

Design & Technology Project Plans MINIBEASTS

These projects are designed to be used in association with your Minibeasts CD-ROM.

Design & Technology Project 1: Revolting recipes (All Key Stages)

Aims of the project: To investigate the diets of minibeasts by devising recipes that could prove appetising to selected invertebrates.

Activity: Begin this activity by asking the pupils if they are feeling hungry. How about some Snozzcumbers for a snack, or a Fresh Mudburger for dinner? Or perhaps you're in the mood for Stink Bugs' Eggs. Fans of Roald Dahl will recognize his culinary inventions from his many books – and can read all about them in his Revolting Recipes, a compendium of dishes that sound worse than they really are. As a preliminary literacy activity, the class should read Revolting Recipes. Then explain to the class that they are going to make a recipe book of foods for insects that they are interested in. With such a huge variety of minibeasts in the world, it naturally follows that

they eat a huge variety of foods. The Design & Technology Project 1 folder on the accompanying CD includes a table detailing some minibeasts and what they like to eat. Explain that most insects will eat just about anything! Lots of them eat plants. Some of them eat other insects. Some of them eat blood (e.g. mosquitoes). Nectar from plants is also a popular food. Ask the class to research different foods that minibeasts eat, then try and devise some suitably appetising recipes for their chosen minibeast. The Design & Technology Project 1 folder also has a recipe for a jelly that ants particularly enjoy. Plenary: As an extension to this activity, the class could make their own pretend minibeast fairy cakes. Simply help the pupils to make some basic fairy cakes and then, using coloured icing, ask them to make the

CD RESOURCE

■ Linked to the
Design &
Technology Project 1
folder on the
accompanying CD,
which includes an
information sheet
on what some
minibeasts eat and a
recipe for Ant Jelly.

Design & Technology Project 2: Scorpion spinners (Key Stages 1 and 2)

Aims of the project: To produce a scorpion picture spinner.

Activity: For this activity, the class is asked to make a picture spinner based on a scorpion. For the spinner, each pupil will need:

- Scorpion card template
- Scissors
- Coloured pencils
- Hole punch
- Two elastic bands

The method to make the spinner is as follows:

 Print out the template for the scorpion spinner on card for distribution. The template is shown opposite and a copy of this can be found in the Design & Technology Project 2 folder on the CD. Cut out the piece of card showing how to use the scissors.

- Colour in the pictures on the card. Remember, each picture needs to look the same, so make sure you use the same colours in each picture.
- 3. Bend the card at the crease mark.

fairy cake look like a chosen minibeast.

- 4. Glue the back of the cards together.
- 5. Allow to dry.
- Make a hole in the card at points A and B by using the hole punch.
- Thread an elastic band through each hole. Secure the elastic band by looping it through itself.

The pupils can then hold the spinner by the elastic bands, rotate the card to 'wind up' the elastic bands and then release. Because the spinner spins around so fast, the brain is fooled into thinking that the 'minibeast' is moving.

Plenary: The Design & Technology Project 2 folder also includes some other spinner templates for a spider, butterfly and ladybird.

CD RESOURCE

■ Linked to the Design & Technology Project 2 folder on the CD, which includes spinner templates for a scorpion, a spider, a butterfly and a ladybird.

Minibeasts

Design & Technology Project 1: Revolting recipes

All key stages

What do minibeasts eat?

Minibeast	Examples of food	How they eat
Spiders	They do not eat plants, but only other living animals, such as flies, small insects and other spiders.	Spiders don't chew their food. When they get to the bug in their web, they bite it and inject venom. The venom either paralyses or kills the bug. Then the venom turns the bug's insides into liquid. While the venom is working, the spider wraps the bug in silk. She may drink the liquid then, or tie the little silk bundle to her web so she can snack later.
Ants	The diet of ants varies from species to species, but in the UK they mainly eat small invertebrate animals of about their own size, and the occasional vertebrate corpse. They will also eat some fruits, and are very partial to sugary substances such as honeydew, tree sap, etc, as well as the bodies of dead insects and grass seeds.	Sometimes ants will keep 'herds' of aphids (like we would keep cows) and nurture them for food.
Butterflies	Most butterflies sip flower nectar or fluids from sap flowers on trees, rotting fruits, bird droppings or animal dung.	When a butterfly lands on a plant, it can instantly 'taste' whether it is the kind of plant it is looking for. In other words, they taste with their feet.
Cockroaches	Cockroaches will eat anything – left-over human food, wood, leather, cigarette butts, coffee, soap, faeces, fabric, shoes, paint, the glue on the back of wallpaper, human hair, fingernails, etc.	Cockroaches are little 'hoovers' and will even nibble on humans if you stay still long enough!

Ant Jelly

Ingredients

1 egg

A good sized spoon of honey (about 3 or 4 tablespoons)

1 multi-vitamin capsule or tablet (preferably with minerals too)

1 sachet of gelatine

300-500 mls of cold water

Method

- 1. Dissolve the gelatine in boiling water, as per the instructions on the packet. (It suggests using 1 cup of boiling water, and to add the gelatine powder to the water, never the other way round!)
- 2. If using a vitamin capsule, open the capsule and squeeze the contents into the hot gelatine mix. If using a solid tablet, crush it first to a powder, then dissolve the powder in the mix.
- 3. Mix in the honey.
- 4. Stir until dissolved.
- 5. Leave it to cool (but not set).
- 6. Break and add the egg (make sure the mixture is cooled before adding the egg, or it will cook!).
- 7. Pour and mix the mixture into the cold water.
- 8. Pour the whole lot into a suitable container and cover.
- 9. Place it into the fridge until set.
- 10. Feed it to your ants!

This can be fed to your ants a couple of times a week. It is recommended that any the ants have not eaten after 24–48 hours should be removed, as it does go mouldy.

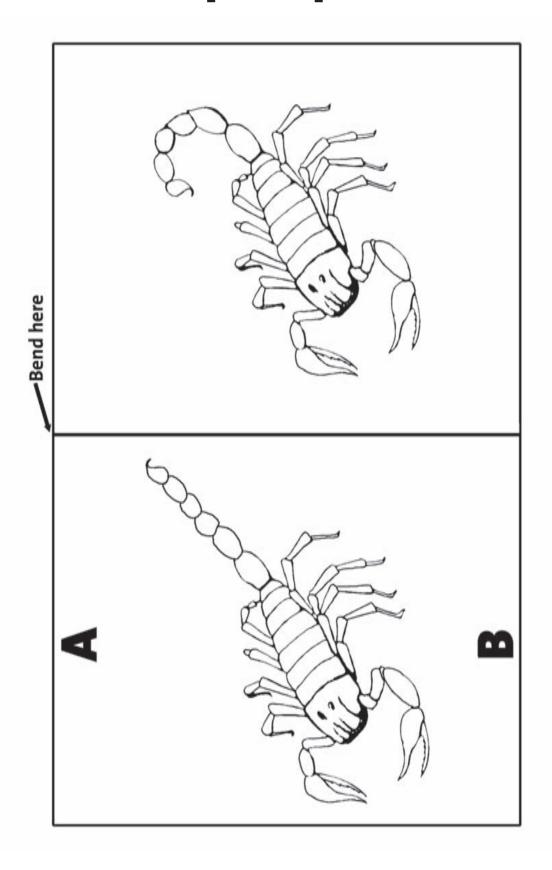
Minibeasts

Design & Technology
Project 2:
Scorpion spinners

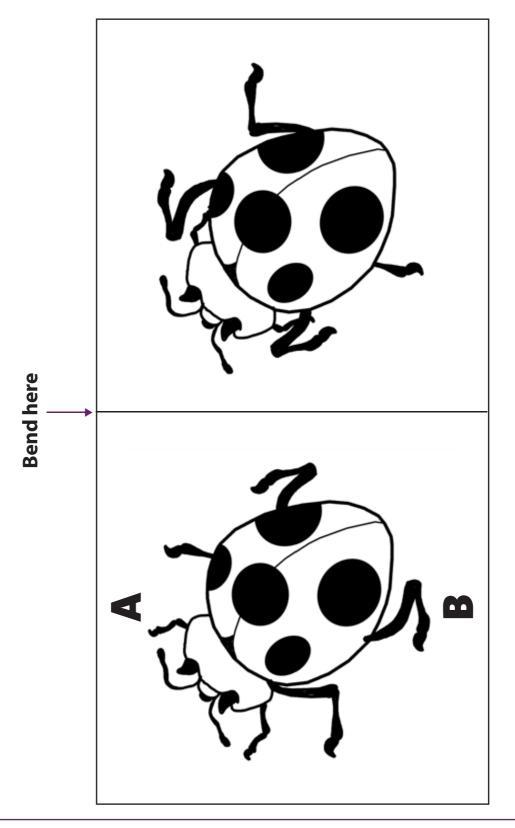
Key stages 1 & 2



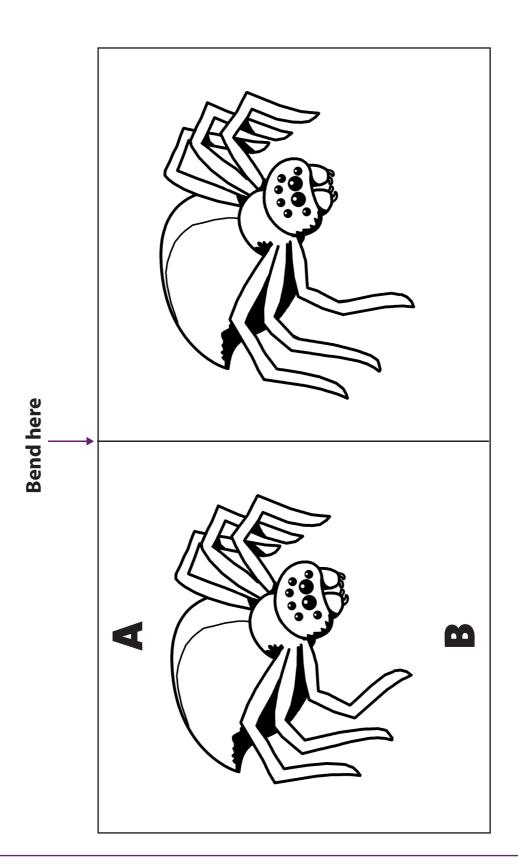
Scorpion spinner



Ladybird spinner



Spider spinner



Butterfly spinner

