



# Pollinator Automaton

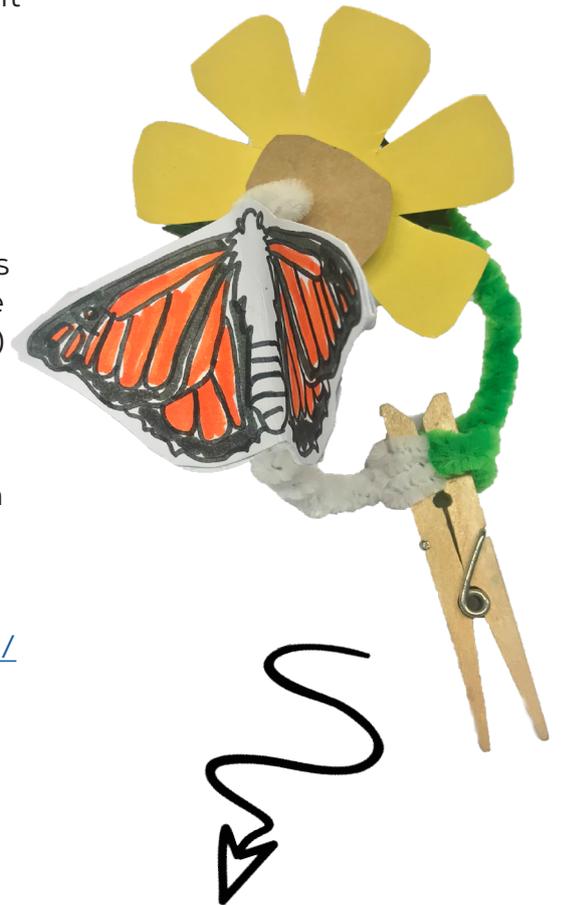
**Recommended ages:** 8+ years with parental supervision or assistance

**Time to complete this project:** approximately 1 hour

Thanks for collecting a Pollinator Grab and Go Kit. This kit will provide you with the materials and instructions you need to construct a simple automaton of a butterfly or bee pollinating a flower. Alongside this kit you will need a few extra things at home to complete this project (see the list below).

An automaton is a moving mechanical device that follows a set sequence of movement. These simple machines are often self-operating (e.g. battery powered or clockwork) or set in motion with a simple lever. If you've seen a cuckoo clock you have seen an automaton.

In this project we will make a very simple automaton with movement created by squeezing and releasing a peg. To make your automaton you can use the attached written instructions OR follow along with our video tutorial via link ([ipswichlibraries.com//whats-on/children/pollinator-automaton/](https://www.ipswichlibraries.com/whats-on/children/pollinator-automaton/)).



## Materials

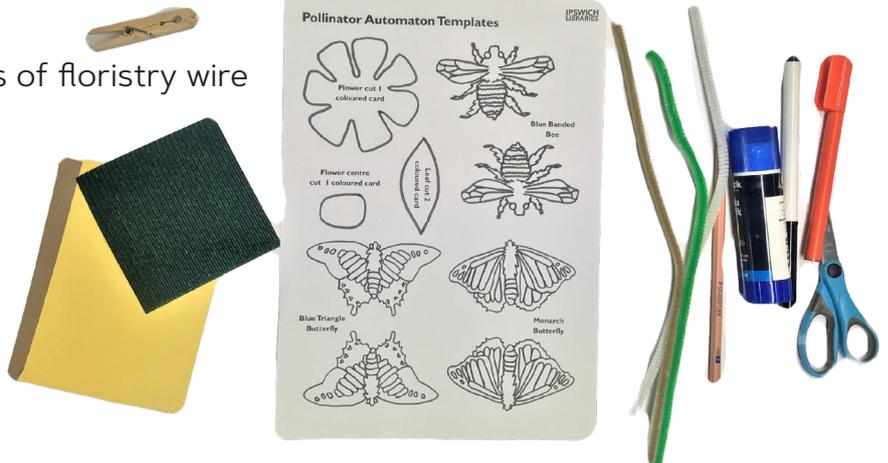


**In your Grab and Go Kit you'll find:**

- Instructions (this sheet)
- A template sheet (but feel free to draw your own flowers, bee or butterfly)
- 1 piece of white card
- 3 pieces of coloured card
- 2 pipe cleaners OR 2 pieces of floristry wire
- 1 Peg

**Additional things you'll need:**

- A pencil
- Scissors
- Glue stick
- Coloured pens or pencils



# Instructions



## Prepare all the cardboard pieces

*You will need the templates and card.*

**a.** Cut the two pieces of your chosen pollinator from the template sheet. Stick these to the white card, colour them in and cut them out.

**b.** Cut out all the flower template pieces, trace around them onto whichever coloured card you'd like to use and cut them out (you can always draw your own flower and leaves if you want to).



## Make the flower

*You will need the cut out flower pieces, pipe cleaner, a pencil and glue.*

**a.** Use your pencil to carefully poke a small hole in the middle of the flower and close to the edge of two leaves.

**b.** Thread a pipe cleaner through the hole in the flower and twist the end to secure it.

**c.** Glue the centre piece over the top of the pipe cleaner.

**d.** Thread the leaves onto the pipe cleaner.



## Make the bee or butterfly

*You will need your coloured pollinator pieces, a pipe cleaner and glue stick.*

**a.** Glue the pipe cleaner onto the white side of one of the bee or butterfly pieces making sure it sticks out the head end by about 4cm.

**b.** Fold the short end over itself and twist it up.

**c.** Glue the two white sides of the pollinator pieces together, sandwiching the pipe cleaner between them.



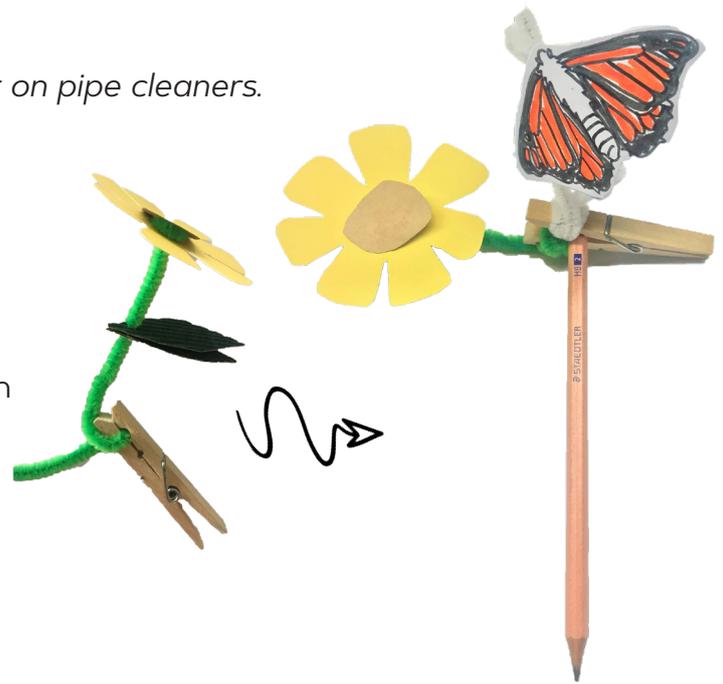


## Put it all together

You will need the peg, the flower and pollinator on pipe cleaners.

**a.** Attach the flower piece to one side of the peg, make sure you twist the pipe cleaner around the peg a couple of times then twist it over itself until you run out of pipe cleaner.

**b.** Attach the butterfly to the other side of the peg (you can use a pencil to keep the peg open or ask your grown up to help). Finish it off the same as the flower.



## Finish it off

**a.** Adjust the flower and butterfly (or bee) so that when the peg is closed the tip of the butterfly touches the flower.

**b.** Open and close the peg to make the butterfly or bee flutter up and down above the flower.



# BOOKS AND OTHER FUN STUFF

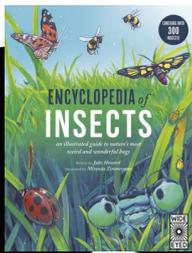
## Find out more/get Inspired

Check out our Online quiz about Incredible Insects at: [\(link to quiz\)](#). Find how much you really know about the creatures that hang out in your garden.

If you want to find out more about pollinators, discover ideas for a craft project, or if you just want something cool to read— check out the list below.

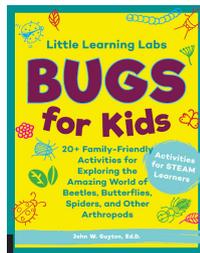
### Non-fiction Books

<https://www.ipswichlibraries.com.au/>



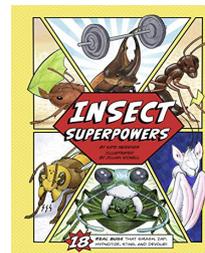
*Encyclopedia of Insects*  
Jules Howard

595.703 HOWA



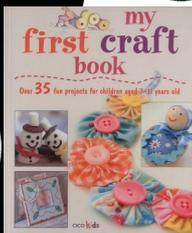
*Bugs for Kids*  
John W. Guynton

595.7 GUYT



*Insect Superpowers*  
Kate Messner

595.7 MESS



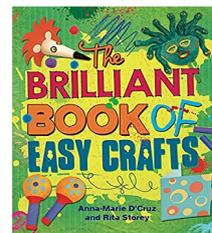
*My First Craft Book*  
Susan Akass

745.5 MY



*Fun and Easy Crafting with Recycled Materials*  
Kimberley McLeod

745.5 MACL

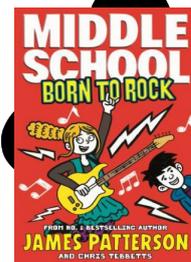
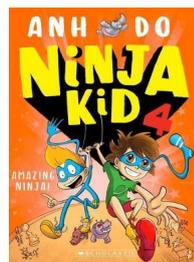


*Brilliant Book of Easy Crafts*  
Anna-Marie D'Cruz

745.5 DCR

### Fiction

<https://www.ipswichlibraries.com.au/>



### Online Resources

#### Pollinators/Insects:

National Geographic: <https://www.natgeokids.com/au/discover/science/nature/the-life-cycle-of-flowering-plants/>

Fun Facts about Bugs: <https://www.si.edu/spotlight/buginfo/fun-facts-bugs>

Backyard Buddies - Bugs and Insects: <https://www.backyardbuddies.org.au/explore/bugs-and-insects>

Kids Growing Strong - Pollination: <https://kidsgrowingstrong.org/pollination/>

Getting the Buzz on the Value of Bees: <https://www.science.org.au/curious/everything-else/bees>