

2

Discovery Card

“There’s no place like home!”

Time: 2.5 hours (split into two sessions)



Teacher Information

“There’s no place like home!” (suitable for 7 - 12 year olds)

This is an opportunity for children to make their own bug boxes and test the habitat preference of selected minibeasts.

Timing - based on a class of 30 working in pairs or in small groups

Session 1: 1-2 hours discussion and bug box construction.

Session 2: 15-20 minutes collecting habitats and placing minibeasts.
15-20 observation.

- The bug box instructions have been designed for the children to follow, but can be adapted for a teacher-guided approach.
- **It is better to construct the boxes a day in advance to allow glues to dry out and to ensure that the boxes are fixed securely.**
- Habitat material should be collected at the start of Session 2 to ensure that they are fresh. One choice of habitat should be a handful of **pebbles or small stones**, another should be a **handful of fresh leaf litter and bark** with two more habitats of the children’s own choice.

Session 1

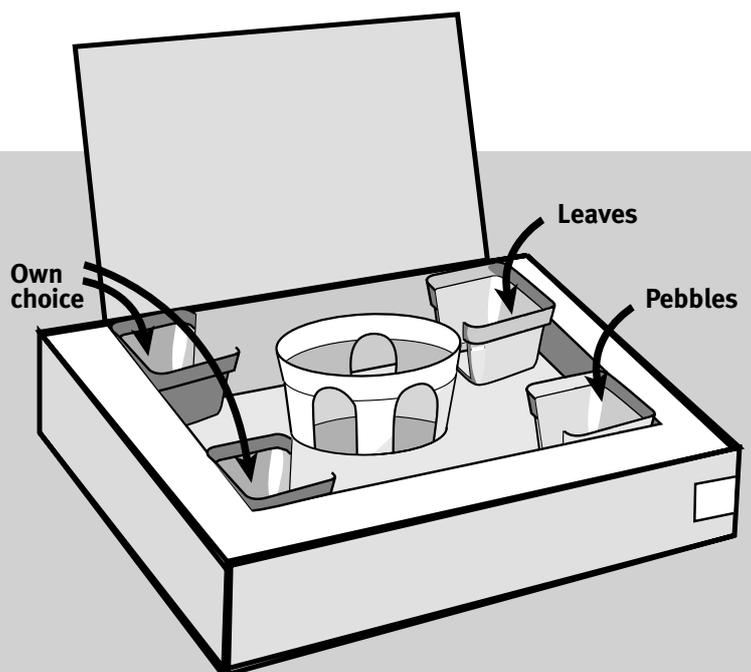
To make one bug box each small group will need:

- “There’s no place like home!” Discovery sheets 2a and 2b.
- 1 medium sized cereal box. A 750 g box is ideal but smaller 500 g boxes can be used effectively.
- 1 large round plastic tub
- 5 small square plastic tubs - all the same size. Square tubs fit neatly into the corners of the bug box but round tubs may also be used, so long as they are all of the same size to maintain fairness.

- A suitable ‘child-safe’ glue
- Sticky tape
- Scissors. (A craft knife may also be useful - but children should always be supervised when using the knife).
- Hand lenses (optional) to help the children to draw their minibeast.
- Perforated polythene or fine wire gauze to cover bug boxes if they are to be left unattended. Generally it is recommended that observation and recording are carried out in one continuous session.

Planning the investigation

While the boxes are under construction and /or drying, the children should make their predictions using the “There’s no place like home!” Discovery sheet 2c.



2

Discovery Card (cont)

“There’s no place like home!”

Time: 2.5 hours (split into two sessions)



Teacher Information

Session 2

The minibeast

Children can either collect their own minibeast for the bug box activity using the **Discovery card 1- Catch your own minibeast**, or you can supply the minibeasts in a suitable container (a tub of soil for woodlice, beetles and worms; a tub of fresh leaves for snails etc).

One minibeast per bug box should be sufficient and will enable the children to focus on the animal and observe it carefully. However, it is advised that you have a pot of additional minibeasts to hand so that the activity can be repeated if necessary.

The best kinds of invertebrates for this activity are those which are easily collected all year round and which do not fly, jump or generally move too quickly! Woodlice are ideal. Other possible choices include; snails, worms and for the more adventurous, beetles.

Minibeast observation

Once all the habitats are in place and predictions have been made, the children can test their bug boxes. They will need to observe the minibeast carefully and monitor which habitat(s) it moves towards. The minibeast may visit more than one habitat,

however a habitat preference usually emerges.

The following table is a basic guide and the **Minibeast Wallchart** may be used to look at habitat and adaptation in more detail.

Recording results

Children can record their results at the bottom of **Discovery sheet 2c** and on **Discovery sheet 2d**.

Discovery sheet 2d allows the children to track the routes taken by the minibeast(s) to and from one or more habitats by colouring in the appropriate footsteps. They might also use arrows to indicate the direction of movement. They should draw or write about their findings inside the four habitat circles. When the children have completed **Discovery sheet 2d**, it can be attached to the inside of the bug box lid. This provides an attractive and informative inlay.

After observation

It is useful to remind the children that animals taken from their natural habitat for study should be returned to the place where they were collected as soon as possible.



Invertebrate	Natural habitat	Box choice
Woodlice	Woodlice prefer moist (but not wet) sheltered habitats. These include; damp bark and leaf litter (also a source of food for many woodlice) and on occasion, damp cracks in soil.	Damp bark fragments or damp, decaying leaves.
Snails	Land snails prefer moist (but not wet) habitats. They live and feed amongst leaves and other foliage. Many species hibernate during the winter months, choosing dry sheltered places.	Fresh leaves and other foliage.
Beetles	There are many different species of beetle. Some species are carnivores (meat eating predators) some are herbivores (plant eaters). Because their hard exoskeleton affords protection from desiccation (drying out of the body) they can live in dry areas as well as damp areas. Generally they will seek a habitat that provides a source of food and protection/shelter.	Varied.
Earthworms	Earthworms prefer moist soil. They feed on leaf litter and plant fragments in the soil itself.	Soil or sand.

“There’s no place like home!”

Instruction sheet

To make your bug box you will need:

- 1 medium sized cereal box
- 1 large round plastic tub
- 5 small square plastic tubs -they must all be the same size
- Glue
- Sticky tape
- Scissors
- One ‘minibeast’
- Discovery sheets 2c and 2d

Habitats

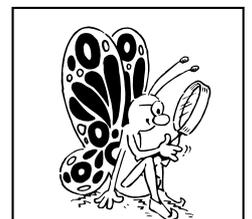
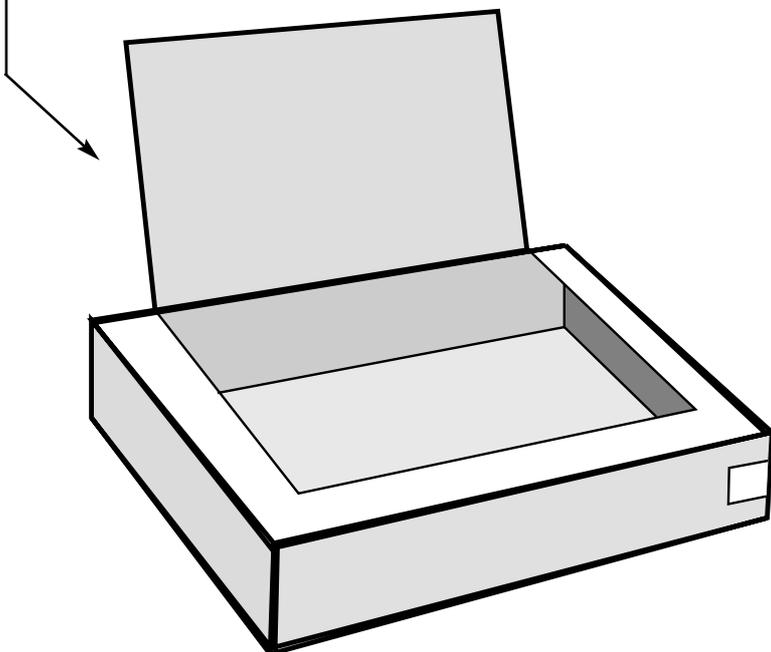
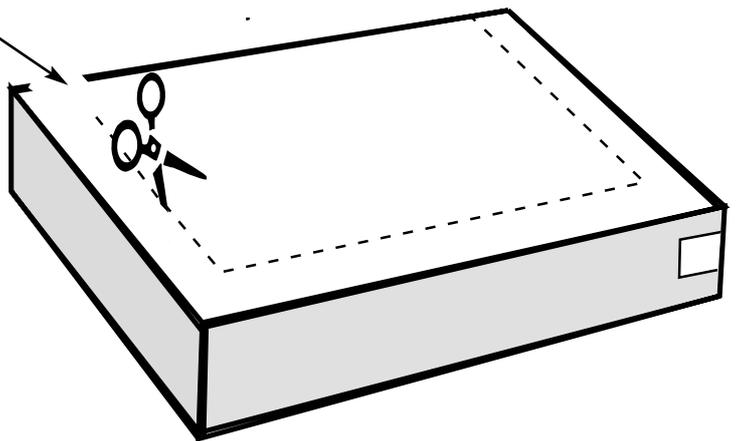
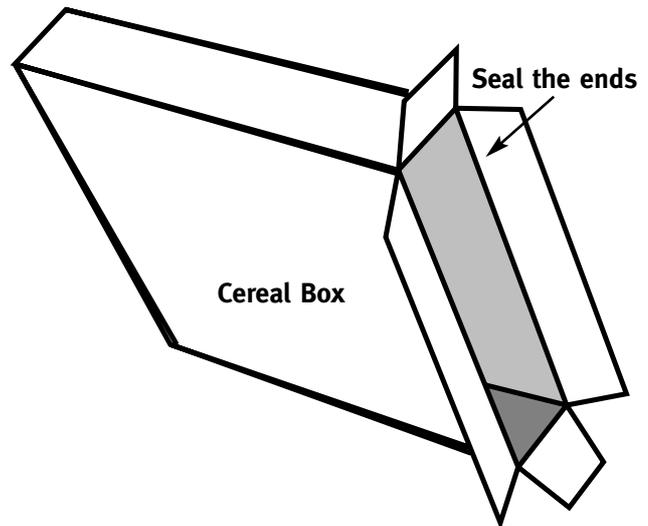
- A handful of pebbles or small stones
- A handful of fresh (damp) leaves and bark
- Two more habitats of your own choice

How to make your bug box

Use some sticky tape to stick the open ends of your empty cereal box together.

Cut a flap from the box as shown. If you are using a craft knife, ask an adult to help you.

You should now have a lid like this which is still attached to your box on one side. Now you are ready to make your home.



“There’s no place like home!”

Instruction sheet

Take the large round plastic tub (e.g. a margarine tub) and cut three holes as shown.

Then cut away one quarter of each of the four small plastic tubs and throw away this portion. **Don’t cut the fifth tub.** You will use this as a scoop to measure your leaves, or pebbles, or your own choice of habitat.

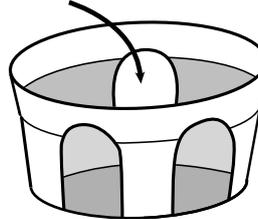
When you have finished cutting your tubs, glue one small tub into each corner of your box and glue the large tub into the middle of the box. **Leave the box to dry.**

When you are ready to use your bug box, put a different kind of habitat in each of the corner tubs, using your fifth tub as a measuring scoop.

Collect one minibeast from your teacher and place it in the large tub in the centre of your bug box and watch carefully. Use Discovery sheet 2d to record what happens.

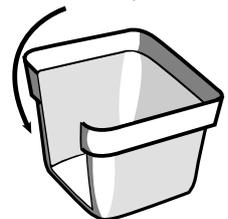
Remember you should always return your minibeasts to the place where you found them when you have finished your observations.

Cut three holes

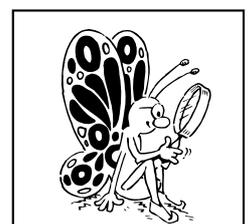
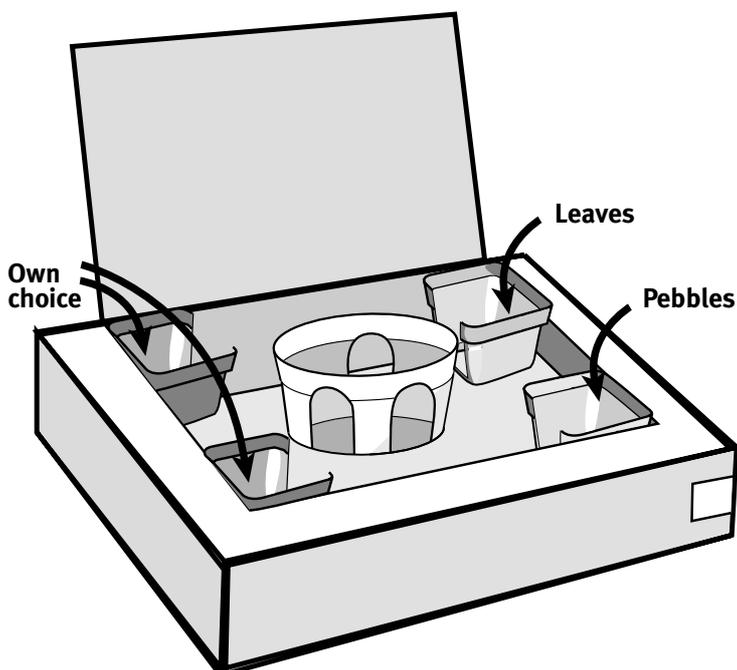
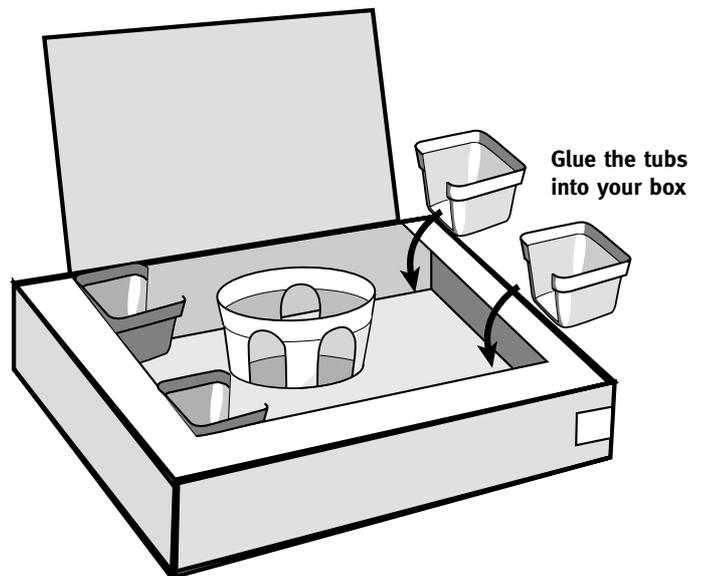


Large round tub

Cut away one side



Small plastic tub x4



“There’s no place like home!”

Recording Sheet 1

The minibeast(s) we will use: _____

The habitats we will use:

Habitat 1 _____ because _____

Habitat 2 _____ because _____

Habitat 3 _____ because _____

Habitat 4 _____ because _____

How we will keep our experiment fair:

This is our prediction: We think that the _____

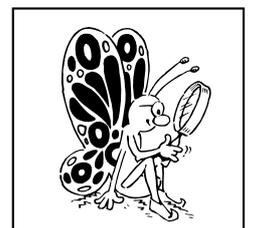
will choose habitat(s) _____

for their home because _____

Our Results

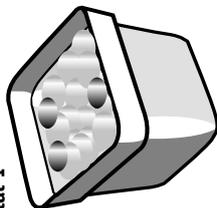
We found out:

We think this happened because:



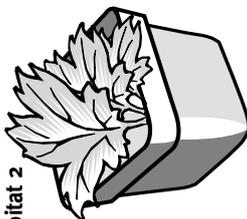
“There’s no place like home!”

Habitat 1



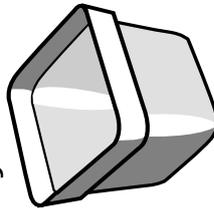
Stones

Habitat 2



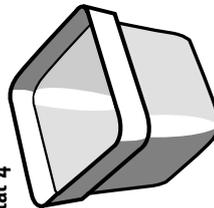
Leaves

Habitat 3



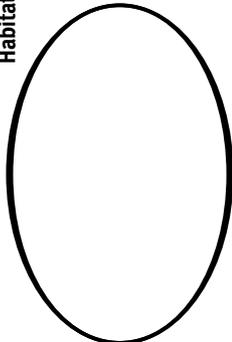
Own choice

Habitat 4

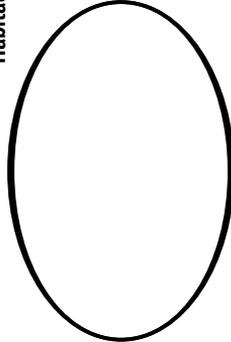


Own choice

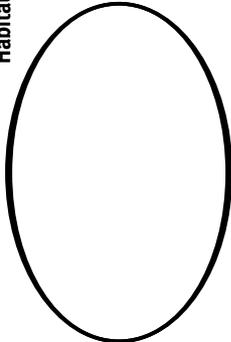
Habitat 1



Habitat 2



Habitat 3



Habitat 4

