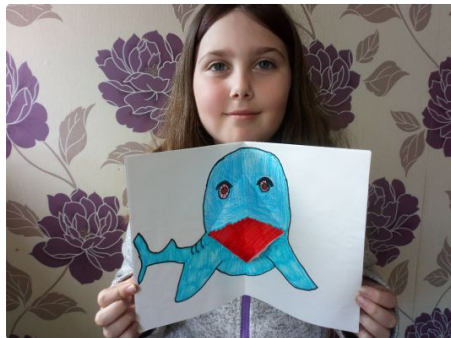


POP UPS

Share your knowledge of the natural world by creating pop up decorations

Overview



We like to show what we know about STEM in creative and imaginative ways. These pop ups will let you record your observations about animals and plants while developing your paper engineering skills.

All you need is card or paper, scissors, a pencil and felt tips, crayons or colouring pencils.



What to do

Step 1



First of all, think of an animal with a large

[More STEM at Home](#)



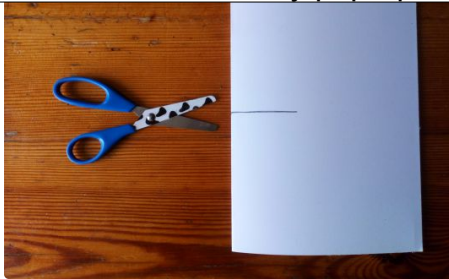
What you'll need

- Card or paper (A4 is easiest but any size will do)
- Scissors
- A pencil
- Felt tips, crayons or colouring pencils
- Photographs of animals and plants or the ability to search the internet for these

Duration

20 minutes or so.

Suitable for...



mouth you want to create. Find a a photograph of that animal ready for later on. You may have a book or you could search online.

Now, fold your card or paper in half. Find about half way down the folded edge and draw a line about 5 cm long from the edge towards the centre. Cut on the line with your scissors.

Age 4 and up.

Safety notes

You know your children better than anyone, and you should judge whether they're ready for this activity. You might want to think in particular about:

- Supervision: scissors can be sharp.
- Glue can damage carpets.

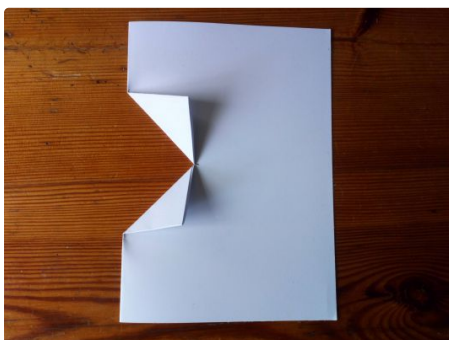
Careers Link – Mechanical Engineer

If you enjoyed making paper mechanisms you might want to become a mechanical engineer.

Mechanical engineering jobs are all about solving problems and creating products to meet people's needs.

For more pop ups and other activities involving simple mechanisms that you can try at home, visit our [mechanical engineering](#) page.

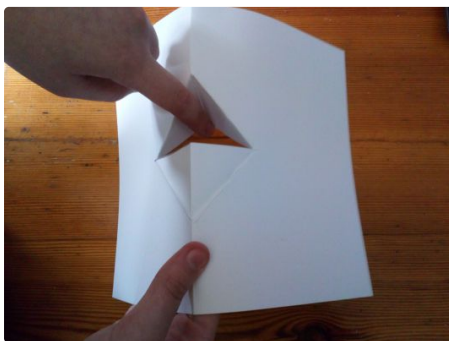
Step 2



Use the snip you just made to fold one triangle upwards, and one downwards (like in the picture).

Now fold these flaps back into the centre and turn over your card. Fold your flaps in the same way again and then fold them back into the centre.

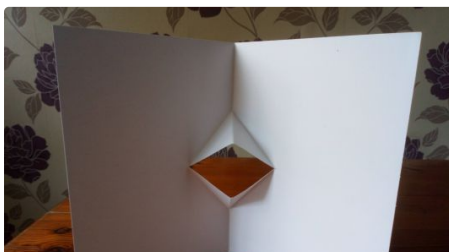
Step 3



Now the tricky bit! Hold your paper so it looks like a roof. Put your finger on the top triangle and push down. Pinch along all of the folds so that the triangle is pushed through to the other side of the paper.

Do the same with the bottom triangle. Your top and bottom triangle will now be pushed out to form a mouth inside your card.

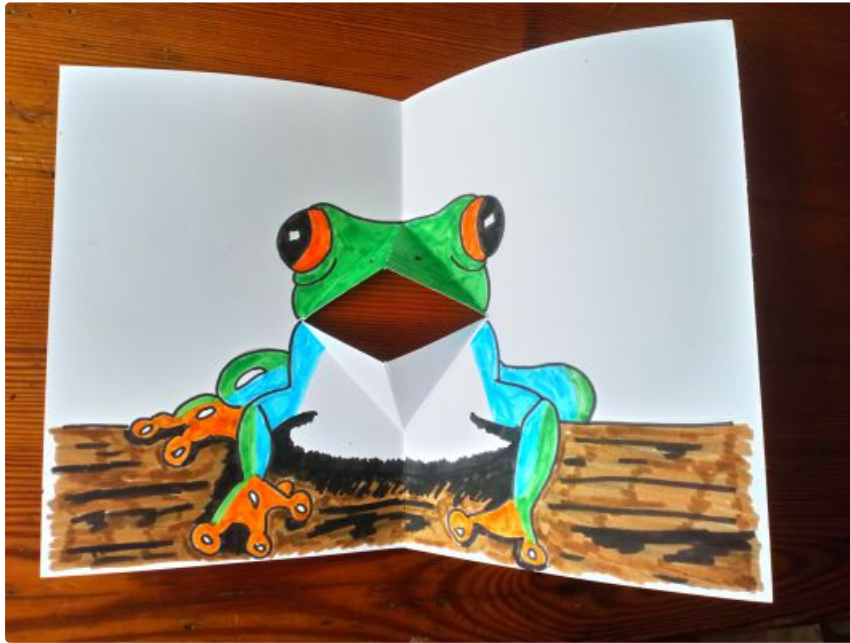
Step 4



Open and close your card so it looks like you have a mouth that is talking or biting!

Now it is time to observe your animal photograph carefully and draw your animal around the mouth.

Things to discuss

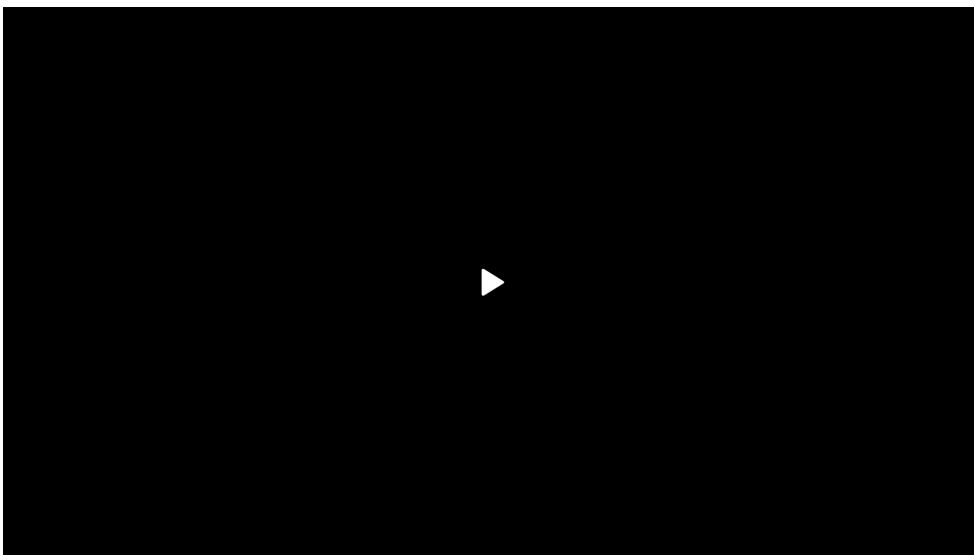


Is your mouth the right size and shape for your animal?

How could you make your mouth bigger or smaller?

Do you need to change the position of your mouth?

How can you change the shape of your mouth?



Why do different animals have different mouths?

Take a look at the animals in the clip and think about what they eat.

The size and shape of some animal's mouths is dependant on the size and shape of

their teeth. Some animals are carnivores (meat eaters) and their teeth are designed to rip and slice food. Other animals are herbivores (plant eaters) and their teeth are designed to squash and grind food.

Have you chosen an animal with teeth? If so, is the animal you have chosen a carnivore or herbivore? What do you notice about its teeth?

Not all animals have teeth. Some have beaks and some swallow their food whole! Can you think of any examples? Try this [quiz](#) to find out more.

Other things to try

Make a mouth with teeth

Back in **step 1**, draw a jagged line instead of a straight line for your mouth and your animal will now have teeth!

Have a look at the way we have made our mouths different shapes and added teeth to some in the gallery below.

