what it eats and make a graphical representation of their pet. <p>Older Student</p> <ul style="list-style-type: none"> • Discuss the importance of essential facts. • Using the My Pet worksheet students write an information fact sheet for their pet. <p>Students share their information sheets.</p> <p>Older Students decide if the information given is enough to keep a pet safe and healthy.</p>	<p>Students are able to collect information.</p> <p>Students are able to match information against a given criteria.</p> <p>Students are able to decide which information is relevant and of importance.</p>	<p>Use a photocopier to enlarge the What My Pet Needs worksheet.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn how to write a collaborative text.</p>	<ul style="list-style-type: none"> • Select one of the pets from the previous activity. <p>Tell students that they are going to tell someone the most essential information about their pet.</p> <p>Younger Students</p> <ul style="list-style-type: none"> • Teacher reads a sentence and students decide if it needs to be included as essential information. • Teacher scribes list of essential information. • Re read list to students. • Ask students to order list according to their views on essential information. <p>Older Students</p> <ul style="list-style-type: none"> • Group students according to pets. See notes. • Students work collaboratively to produce essential information about their type of pet. • Students share their collaborative information. • Students reflect on the work of other smaller groups within their main group. 	<p>Students are able to write in a style to suit a particular purpose.</p> <p>Students are able to express views on importance rating of information.</p> <p>Students are able to appreciate the views of others.</p> <p>Students are able to work collaboratively to produce an information sheet.</p>	<p>Group students according to pets. If student does not have a pet put in group with 'wish list' pet.</p> <p>Teacher scribe or word process to reorder/redraft to produce final draft.</p>
<p>Students learn how to write a collaborative text.</p>	<p>Students choose the information about one pet.</p> <ul style="list-style-type: none"> • Enter information onto the Plants and Animals Project Publisher. 	<p>Students are able to write in a style to suit a particular purpose.</p>	<p>Teacher scribe or word process to reorder/redraft to produce final draft.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to make detailed observations.</p> <p>Students learn to draw representations of their observations.</p>	<ul style="list-style-type: none"> Show the students a picture of a pet. Ask the students what detail they can see in the picture. <p>Younger students</p> <ul style="list-style-type: none"> Teacher demonstration of how to draw the outline of the pet using observation skills. Demonstrate shading techniques. Give the students paper on which to copy teacher demonstration of drawing the pet. <p>Older students</p> <ul style="list-style-type: none"> Discuss what detail can be seen on the picture of the pet. Discuss the pose of the pet. Give the students paper on which to draw the pet in the picture. 	Students are able to draw from observation with increasing accuracy.	<p>Inform the parents/carers of the students about the activity.</p> <p>Ask the students to bring in a photo of their pet.</p> <p>It may be appropriate to provide students with access to a digital camera that can be taken home.</p>
Students learn to make an observational representation.	<ul style="list-style-type: none"> Students make observational representations of their pets. Use a variety of medium for this activity. Some students could use a computer based drawing program. Some students could make pencil sketches. Some students could paint pictures. Some students could make a collage representation of their pet. 	Students are able to make observational representations	
Students learn how to scan work.	<ul style="list-style-type: none"> Students share their finished work. Discuss with the students how a scanner can be used to present work on a web site. The students decide on one of their pet representations to enter onto the Plants and Animals Project Publisher. Older students may be able to scan their own work. Younger students will need support. 	Students know that a scanner can be used to make a copy of work that can then be displayed on a web site.	The scanned work is immediately displayed.
Students learn to enter scanned work on the project publisher.	<ul style="list-style-type: none"> Enter information onto the Plants and Animals Project Publisher. 	Students know that a scanned work can be used on a web site.	

Objectives	Lesson Activities	Outcomes	Notes
Students learn how to retrieve work that has been saved.	<ul style="list-style-type: none"> Show the students how to find the web page on which the data and text has been previously entered. 	Students will be able to retrieve their saved project work.	Introduce the skill of using a spell check by using a word processing program to provide the students with a text sample to spell check.
Students learn how to use a spell check.	<ul style="list-style-type: none"> Explain that the data and the text need to be proof read before it is published on the project web site. Show older students how to use a spell check. 	Students will be able to use a spell check when using a word processing program.	
Students learn how to upload the data collection results and text overview on the project web site.	<ul style="list-style-type: none"> Show the students how to upload their work to the web page. Older students could independently upload their work. 	Students know that their work will be shared with others when it is published.	
<p>Students learn to ensure their work is suitable for the intended audience when published.</p> <p>Students learn how to publish their work on the project web site.</p>	<ul style="list-style-type: none"> Discuss with the students their uploaded work. Do they think the style of the presentation of their collected information on the web page is suitable for their intended audience? Explain to the students the function of the Publish button. The teacher checks the contents of the web page when the students have decided that the uploaded work is ready to publish. Select the Publish button. Show the students their web page on the project web site. 	<p>Students will know how to present work that is fit for the intended audience.</p> <p>Students will know how to publish their work on the project web site.</p>	<p><i>Before publishing the students' work check the school's Internet policy.</i></p> <p><i>Ensure that only a student's first name has been used in a text account and that no students in a photo are identified by name.</i></p>

Objectives	Lesson Activities	Outcomes	Notes
Students learn to prepare and enter data into a database.	<ul style="list-style-type: none"> The students enter the information they have collected on the pets data-recording sheets on to a data collection form on the project website which immediately generates a graph. 	Students develop an understanding of the potential use of a computer to generate information from a database and to solve problems using a database.	
Students learn to use ICT appropriately to communicate ideas through text.	<ul style="list-style-type: none"> The students use a word processing program to assemble the information they have obtained through the data collection activities. 	Students are able to change the layout of text in a word processing program.	
Students learn to use a word processing program to organize text.	<ul style="list-style-type: none"> The activity will enable the students to use copy, cut and paste to reorganize the text. The students will be able to spell check their final draft. Using a copy of the text account which has been submitted to the project web site the students could decide which font, colour and size would be appropriate for another type of display – e.g. a classroom display, an information book. Younger students could be given a prepared text to use to decide which font, colour and size would be appropriate for a given type of display. 	<p>Students are able to use a word processing program to produce a text that is suitable for the intended audience.</p> <p>Students are able to decide which font, size and colour are the most suitable for the way in which their work is to be displayed.</p>	
Students learn to save their work.	<ul style="list-style-type: none"> Students print and save the text account. 	Students are able to print and save work.	
Students learn to retrieve work that has been saved.	<ul style="list-style-type: none"> Students retrieve the saved text account at a later date. 	Students are able to retrieve saved work.	
<p>Students learn to use a scanner.</p> <p>Students learn that a scanned image can be used on a web site.</p>	<ul style="list-style-type: none"> Using a photo of their pet the students make a representational graphical image of their pet. A graphical image is scanned then published on the project web site. 	<p>Some students will be able to use a scanner.</p> <p>Some students will know that a scanned image can be displayed on a web site.</p>	

Objectives	Web site		Outcomes	Notes
Students learn that the Internet is a source of information.	http://www.rspca.org.uk/servlet/Satellite?pagename=RSPCA/Education/EducationOnlineResources	A teacher resource site.	The web links enable students and teachers to find and use appropriate project linked information.	<p>Disclaimer</p> <p><i>learning-lincs endeavours to provide high quality and informative global educational projects. Whilst we try to ensure that our projects are educationally sound and safe we cannot guarantee your results with any procedure or project, nor can we be held liable for your activities or outcomes.</i></p> <p><i>Where suitable we will provide links to other sites on the Internet. These links are checked frequently but we cannot be held responsible for the content or quality of materials on these other sites.</i></p>
	http://www.rspca.org.uk/servlet/Satellite?pagename=RSPCA/AnimalCare/AnimalCareHomepage	A teacher resource site. Or for use by older students to find information about caring for a pet.		
	http://www.allaboutpets.org.uk/sitemap.html	The national pet care association. The Blue Cross web site.	Students know that information can be downloaded from a web site.	
	http://www.allaboutpets.org.uk/dogindex1.html#dog1	Site provides downloadable Caring for a Pet information, text and illustrations.		

The purpose of this week is for each group of students to observe and record the growth of their bean plant and to identify the different kinds of plants and animals in the local environment. By conducting surveys students identify similarities and differences between local environments and the ways in which these affect the animals and plants that are found there. The students will collect, record and analyse numerical data. The students write a review of the collected data giving them the opportunity to write in a style that is appropriate to the task – sharing information.

The students use the data submitted in week 1 to compare their pets with other students in other locations.

Curriculum focus	Learning Objectives
Mathematics	<ul style="list-style-type: none"> • To be able to collect, present and interpret data. • To be able to compare data in graph form.
English	<ul style="list-style-type: none"> • To be able to read a variety of texts. • To be able to read for information. • To be able to write for a wide audience. • To be able to share written accounts.

Curriculum focus	Learning Objectives
Science	<ul style="list-style-type: none"> • To identify similarities and differences between plants and animals in the local environment. • To care for the environment. • To group living things according to observable similarities and differences.
ICT	<ul style="list-style-type: none"> • To be able to communicate and handle information. • To be able to present information with an awareness of audience.

The main focus of this week is for each group of students to collect information about the plants and animals found in the locality of the school. Students record their observations of the bean growing experiment.

Step	Title	Notes
1	Review time	Compare previous week’s work published on the project web site.
Teacher Decision	How’s the Bean Been?	Observation of bean growing experiment.
2	Around the School Flora and Fauna Survey. Plant Information	Descriptive text account. Whole class data collection.
3	What We Have Discovered	Collaborative writing.
4	Publish Our Work	Publish the data collection results and text overview on web site.

Resources
<p>Data collection sheets</p> <ul style="list-style-type: none"> • Flora Survey and Fauna Survey <p>Support sheets</p> <ul style="list-style-type: none"> • Plant Information <p>Optional</p> <ul style="list-style-type: none"> • Digital camera

Vocabulary																																																				
<p>Keywords support sheet</p> <table> <tr> <td>tally</td> <td>graph</td> <td>chart</td> <td>list</td> </tr> <tr> <td>data</td> <td>total</td> <td>survey</td> <td>collect</td> </tr> <tr> <td>criteria</td> <td>label</td> <td>axis</td> <td>observe</td> </tr> <tr> <td>shoot</td> <td>root</td> <td>stem</td> <td>leaf</td> </tr> <tr> <td>habitat</td> <td>evergreen</td> <td>deciduous</td> <td></td> </tr> <tr> <td>amphibian</td> <td>bird</td> <td>reptile</td> <td></td> </tr> <tr> <td>fish</td> <td>insect</td> <td>mammal</td> <td></td> </tr> <tr> <td>cultivated</td> <td>environment</td> <td>flowers</td> <td>grass</td> </tr> <tr> <td>trees</td> <td>woods</td> <td>country park</td> <td>grounds</td> </tr> <tr> <td>flora</td> <td>fauna</td> <td>plants</td> <td>animals</td> </tr> <tr> <td>interpret</td> <td>evaluate</td> <td>compare</td> <td>retrieve</td> </tr> <tr> <td>information</td> <td>completion</td> <td>publish</td> <td>audience</td> </tr> <tr> <td>collaborate</td> <td></td> <td></td> <td></td> </tr> </table>	tally	graph	chart	list	data	total	survey	collect	criteria	label	axis	observe	shoot	root	stem	leaf	habitat	evergreen	deciduous		amphibian	bird	reptile		fish	insect	mammal		cultivated	environment	flowers	grass	trees	woods	country park	grounds	flora	fauna	plants	animals	interpret	evaluate	compare	retrieve	information	completion	publish	audience	collaborate			
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Expectations
<p>Most students will be able to</p> <ul style="list-style-type: none"> • to collect observable information • interpret collected information • recognize specific plants <p>Some students will be able to</p> <ul style="list-style-type: none"> • use recorded information to present facts • suggest reasons for plant and animal habitats

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn that information and data can be stored and retrieved.</p>	<ul style="list-style-type: none"> • Show the students the data and text that they posted on the project web site in week 1. • Discuss with the students the success of their style of text account. • Ask the students if there are any changes they would make to the style of text account. 	<p>Students are able to evaluate the success of the presentation style of their work.</p> <p>Students are able to suggest changes they would make.</p>	<p>Activity suitable for use on an interactive whiteboard.</p>
<p>Students learn to evaluate the effectiveness of different formats and layouts.</p>	<ul style="list-style-type: none"> • The students view the Week 1 web pages of other participating students. • Discuss with the students the similarities and differences in the style chosen for the text account. • Ask the students to decide which text accounts they prefer. • Encourage the students to give reasons for their preferences. 	<p>Students are able to express a preference.</p> <p>Students are able to give reasons for their preference.</p>	<p>If possible ensure that comparisons of text are made between similar aged students.</p> <p>Activity suitable for interactive whiteboard or individual computer use.</p>
<p>Students learn to read and interpret data.</p> <p>Students interpret and use data in problem solving activities.</p>	<ul style="list-style-type: none"> • The students view the data collection results of other participating students. • Discuss the other participating students data collection results. • Use the data results to ask the students comparative questions. • Younger students use the graphical information to make direct comparisons. – How many students have the same type of pets as themselves? Or set questions that interrogate the graphical information. • Older students use the graphical information to solve problems that involve further calculations. • Using the graphical data from 3 or 4 groups of students calculate the fraction of the total that have a given criteria – type of pet. Or calculate the percentage number of students with a given criteria. 	<p>Students are able to read and compare information and data.</p> <p>Students are able to select an appropriate calculation method in problem solving activities.</p> <p>Students are able to use recorded information in problem solving activities.</p>	<p>If possible when making direct data comparisons ensure that the groups of students are of a similar size.</p> <p>Students may need to use a calculator when calculating percentages.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to make observations. Students learn to use scientific language.</p>	<ul style="list-style-type: none"> • Discuss with the students the changes they can see in the bean they are using for the project. • If the changes are significant students record them pictorially. • Remind the students of the observations needed for the Bean Diary support sheet. • Ask the students if there are any entries that can be made on the Bean Diary support sheet. 	<p>Students are aware of the changes in the bean.</p>	<p>If other beans have been planted and placed in other environments their changes could also be noted and comparisons made with the main bean.</p>
<p>Students learn how to collect and record data.</p>	<p>Younger Students</p> <ul style="list-style-type: none"> • Provide the students with a centimetre ruler to give them the practical experience of seeing the how big 1 centimetre is. • Show the students how to measure something accurately. • Students estimate the height of the bean. • Measure the height of the bean. • Show the students the Our Bean Plant support sheet. • Give the students the data-recording sheet Our Bean Plant. • Read the scale on the Our Bean Plant support sheet. • Students record the measurement on their support sheet. <p>Older Students</p> <ul style="list-style-type: none"> • Students estimate and then measure accurately the height of the bean plant. • Students record the height of the bean on the Our Bean Plant worksheet. • Students take a photo or make an observational drawing of the bean plant. 	<p>Students are able to measure and record.</p>	<p>Use a photocopier to enlarge the Our Bean Plant data collection sheet. The enlarged sheet can then be used to demonstrate how to read the scale and record the measurement of the bean plant.</p>
<p>Students learn how to present information in a form suitable for task and audience.</p>	<p>Enter the information about the growth of the bean on the Plants and Animals Project Publisher. Choose an illustration to scan or a photo of the bean to enter on the Plants and Animals Project Publisher.</p>	<p>Students are able to enter text onto a writing template. Students know that entered text can be retrieved and edited. Students know that scanned images and photos can be used on a web page.</p>	<p>Use step 4 week 1 to recap on scanning.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn that different environments support different plants and animals.</p>	<ul style="list-style-type: none"> • Ask the students if they can identify from the photos the area to be studied. • Show the students the words flora, fauna, habitat and establish the meaning of these words. • Ask the students to describe the photographed area from memory. • Establish whether the area is a cultivated area – the grass is cut regularly, or a natural area. • Ask the students to predict what kinds of plants and animals they will find in the chosen area. • Show the students the Flora and Fauna worksheet and explain what they will need to be observing when they visit the chosen area. • Students visit the chosen area. • Students take photos or make a video of the chosen area. • Enter the observed information onto the Flora and Fauna worksheet. 	<p>Students develop an awareness of the names of common plants.</p> <p>Students are able to identify locally occurring plants and animals.</p> <p>Students find out about the different kinds of plants and animals in the local environment.</p>	<p>Identify the area to be studied. It can either be part of the school grounds or a nearby country park or wood. Ensure the chosen area is suitable for the flora and fauna worksheet.</p> <p>Take photos of the area to be studied.</p> <p>Identify the plants that are found in the chosen area.</p>
<p>Students learn to identify specific plants.</p>	<ul style="list-style-type: none"> • Choose one plant in the chosen area – a tree, shrub. • Identify the plant to the students. • Discuss with the students the meaning of deciduous, evergreen, flowering, non-flowering. • Students make observational drawings of a plant found in the chosen area. • Discuss with the students as to whether they think there may be any wild life on the plant. • Students make their own observations of the chosen plant. • Discuss with the students the answers to the statements on the Plant Information worksheet. • Give the students the Plant Information worksheet. • Students complete the worksheet. 	<p>Students are able to identify and describe a specific plant.</p>	<p>This activity could be part of the previous activity or a separate activity.</p>

Objectives	Lesson Activities	Outcomes	Notes
Students learn how to scan work.	<ul style="list-style-type: none"> • Discuss with the students how a scanner can be used to present work on a web site. • The students decide on one of their plant representations to enter onto the Plants and Animals Project Publisher. • Older students may be able to scan their own work. • Younger students will need support. 	Students know that a scanner can be used to make a copy of work that can then be displayed on a web site.	The scanned work is immediately displayed.
Students learn to enter scanned work on the project publisher.	<ul style="list-style-type: none"> • Enter information on the Plants and Animals Project Publisher. 	Students know that scanned work can be used on a web site.	The photos of the chosen area and the plant illustrations could be included on the school web site.

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to present information in text form.</p> <p>Students learn how to write a collaborative text.</p> <p>Students learn to evaluate text and data collection results.</p>	<p>Prepare the final overall text review.</p> <p>The final text review should include-</p> <ul style="list-style-type: none"> • examples of the comparisons the students made using the week 1 data • descriptions of the area around the school the students have chosen to study • examples of what the group has discovered about the flora and fauna around their school <p>Teacher scribe the younger students' conclusions. Write sentences on strips of paper so that they can be rearranged to produce the final draft.</p> <p>Older students write and reorganize their own final draft.</p> <ul style="list-style-type: none"> • Enter information on the Plants and Animals Project Publisher. 	<p>Students are able to choose, when writing, a form and content to suit a particular purpose.</p> <p>Students are able to evaluate data collection results.</p> <p>Students are able to interpret data to solve problems.</p>	<p>The text accounts could be used to make comparisons of styles of writing.</p> <p>Older students use a word processing program to write and reorder their final text draft.</p> <p>Older students input the final text draft onto the saved web page.</p> <p>Younger students – teacher scribe to produce final draft.</p>

Objectives	Lesson Activities	Outcomes	Notes
Students learn how to retrieve work that has been saved.	<ul style="list-style-type: none"> Remind the students how to find the web page on which the data and text has been previously entered. 	Students will be able to retrieve their saved project work.	Support sheets could be made giving the students instructions to follow.
Students learn how to use a spell check.	<ul style="list-style-type: none"> Remind the students that the data and the text needs to be proof read before it is published on the project web site. Older students use a spell check. 	Students will be able to use a spell check when using a word processing program.	
Students learn how to upload and publish their work.	<ul style="list-style-type: none"> Remind the students how to upload their work. Remind the students to check to see if they think the style of the presentation of their collected information on the web page is suitable for their intended audience. Revise the function of the Publish button. The <i>teacher checks</i> the contents of the web page when the students have decided that the uploaded work is ready to publish. Select the Publish button. Show the students their web page on the project web site. 	Students know that their work will be shared with others when it is published.	<p><i>Before publishing the students' work check the school's Internet policy.</i></p> <p><i>Ensure that only a student's first name has been used in a text account and that no students in a photo are identified by name.</i></p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to use ICT appropriately to communicate ideas through text.</p> <p>Students learn to use a word processing program to organize text.</p>	<ul style="list-style-type: none"> • Students use a word processing program to assemble the information they have obtained through the observational activities. The activity will enable the students to use copy, cut and paste to reorganize the text. The students will be able to spell check their final draft. • The students use a copy of their text account on the project web site to use on a classroom display or as part of an information book. They decide which font, colour and size would be appropriate for a given type of display. • Younger students could be given a prepared text to use to decide which font, colour and size would be appropriate for a given type of display 	<p>Students are able to change the style and layout of text in a word processing program.</p> <p>Students are able to use a word processing program to produce a text that is suitable for the intended audience.</p>	
<p>Students learn to save their work.</p> <p>Students learn to retrieve work that has been saved.</p>	<ul style="list-style-type: none"> • Students print and save the text account. • Students retrieve the saved text account at a later date. 	<p>Students are able to print and save work.</p> <p>Students are able to retrieve saved work.</p>	
<p>Students learn how to use a digital camera or video camera.</p>	<ul style="list-style-type: none"> • Students use the digital camera to take photos of the flora and fauna in the chosen area. • Students make a video account of the chosen area. 	<p>Students are able to use a viewfinder to compose a photo.</p> <p>Students are able to use a video recorder.</p>	<p>Photos taken could be used by the students to make a slide show to present information to others.</p>
<p>Students learn how to use a scanner to produce an image for a web site.</p>	<ul style="list-style-type: none"> • Students make an observational drawing of a plant that is then scanned. 	<p>Students develop an understanding of the use of a scanner.</p> <p>Some students will be able to use a scanner.</p>	<p>The students could use the scanner in other classroom activities.</p>

Objectives	Web site	Description	Outcomes	Notes
Students learn that the Internet is a source of information.	http://www.natureartists.com/	A teacher resource site.	The web links enable students and teachers to find and use appropriate project linked information.	<p>Disclaimer</p> <p><i>learning-lincs endeavours to provide high quality and informative global educational projects. Whilst we try to ensure that our projects are educationally sound and safe we cannot guarantee your results with any procedure or project, nor can we be held liable for your activities or outcomes.</i></p> <p><i>Where suitable we will provide links to other sites on the Internet. These links are checked frequently but we cannot be held responsible for the content or quality of materials on these other sites.</i></p>
	http://www.nmnh.si.edu/botart/	A teacher resource site. Providing opportunities to find sample plant illustrations to use as examples with the students when they are making their own observational drawings.		
	http://flood.nhm.ac.uk/cgi-bin/perth/cook/	This site presents most of the botanical drawings and engravings prepared by artist Sydney Parkinson of plants discovered on the voyage of HMS Endeavour (1768-1771). Providing opportunities to find sample plant illustrations to use as examples with the students when they are making their own observational drawings.		
	http://www.scientificillustrator.com/images.html	A teacher resource site. Providing opportunities to find sample flora and fauna illustrations to use as examples with the students when they are making their own observational drawings.		

The purpose of this week is for each group of students to observe and record the growth of their bean plant and to make first hand observations of living things. The students survey and identify the different kinds of minibeasts found in the school grounds. The students collect, record and analyse numerical data.

The students use the data and text accounts submitted in week 2 to compare observations made of the ‘Growing a Bean’ experiment and to identified flora and fauna.

Curriculum focus	Learning Objectives
Mathematics	<ul style="list-style-type: none"> • To be able to collect, present and interpret data. • To be able to compare data in graphical form.
English	<ul style="list-style-type: none"> • To be able to communicate with others. • To be able to organise and explain information. • To be able to write for a variety of audiences. • To be able to share written accounts. • To be able to read for information.

Curriculum focus	Learning Objectives
ICT	<ul style="list-style-type: none"> • To be able to communicate and handle information. • To be able to present information with an awareness of audience. • To be able to use a variety of word-processing functions.
Science	<ul style="list-style-type: none"> • To group living things according to observable similarities and differences. • To be able to identify parts of a plant. • To know which conditions a plant needs to grow.

The main focus of this week is for the students to identify similarities and differences between selected habitat areas of the school grounds and the ways in which these affect the minibeasts that are found there. Students record their observations of the ‘Growing a Bean’ experiment.

Step	Title	Notes
1	Review Time	Compare previous week’s work published on the project web site.
Teacher Decision	How’s the Bean Been?	Observation of bean growing experiment.
2	Bug Hunt and Bug Facts	Whole class data collection.
3	Minibeasts	Collaborative or individual text account.
4	Publish Our Work	Upload and publish the data collection results and text overview to project web site.

Resources
<p>Data collection sheets</p> <ul style="list-style-type: none"> • Bug Hunt • Bug Facts <p>Support sheets</p> <ul style="list-style-type: none"> • Bean Diary • Minibeasts <p>Optional</p> <ul style="list-style-type: none"> • Digital camera

Vocabulary																																
<p>Keywords support sheet</p> <table> <tr> <td>tally</td> <td>graph</td> <td>chart</td> <td>list</td> </tr> <tr> <td>data</td> <td>total</td> <td>survey</td> <td>collect</td> </tr> <tr> <td>criteria</td> <td>label</td> <td>axis</td> <td>minibeasts</td> </tr> <tr> <td>ladybird</td> <td>wood louse</td> <td>wood lice</td> <td>butterfly</td> </tr> <tr> <td>butterflies</td> <td>ant</td> <td>spider</td> <td>caterpillar</td> </tr> <tr> <td>centipede</td> <td>grasshopper</td> <td>evaluate</td> <td>compare</td> </tr> <tr> <td>retrieve</td> <td>information</td> <td>completion</td> <td>publish</td> </tr> <tr> <td>audience</td> <td>collaborate</td> <td></td> <td></td> </tr> </table>	tally	graph	chart	list	data	total	survey	collect	criteria	label	axis	minibeasts	ladybird	wood louse	wood lice	butterfly	butterflies	ant	spider	caterpillar	centipede	grasshopper	evaluate	compare	retrieve	information	completion	publish	audience	collaborate		
tally	graph	chart	list																													
data	total	survey	collect																													
criteria	label	axis	minibeasts																													
ladybird	wood louse	wood lice	butterfly																													
butterflies	ant	spider	caterpillar																													
centipede	grasshopper	evaluate	compare																													
retrieve	information	completion	publish																													
audience	collaborate																															

Expectations
<p>Most students will be able to</p> <ul style="list-style-type: none"> • enter data with accuracy • interpret data using a tally chart • share information about a topic of interest <p>Some students will be able to</p> <ul style="list-style-type: none"> • read for information • answer questions using information from text • present information in a simple presentation form

Objectives	Lesson Activities	Outcomes	Notes
Students learn that information and data can be stored and retrieved.	<ul style="list-style-type: none"> Show the students the text and graphics that they posted on the project web site in Week 2. Discuss with the students the success of their style of text account. Ask the students if there are any changes they would make to the style of text account. 	<p>Students are able to evaluate the success of the presentation style of their work.</p> <p>Students are able to suggest changes they would make.</p>	Activity suitable for use on an interactive whiteboard.
Students learn to evaluate the effectiveness of different formats and layouts.	<ul style="list-style-type: none"> The students view the Week 2 web pages of other participating students. Discuss with the students the similarities and differences in the style chosen for the text account. Ask the students to decide which text accounts they prefer. Encourage the students to give reasons for their preferences. 	<p>Students are able to express a preference.</p> <p>Students are able to give reasons for their preference.</p>	<p>If possible ensure that comparisons of text are made between similar aged students.</p> <p>Activity suitable for interactive whiteboard or individual computer use.</p>
<p>Students learn to find information from text accounts.</p> <p>Students interpret and use text in comprehension and information retrieval activities.</p>	<ul style="list-style-type: none"> The students view the text accounts of other participating students. Discuss the other participating students text accounts. Use the text accounts to ask the students information retrieval questions. Younger students, as a group, use the text information and pictures to make direct comparisons. How is our chosen area is similar or different to that of another participating group? 	<p>Students are able to read and compare information.</p> <p>Students are able to use recorded information in information retrieval activities.</p>	<p>Decide whether to compare a similar or different chosen area.</p> <p>Activity suitable for interactive whiteboard or individual computer use.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to make observations. Students learn to use scientific language.</p>	<ul style="list-style-type: none"> • Discuss with the students the changes they can see in the bean they are growing for the project. • If the changes are significant students record them pictorially. • Remind the students of the observations needed for the Bean Diary support sheet. • Ask the students if there are any entries that can be made on the Bean Diary support sheet. 	<p>Students are aware of the changes in the bean. Students are able to record observable changes in the growth of their bean plant.</p>	<p>If other beans have been planted and placed in other environments their changes could also be noted and comparisons made with the main bean.</p>
<p>Students learn how to collect and record data.</p>	<p>Younger Students</p> <ul style="list-style-type: none"> • Provide the students with a centimetre ruler to revise how big 1 centimetre is. • Remind the students how to measure something accurately. • Students estimate the height of the bean. • Measure the height of the bean. • Show the students the Our Bean Plant support sheet. • Give the students the data-recording sheet Our Bean Plant. • Read the scale on the Our Bean Plant support sheet. • Students record the measurement on their support sheet. <p>Older Students</p> <ul style="list-style-type: none"> • Students estimate and then measure accurately the height of the bean plant. • Students record the height of the bean on the Our Bean Plant worksheet. 	<p>Students are able to measure and record.</p>	<p>Use a photocopier to enlarge the Our Bean Plant data collection sheet The enlarged sheet can then be used to demonstrate how to read the scale and record the measurement of the bean plant.</p>
<p>Students learn how to present information in a form suitable for task and audience.</p>	<p>Enter the information about the growth of the bean on the Plants and Animals Publisher. Choose an illustration to scan, or a photo of the bean, to enter on the Plants and Animals Publisher.</p>	<p>Students are able to enter text onto a writing template. Students know that entered text can be retrieved and edited. Students know that scanned images and photos can be used on a web page.</p>	<p>Use step 4 week 1 to recap on scanning.</p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students should learn that different environments support different animals.</p>	<ul style="list-style-type: none"> • Ask the students to name any minibeasts that are known to them. • Discuss with the students the word habitat and the purpose of the activity – conducting a survey to see which minibeasts are found in which habitat. • Discuss the type of areas that they are going to be looking at – e.g. under stones, under logs, on plants, in the grass. <p>Older Students</p> <ul style="list-style-type: none"> • Divide the students into pairs. <p>One of the pair has the Bug Hunt data collection sheet. The other has the Bug Facts worksheet.</p> <p>Younger Students</p> <ul style="list-style-type: none"> • Divide the students into an equal number of groups. <p>Half the groups have the Bug Hunt data collection sheet. The other has the Bug Facts worksheet.</p> <ul style="list-style-type: none"> • Show the students the chosen Bug Hunt / Bug Facts data collection sheet. • Give each group of students an environment to investigate. • Students carry out the surveys entering their results on to their data collection sheets. • Students take a photo of, or make a pictorial representation of, one of the habitats. (Include minibeasts if possible) • As a group students compare their results of the surveys. 	<p>Students know the meaning of habitat.</p> <p>Students develop an understanding that differing habitats support different minibeasts.</p>	<p>Decide which data collection sheet is to be used. Bug Hunt / Bug Facts</p> <p>Use a photocopier to enlarge the chosen data collection sheet.</p> <p>A digital camera could be used to photograph a minibeast habitat.</p> <p>Explain that the Bug Hunt survey is recording the type of minibeast found and their habitat not the number of minibeasts found in each habitat.</p>
<p>Students should learn how to use collected data to present information.</p>	<p>Use the collected data to produce text accounts.</p> <p>Students compose sentences to provide the information about which minibeasts were found in each habitat.</p> <ul style="list-style-type: none"> • Enter information onto the Plants and Animals Publisher. • Class activity using interactive whiteboard. 	<p>Students are able to enter data with accuracy.</p>	

Objectives	Lesson Activities	Outcomes	Notes
<p>Students should learn about minibeasts found in different locations.</p> <p>Students learn to group things according to their observable similarities and differences.</p>	<p>Younger Students</p> <p>If adult support is available divide the group into smaller groups or as a group take only one minibeast example to describe.</p> <p>Give the students the Minibeast support sheet on which to record their information.</p> <p>Older Students</p> <p>Divide the group into smaller groups.</p> <ul style="list-style-type: none"> • Using the examples the students have found whilst carrying out their minibeast surveys choose a minibeast for each group to provide information about. • Give the students the Minibeast support sheet on which to record their information. • Students could word process their information sheet. • Each group produces a fact sheet using the information on the minibeast survey worksheet. • Each group produces an illustration of their minibeast. • On completion groups share their information. 	<p>Students develop an understanding of the using observable information to provide facts.</p> <p>Students are able to describe a minibeast in factual terminology.</p>	<p>Younger students teacher scribe facts. Use strips of paper that can then be reorganised according to the importance of the information.</p> <p>Older students could be given the opportunity to word process their minibeast information.</p>
<p>Students should learn how to enter information text and check for appropriateness of style.</p>	<ul style="list-style-type: none"> • Enter information on Plants and Animals Publisher. • Class activity using interactive whiteboard. 	<p>Students are able to enter text with accuracy.</p>	

Objectives	Lesson Activities	Outcomes	Notes
Students learn how to retrieve work that has been saved.	<ul style="list-style-type: none"> Remind the students how to find the web page on which the data and text has been previously entered. 	Students will be able to retrieve their saved project work.	Support sheets could be made giving the students instructions to follow.
Students learn how to use a spell check.	<ul style="list-style-type: none"> Remind the students that the data and the text needs to be proof read before it is published on the project web site. Older students use a spell check. 	Students will be able to use a spell check when using a word processing program.	
Students learn how to upload their work.	<ul style="list-style-type: none"> Remind the students how to upload their work. Remind the students to check to see if they think the style of the presentation of their collected information on the web page is suitable for their intended audience. Revise the function of the Publish button. The <i>teacher checks</i> the contents of the web page when the students have decided that the uploaded work is ready to publish. Select the Publish button. Show the students their web page on the project web site. 	<p>Students know that their work will be shared with others when it is published.</p> <p>Students are aware of the need to present work in a style suitable for the intended audience.</p>	<p><i>Before publishing the students' work check the schools Internet policy.</i></p> <p><i>Ensure that only a student's first name has been used in a text account and that no students in a photo are identified by name.</i></p>

Objectives	Lesson Activities	Outcomes	Notes
<p>Students learn to use ICT appropriately to communicate ideas through text.</p> <p>Students learn to use a word processing program to organize text.</p>	<ul style="list-style-type: none"> • Students use a word processing program to assemble the information they have obtained through the observational activities. The activity will enable the students to use copy, cut and paste to reorganize the text. The students will be able to spell check their final draft. • The students use a copy of their text account on the project web site to use on a classroom display or as part of an information book. They decide which font, colour and size would be appropriate for a given type of display. • Younger students could be given a prepared text to use to decide which font, colour and size would be appropriate for a given type of display. 	<p>Students are able to change the style and layout of text in a word processing program.</p> <p>Students are able to use a word processing program to produce a text that is suitable for the intended audience.</p>	
<p>Students learn to save their work.</p> <p>Students learn to retrieve work that has been saved.</p>	<ul style="list-style-type: none"> • Students print and save the text account. • Students retrieve the saved text account at a later date. 	<p>Students are able to print and save work.</p> <p>Students are able to retrieve saved work.</p>	
<p>Students learn how to use a digital camera.</p>	<ul style="list-style-type: none"> • Students use the digital camera to take photos of the minibeast habitats. 	<p>Students are able to use a viewfinder to compose a photo.</p>	<p>Photos taken could be used by the students to make a slide show to present information to others.</p>
<p>Students learn how to use a scanner to produce an image for a web site.</p>	<ul style="list-style-type: none"> • Students make an observational drawing of a minibeast that is then scanned. 	<p>Students develop an understanding of the use of a scanner.</p> <p>Some students will be able to use a scanner.</p>	<p>The students could use the scanner in other classroom activities.</p>

Objectives	Web site	Description	Outcomes	Notes
Students learn that the Internet is a source of information.	http://www.aces.mq.edu.au/education/students/minibeasts/index.html	A teacher or student insect information resource site.	The web links enable students and teachers to find and use appropriate project linked information.	<p>Disclaimer <i>learning-lincs endeavours to provide high quality and informative global educational projects. Whilst we try to ensure that our projects are educationally sound and safe we cannot guarantee your results with any procedure or project, nor can we be held liable for your activities or outcomes.</i></p> <p><i>Where suitable we will provide links to other sites on the Internet. These links are checked frequently but we cannot be held responsible for the content or quality of materials on these other sites.</i></p>
	http://www.haworth-village.org.uk/nature/pictures/beasts.asp	A teacher or students resource site. Providing photos of minibeasts.		
	http://www.hainaultforest.co.uk/3MiniBeasts.htm	This site provides photos of minibeasts, and woodlands.		
	http://www.teachers.ash.org.au/jmresources/minibeasts/minibeasts.htm	A teacher resource site. Providing web resource links for minibeasts.		
	http://www.workingwithwildlife.co.uk/resource/education/minibeast.asp	Downloadable activity sheets.		
	http://www.underfives.co.uk/minibst.html	Information and ideas for minibeast observations. Downloadable pictures of minibeasts.		

The students use the ‘Growing a Bean’ observations published by other students to make comparisons with the growth of their own bean plant. The students use the text accounts and the data collection information on the web site to identify similarities and differences between plant and animal habitats in different locations.

The students submit an evaluation of the project.

Curriculum focus	Learning Objectives
Mathematics	<ul style="list-style-type: none"> • To be able to collect, present and interpret data. • To be able to compare data in graphical form.
English	<ul style="list-style-type: none"> • To be able to read a variety of texts. • To be able to read for information. • To be able to write for a wide audience. • To be able to share written accounts. • To be able to write an evaluation of a task.

Curriculum focus	Learning Objectives
ICT	<ul style="list-style-type: none"> • To be able to communicate and handle information. • To be able to present information with an awareness of audience. • To be able to evaluate the success of using ICT to communicate information and to share data.
Science	<ul style="list-style-type: none"> • To be aware of the similarities and differences between plant and animal habitats in different locations. • To be able to identify a number of plants and animals. • To be able to identify the criteria required to make a fair comparison. • To be able to describe a scientific investigation.

The purpose of this week is for each group of students to make their final observations of the growth of their bean plant. Students interpret comparative text and data by reviewing the work submitted by other schools on the project web site.

Step	Title	Notes
1	Review Time	Overall comparisons.
2	How's the Bean Been?	Final observation of the bean growing experiment.
3	What We Have Learnt	Overview observations of the project.
4	Goodbye	Final text communications and graphic.
5	Publish Our Work	Publish the final text and graphics.

Resources
<p>Optional</p> <ul style="list-style-type: none"> Digital camera

Vocabulary
<p>evaluation evaluate compare retrieve information completion publish audience collaborate summary</p>

Expectations
<p>Most students will be able to</p> <ul style="list-style-type: none"> retrieve stored information make comparisons using retrieved information communicate and handle information present information with an awareness of audience <p>Some students will be able to</p> <ul style="list-style-type: none"> compare information and decide on the fairness of the comparison suggest another scientific investigation they could undertake

Objectives	Lesson Activities	Outcomes	Notes
Students learn how to retrieve work that has been saved.	<ul style="list-style-type: none"> Remind the students how to find the web page on which the data and text has been previously entered. 	Students will be able to retrieve their saved project work.	Older students could be given a list of questions to answer using the information displayed on the project web site. Parents and carers of younger students could be invited into school to share the project web site.
Students learn how to compare information.	<ul style="list-style-type: none"> The students review the work submitted by other schools on the web site. 	Students will be able to compare styles of presentation – text and pictorial representations.	
Students learn how to find information from data and text.	<ul style="list-style-type: none"> The students use the data collection and text information on the web site to discuss similarities and differences between habitats of flora and fauna known to them and those of other participating groups of students. 	Students will understand that the flora and fauna habitats will be different in different locations.	
Students learn that there are different flora and fauna habitats in different locations.	<ul style="list-style-type: none"> The students use the text accounts, graphical information and images to make comparisons with their chosen flora and fauna habitats. Older students make the comparisons and express their opinions about the similarities and differences. Older students express their opinions about caring for the environment. 	Students will be able to compare and contrast differing flora and fauna habitats. Students will be able to appreciate and be sensitive to the need to care for the environment. Students will be able to develop respect for the environment. Students will be able to think about the caring for the environment in other locations.	Use the activities in Personal, Social and Health and Citizenship lessons to enable the students to understand what improves and harms their local natural environment.

Objectives	Activity	Outcomes	Notes
Students learn how to write in a style suitable for the task.	<ul style="list-style-type: none"> • The students write a collaborative whole project summary, based on the comparisons they have made. • The summary should include statements about what the students have learnt - identifying similarities and differences between the pets they have and flora and fauna habitats. • The students upload the summary to the web page. 	<p>Students are able to communicate in a style best suited to a task.</p> <p>Students are able to summarize information.</p>	<p><i>If using individual student's names before uploading the students' work check the schools Internet policy.</i></p>

Objectives	Activity	Outcomes	Notes
Students learn how to write in a style suitable for the task.	<ul style="list-style-type: none"> The students write goodbye messages to other participating students. The students write a collaborative goodbye message. 	Students are able to communicate in a style best suited to a task.	<i>Before publishing the students' work check the schools Internet policy.</i>
Students learn how to take a photo using a digital camera.	<ul style="list-style-type: none"> The students submit a goodbye photo. This could be of the group, the school or a display linked to the project. 	<p>Students are able to use a digital camera.</p> <p>Students know that photos taken with a digital camera can be published on a web site.</p>	<i>Ensure that only a student's first name has been used in a text account and that no students in a photo are identified by name.</i>

Objectives	Activity	Outcomes	Notes
Students publish their goodbye messages and images on the web site.	<ul style="list-style-type: none"> • <i>Revise the function of the Publish button.</i> • The <i>teacher checks</i> the contents of the web page when the students have decided that the uploaded work is ready to publish. • Select the Publish button. • Show the students their web page on the project web site. 	Students complete the project. Students are able to retrieve and share their work by logging on to the project web site.	The completed web site will provide other teachers and groups of students within the school with access to data collection results and information text that could be used in problem solving and information retrieval activities.

Project Resources

Ongoing	Resource
Bean Diary	Individual support sheet for recording observations of the growth of the bean plant.
Our Bean Plant	Individual support sheet for recording growth of bean plant.
Week 1	Resource
Grow a Bean	Instructions for planting the bean.
How to Grow a Bean (2)	1. Information sheet. 2. Worksheet for students to write an individual text account.
Our Pets	Younger Students Whole class data collection.
Pet Survey	Older Students Whole class data collection.
What My Pet Needs	Younger Students Worksheet for students to write an individual text account.
My Pet	Older Students Worksheet for students to write an individual text account.
Week 2	Resource
Flora and Fauna Survey	Whole class data collection.
Plant Information	Worksheet for students to write observations of their chosen plant.
Week 3	Resource
Bug Hunt	Whole class data collection.
Bug Facts	Whole class data collection.
Minibeasts	Worksheet for students to write an individual text account.
Week 4	Resource
What Have We Learnt?	<i>No worksheets are required for this week.</i>
QCA Links	
Science	
Unit 1b Growing Plants	<i>Name some plants; recognise that plants need water and light to grow; investigate the conditions plants need for growth.</i>
Unit 2b Plants and Animals in the local environment	<i>Describe what they observe as new plants grow; record observations in tables, using these to draw conclusions suggest reasons why different plants and animals are found in the different environments.</i>
Unit 3b Helping Plants Grow Well	<i>Explain in simple terms why a number of plants should be used to provide reliable evidence about plant growth.</i>
Unit 4b Habitats	<i>Identify some local habitats, make observations of animals and plants.</i>

Name _____

Date _____

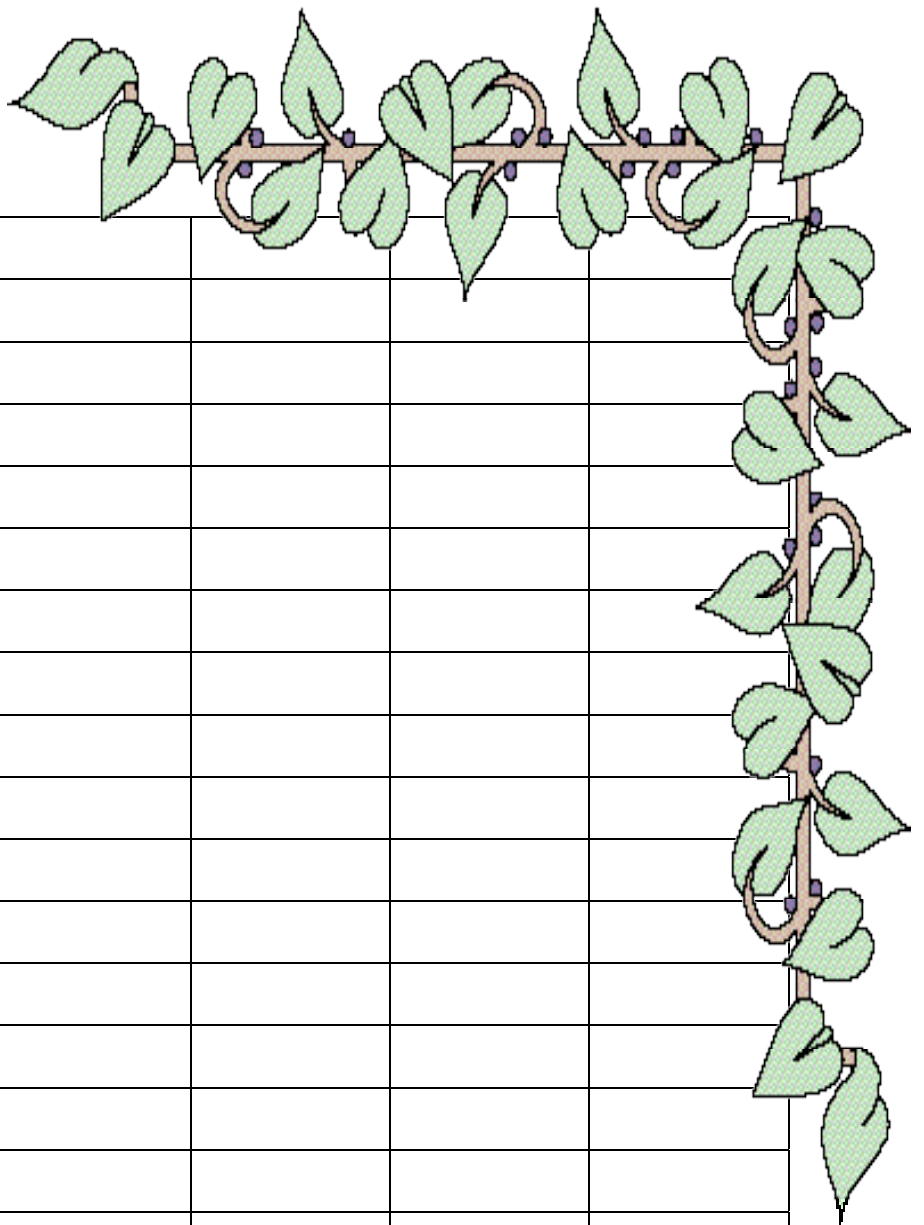
Bean Diary

The bean was planted on	
The root appeared on	
The first leaf appeared on	

The shoot appeared on	
The first flower appeared on	

After one week the bean plant was	<input type="text"/>	centimetres/inches tall.
After two weeks the bean plant was	<input type="text"/>	centimetres/inches tall.
After three weeks the bean plant was	<input type="text"/>	centimetres/inches tall.
After four weeks the bean plant was	<input type="text"/>	centimetres/inches tall.

Our Bean Plant



25cm	10 inches				
24cm					
23cm					
22cm					
21cm					
20cm	8 inches				
19cm					
18cm					
17cm					
16cm					
15cm	6 inches				
14cm					
13cm					
12cm					
11cm					
10cm	4 inches				
9cm					
8cm					
7cm					
6cm					
5cm	2 inches				
4cm					
3cm					
2cm					
1cm					
0cm	0 inches				
Height		Week 1	Week 2	Week 3	Week 4

Resources

- Clear plastic container
- Seed compost
- Bean (quick germinating such as runner bean)
- Label
- Centimetre/inch measure

What to Do

- Let each student handle one of the beans.
- Discuss size, colour, shape and texture.
- Discuss texture of compost.
- Fill clear plastic container with compost e.g. a cut down plastic drinks bottle.
- Wet compost.
- Plant bean next to side of container to allow observation of root, shoot formation.

At this stage students could set up other growth experiments to investigate the needs of a plant for growth – light, water and warmth.

The bean grown for the project should be placed in the most suitable indoor situation.

Each week use the **Bean Diary** to record progress.

Each week use the **Our Bean Plant** sheet to record growth and make comparisons with beans from other schools.

How to Grow a Bean

Required

- 8 Beans
- Clear Plastic container
- Compost

Method

1. Three quarters fill container with compost.
2. Water compost.
3. Place 3 or 4 beans on surface of compost.
4. Ensure beans are spaced out on the surface of the compost.
5. Cover beans with compost.
6. Place remaining beans in compost against the side of the container. This will enable the growth of the roots and shoots to be observed.
7. Dampen the top layer of compost.
8. Place the plastic container somewhere warm and well lit. For example a sunny windowsill.
9. Do not allow compost to dry out. Check daily.
10. When the shoot appears provide a stick as a support.

How to Grow a Bean	Method
Required	1.
Where to Grow the Bean	2. 3. 4. 5.

Name _____ Date _____

Pet Survey

	Total
Cat	
Dog	
Tropical Fish	
Goldfish	
Rabbit	
Hamster	
Gerbil	
Guinea Pig	
Mice	
Pony	
Snake	
Bird	
Spider	
Stick Insects	
Tortoise	

Name _____

Date _____

What My Pet Needs

My pet is a

It is called

It eats

It needs

.....

.....

.....

.....

.....

.....

Name _____ Date _____

My Pet

Type of pet

My Pet Needs

.....

.....

.....

.....

.....

.....

.....

.....

.....

Flora and Fauna Survey

Type of Plants	trees <input type="checkbox"/> shrubs <input type="checkbox"/> other <input type="checkbox"/> deciduous <input type="checkbox"/> evergreen <input type="checkbox"/> flowering <input type="checkbox"/> non flowering <input type="checkbox"/> fruit <input type="checkbox"/> no fruit <input type="checkbox"/>
Type of Animal	amphibians <input type="checkbox"/> birds <input type="checkbox"/> fish <input type="checkbox"/> insects <input type="checkbox"/> reptiles <input type="checkbox"/> mammals <input type="checkbox"/>

Plant Information

Type of plant tree shrub other

Name of plant.....

It is growing

Approximate height of plant.....

Deciduous Evergreen

Colour of the leaves

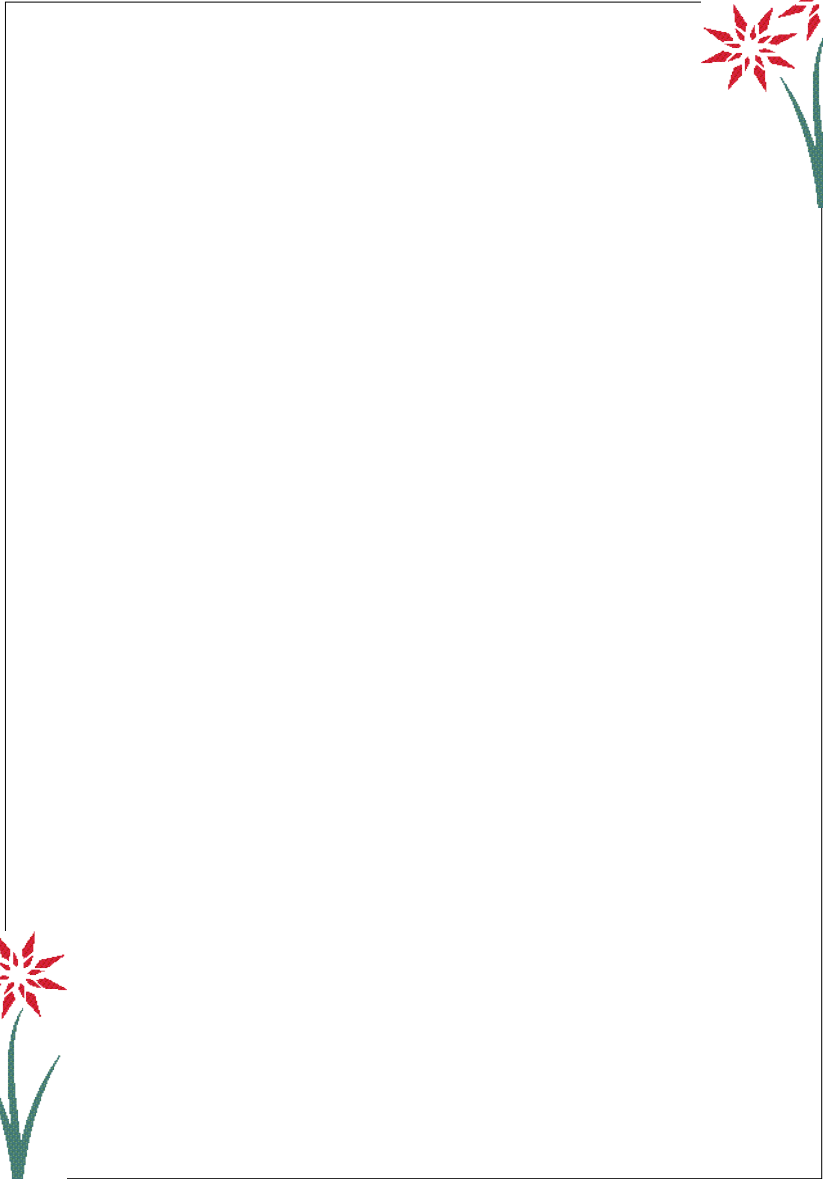
Flowering Non-flowering

Colour of the flowers

Fruit No Fruit

Description of any wildlife observed on plant.

.....
.....



Name _____ Date _____

Bug Hunt

Minibeast	Under a stone or log	In the grass	On a tree or bush	On the path	Other
Wood louse					
Ant					
Spider					
Caterpillar					
Snail					
Worm					
Ladybird					
Bee					

Name _____ Date _____

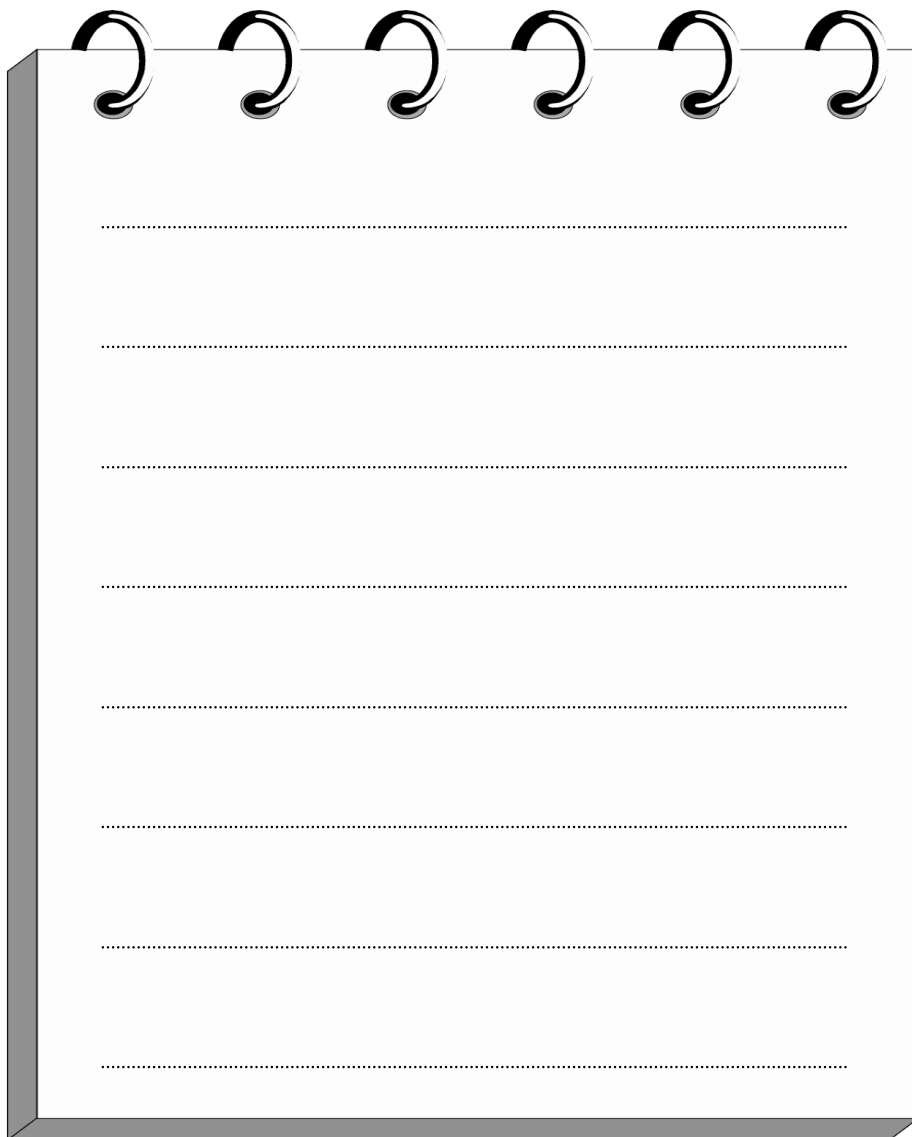
Bug Facts

Minibeast	How does it move?				Does it have			How many legs does it have?
	fly	swim	walk	other	wings	feathers	a shell	
Wood louse								
Ant								
Spider								
Caterpillar								
Snail								
Worm								
Ladybird								
Bee								

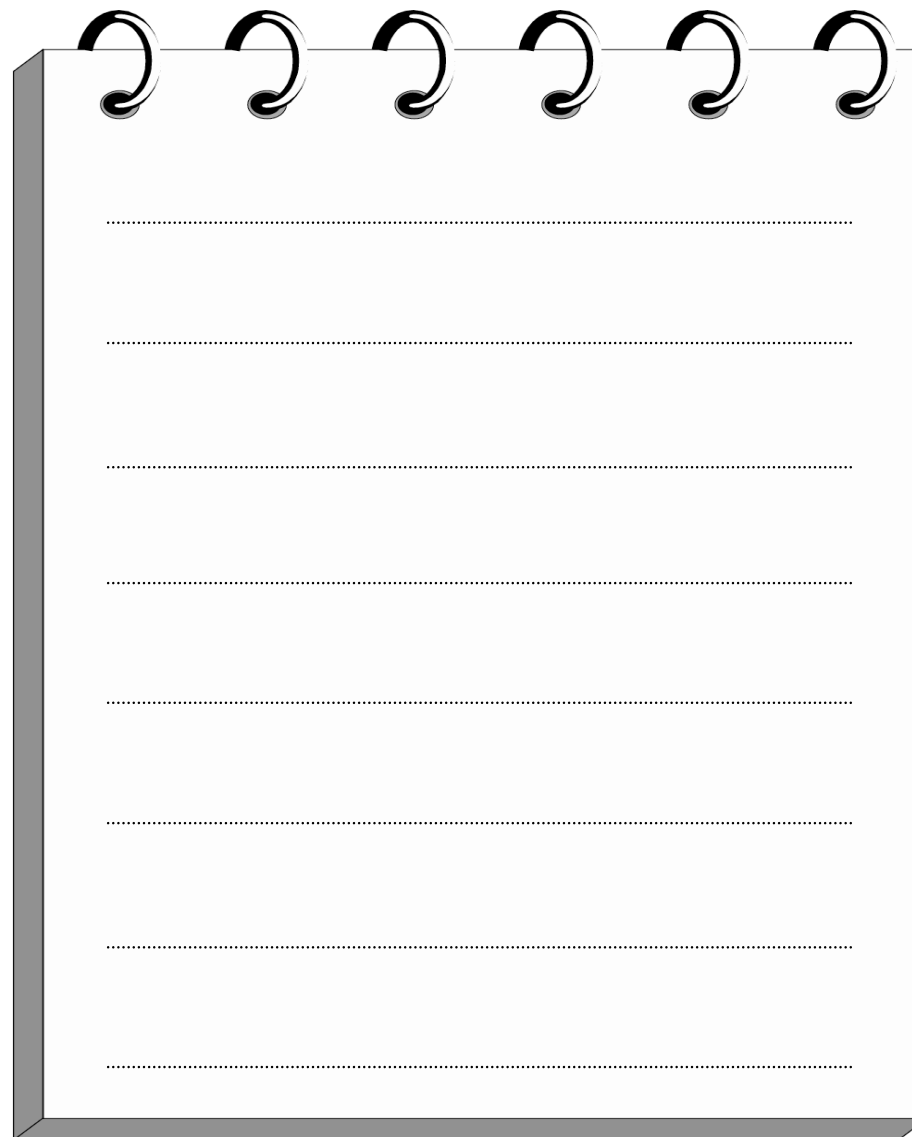
Name _____

Date _____

Minibeast



A spiral-bound notebook page with six metal rings at the top. The page contains ten horizontal dotted lines for writing.



A spiral-bound notebook page with six metal rings at the top. The page contains ten horizontal dotted lines for writing.