

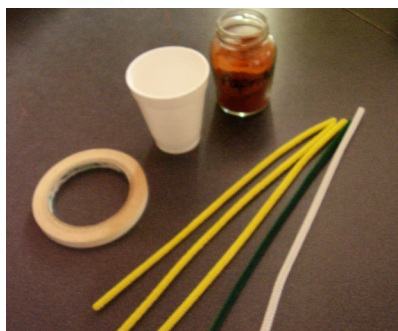


Bugwise

Making an Insect Pollinator

Purpose:

To construct a model insect and flower to investigate how an insect pollinates a flower.



What you will need:

- Two pipe cleaners
- Paper cup
- Coloured powder e.g. ground chalk, paprika
- Tape

Make an insect by bending a pipe cleaner on to an insect shape, making sure it fits easily in to the bottom of the paper cup "flower".



Make the paper cup "flower" ..

1. Colour in the base of the cup to represent the "nectar".
2. Poke three folded over pipe cleaners through the base of the cup. They are the "stamens".
3. Wrap double-sided tape around one end of another pipe cleaner and insert it through the centre hole in the cup. Surround the tip with double sided tape. This will be the "stigma".
4. Dip the tips of the "stamen" in to coloured powder (the "pollen"; they are now the "anthers".



This will work best if there are at least two flowers with different coloured "pollen" smeared around the "flower".

Fly the insects in to the paper cups allowing them to touch the powder and sticky, taped end of the pipe cleaner.

Inside the "flower" is a stigma that is sticky like the tape. The pollen sticks to the stigma and is used to fertilise the ovaries in the flower.



- WHAT HAPPENED TO THE TAPED PIPE CLEANER?
- ARE THERE DIFFERENT COLOURS ON THE PIPE CLEANER?
- WHAT DID YOU USE TO SIMULATE THE FLOWER'S POLLEN?
- WHAT HAPPENED TO THE PIPE CLEANER INSECT?
- WHAT HAPPENED TO THE POLLEN?
- HOW DO YOU THINK THIS RELATES TO REAL FLOWERS?
- WAS THE INSECT'S TONGUE LONG ENOUGH?

Q: WHY DO YOU THINK POLLINATION IS IMPORTANT TO US?

A: Without pollination the plant cannot develop seeds, reproduce or produce fruit.

WHAT DO YOU THINK WOULD HAPPEN IF... .. BEES AND OTHER INSECTS COULDN'T DETECT COLOR? ... OIL WERE SPLASHED ON A FLOWER'S STIGMA? ... PESTICIDES, TOXIC TO BEES, WERE SPRAYED ON PLANTS?.. THE STIGMA WERE SHORTER THAN THE STAMENS?...THE STIGMA WEREN'T STICKY?

Want to find out more? www.australianmuseum.net.au/Pollination