



Teacher Lab

# Teaching Primary Science through Creativity: Identifying and Classifying Nature

Teaching Resource – Slides and Notes



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# About Teacher Lab

The Teacher Lab project promotes creative practice in the classroom by supporting cross-curricular teacher and artist exchanges in the UK. It offers teachers direct access to a variety of artists, in order to re-imagine the curriculum and develop practical tools for learning through the arts.

You can access the previous Teacher Lab resource (exploring Push and Pull forces) created by teacher Christina Paul and actor and mathematician Victoria Gould, here: <https://sites.barbican.org.uk/teacherslab/>

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This Teacher Lab was a collaboration between Barbican Creative Learning, Creative Arts East for PEACH West Norfolk, and involved teachers Gill Sekatawa and Sarah Melia from Nelson Academy in Downham Market, Norfolk, and Norwich based artist Kaitlin Ferguson.

Through a series of planning, testing and reflection sessions, Gill, Sarah and Kaitlin co-designed a range of creative activities to support the delivery of the primary science curriculum. These were then developed into a resource pack, in the form of a set of PowerPoint Slides which can be used directly in a lesson, with supportive guidance notes to assist your teaching.



# How to use this resource

You can use this resource in two ways:

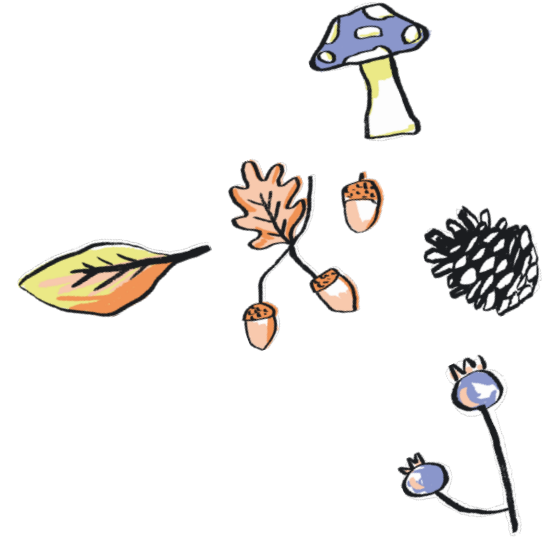
- As a live PowerPoint presentation for the whole class to view
- As a printed pdf

Each year group has a dedicated set of slides.

The main content of each slide is directed at the pupils.

This content is animated to ensure that the teacher is in control of the pace of the lesson.

Each slide also has a corresponding set of 'notes', which are directed at the teacher.



## To use the resource in PowerPoint Slide Show mode:

- Go to the slide you wish to begin from
- Click 'Slide Show' tab in the top navigation bar
- Click 'From Current Slide' in the menu bar
- To see the notes in this mode, click on the '...' in the lefthand corner and select Presenter View

## To view the notes:

- Click on the View tab in the top navigation bar
- Select 'Notes' to see these at the bottom of each slide



## About this Resource...

Our Teacher Lab resource pack supports both creative practice and scientific enquiry in the classroom. We aim to offer teachers access to a variety of art experiences, aligned to each year group's science curriculum. Through these activities, we hope to introduce exciting ways to combine the deepening of scientific knowledge and skills with the development of creative practice. Each activity also aims to embed scientific understanding and help children to 'know more and remember more' about the chosen topic.

We chose the working scientifically skills of 'identifying and classifying', as these are skills which run throughout the primary curriculum. We have chosen 'Nature' as a theme across all of the activities, offering ways to broaden children's experience and understanding of nature and their place within it. Each nature-based topic has been selected from the National Curriculum and for reception the Early Learning Goals, to ensure each is as relevant as possible.

With reference to this knowledge base, we demonstrate how arts practice can be used to reinforce the skills and processes of identifying and classifying. For each year group, we have chosen a different art-based skill to provide teachers with a wide repertoire of creative ideas. We hope that these might be a starting point to enable teachers to use these creative practices to reinforce learning in other curriculum areas.



Each activity is designed as a mini project brief for your class, they are jumping off points to take in whichever direction best suits you. We encourage you to follow the natural curiosity of the children you're working with and adapt the activity how best you see fit.

In terms of work with SEND children - each child is of course different, so when working with this resource, feel free to pick and choose activities which feel most suitable for them, depending on how they feel that day. Feel free to get creative with the activities and adapt them to your child's needs to create the best experience possible.



# Author Statements

## **Gill Sekatawa, Art and Design Lead, Nelson Academy:**

My aim for the resource was to provide a range of activities and experiences which will not only allow students to soak up the knowledge but also that allowed all involved to acquire transferable skills in art and problem solving to use in their future learning.

Prior to this Teacher Lab project, we had recently explored art and poetry with Kaitlin as part of Barbican Box in West Norfolk, which was an amazing experience. When the Barbican and Creative Arts East approached us about working together again, but this time in the suggested area of Science, it became immediately clear that we should involve Sarah, my teaching team colleague. As Science lead for our school, she is tasked with ensuring that, working scientifically, children will know and remember more. From my experience, there is no better way of making knowledge 'stick' than using art and creativity to make learning engaging.

## **Sarah Melia, Science Lead, Nelson Academy:**

I came at this project as a novice artist, intrigued to learn how art and science could mix and how creative practice could help children to enjoy working scientifically as well as know and remember more about a chosen topic. I wanted to choose a working scientifically thread which would run through all year groups in the hope that we would reach as wide a teacher and pupil audience as possible. By having this common thread link all the year groups' activities together, the aim is that teachers will be able to adapt art activities from other year groups to use with other knowledge areas in their own year group, thereby creating a bank of resources whose application is potentially much wider than that originally written. As a science lead, I wanted not only to improve my own creative practice, but also to introduce a range of activities that could be adapted and used in different contexts, so that they could support the teaching of schools' individual science curriculums, no matter what the unit's knowledge base.



## Author Statements continued...



### **Kaitlin Ferguson, Artist:**

It has been really inspiring to work on this collaboration with both Gill and Sarah, and to create a resource which draws upon areas of the curriculum which we each feel very passionate about. It has been a fascinating process, which has allowed us to find inspiration from each other's passions and knowledge.

When we began creating the resource, we agreed it was really important that each set of activities felt truly balanced between art and science. We saw science as an inspiration for making art, and creativity as a means to explore science on a more meaningful level.

Art is a dynamic subject which has the ability to work in tandem with any subject in the curriculum, to bring greater depth and understanding. During our initial chats, we realised that classifying and sorting was not only a science skill which is relevant to each year group, but it also is a skill found in art. For example, curation is simply the sorting and organising of artworks. Therefore we designed the activities to have identifying and classification at the heart of them.

It's been really enlightening to learn about the curriculum in greater detail, from those who are actively teaching it. This has allowed me to absorb and learn from the amazing teaching of Gill and Sarah. Like most teachers, Gill and Sarah have to come up with infinite new ideas and activities for their pupils regularly, under pressure of time constraints. Therefore, it has been really rewarding to create a resource which is designed both for ease of use for the teacher but also full of excitement and wonder for the children.

We hope that the resource offers teachers an exciting and ambitious set of ideas, rooted in the curriculum, to help grow the confidence, knowledge, and creativity of children.

# Natural Materials

with Reception



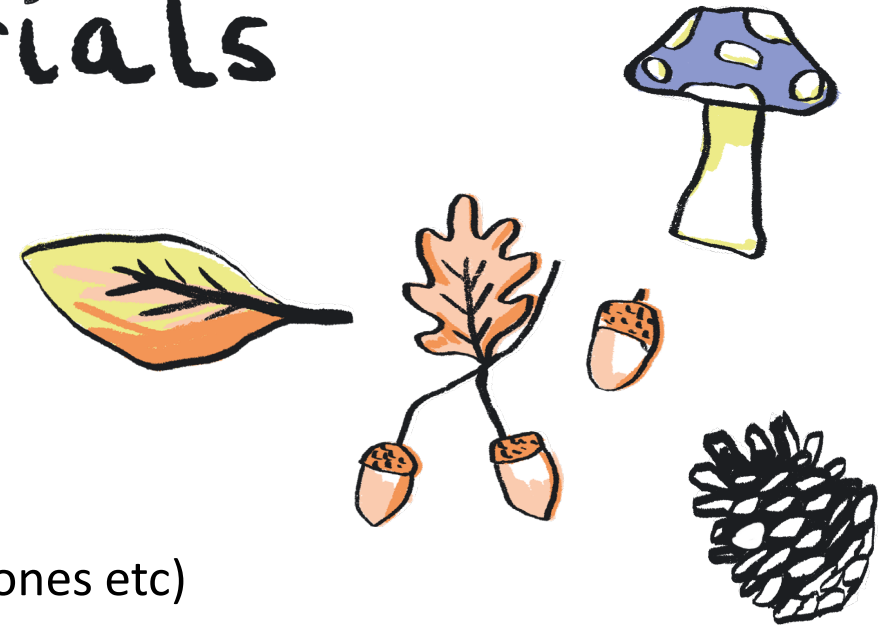


# Sorting Natural Materials

*Sorting Natural objects using criteria*

## You will need...

- Variety of natural objects to compare their qualities  
(E.g. pebbles, twigs, conkers, feathers, flowers, leaves, pine cones etc)
- Electrical tape or masking tape
- A pair of scissors



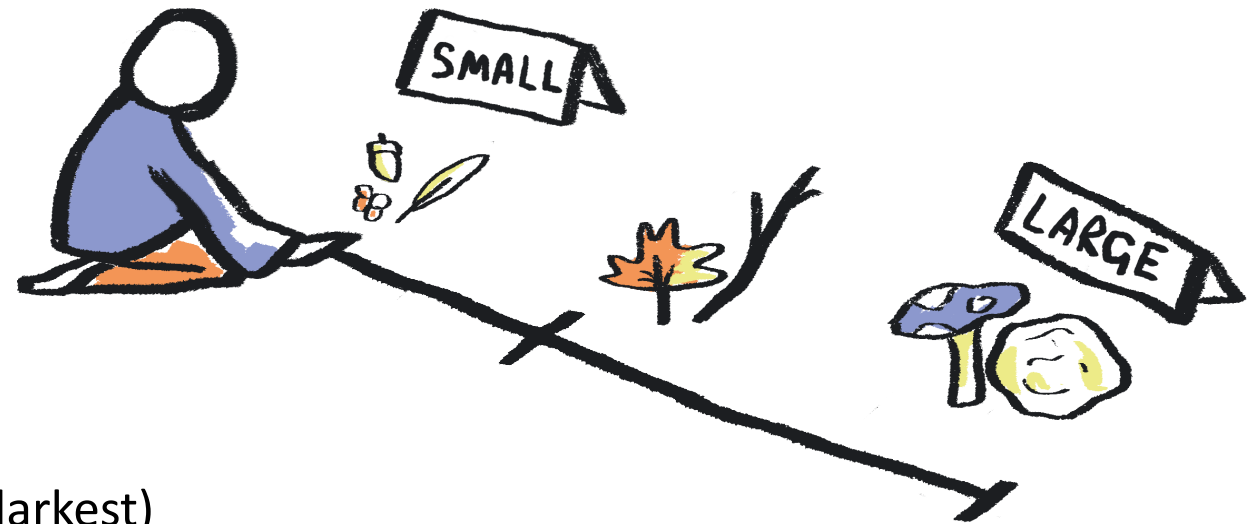
# Instructions

1. Create a scale for the group by taping a strip of electrical tape on the floor.
2. Work as a group to sort and order materials according to different qualities or categories.

These could be:

- **Sort by texture** (smooth to rough)
- **Sort by size** (smallest to biggest)
- **Sort by weight** (heavy to light)
- **Sort by colour** (lightest/most colourful to darkest)

Or feel free to make up your own categories depending on the natural materials you have!





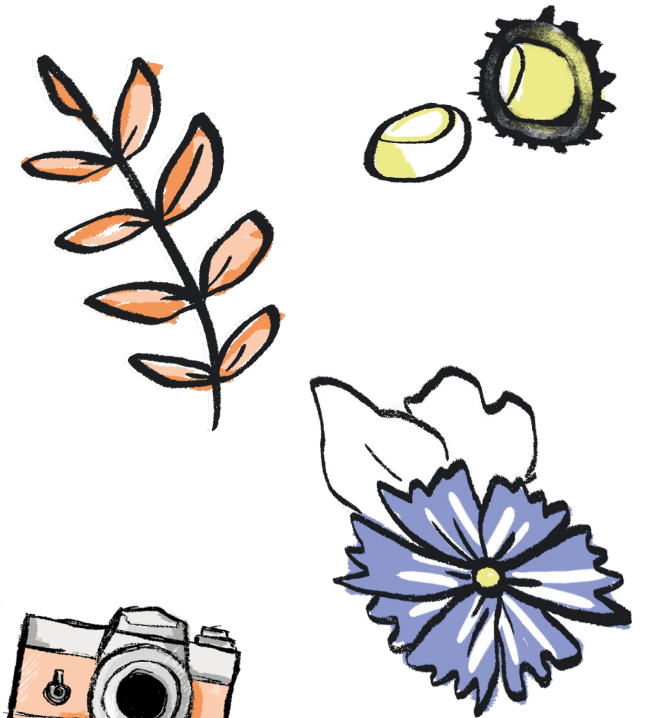
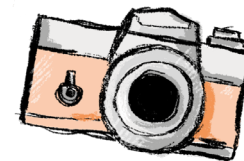
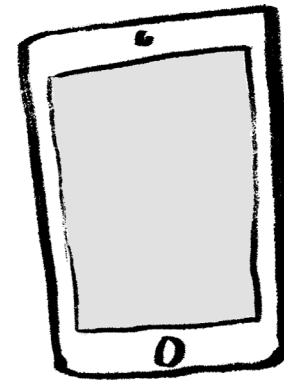


# Zoomed in Nature

Medium: Photography

## You will need...

- Natural objects from your classification activity  
(E.g. pebbles, twigs, conkers, feathers, flowers, leaves, pine cones etc)
- An iPad or digital camera (one per group)
- A printer





# Instructions

1. Take some close-up photographs of the natural objects from your classification activities.

*You can take these images by zooming in or using macro settings on your camera.*

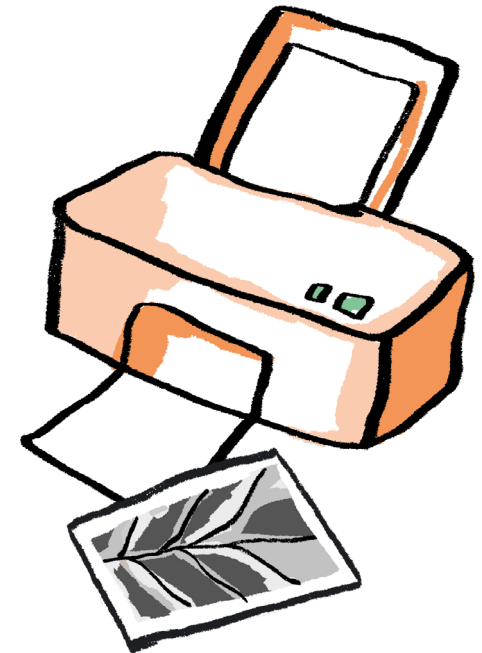


2. Change the images into black and white.

*This can be done using picture settings on your iPad, camera or print setting on your computer.*

3. Print your images.

- Can you work out which each one of the close-up images is of?
- Can you order them, using the same categories as the Classification Activity?





# Suggested Artists

## Andy Goldsworthy

Andy Goldsworthy is a British artist, who uses natural materials to create site-specific artworks which explore the relationship between humans and their natural surroundings.

## Kate MccGwire

Kate MccGwire is a British sculptor who specialises in using the feathers, as a natural material, in her work.

## Nancy Holt

Gill says: *“Nancy Holt was an American Artist from the Land Art movement. She connected with the landscape in her art. Her sculpture “Sun Tunnels” her most famous work, uses the play of sunlight through huge concrete cylinders to capture change. In the classroom you could take cardboard tubes and use them as viewfinders to observe the natural world around you.”*

# Leaves & Seasons

with Year 1





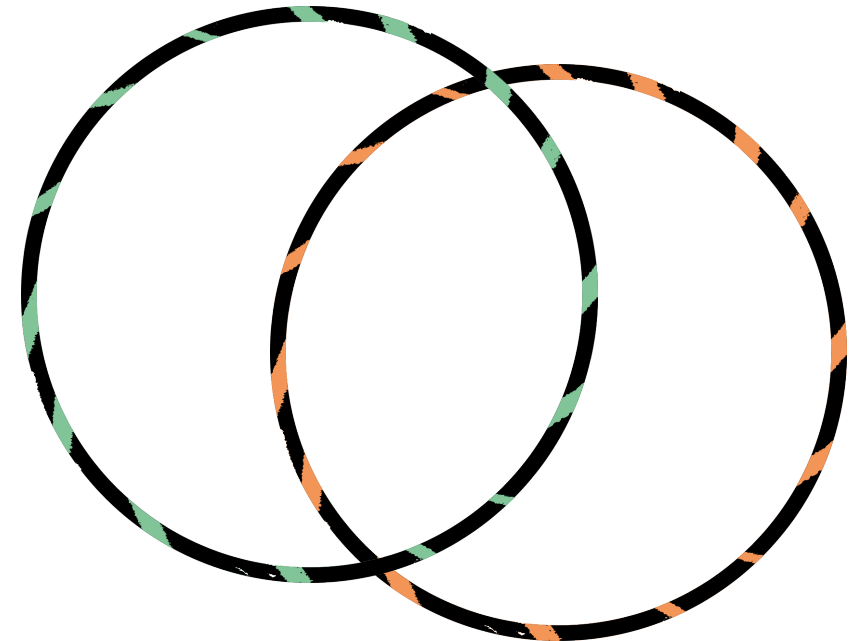
# Sorting Leaves

*Observe closely, perhaps using magnifying glasses, and compare and contrast familiar plants; describe how they were able to identify and group them.*



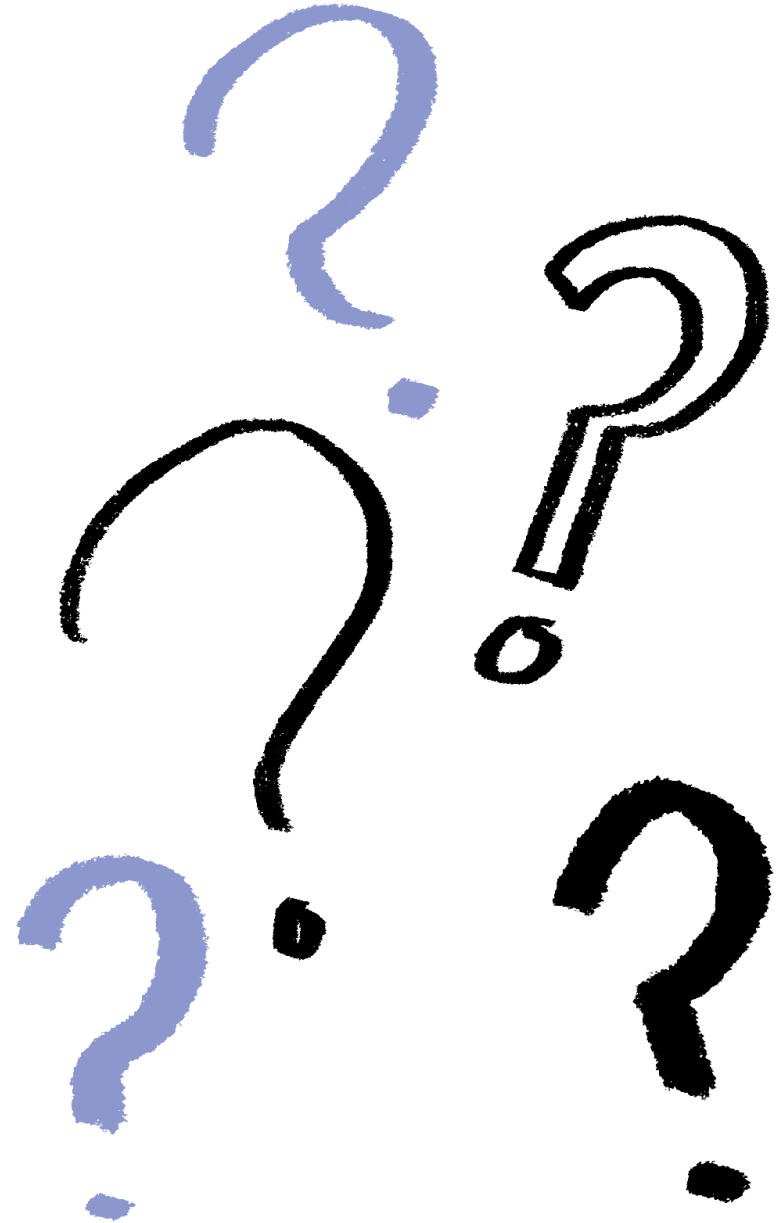
## You will need...

- Coloured electrical tape, masking tape or hula hoops to make 'sorting circles' on the floor.
- A variety of leaves.



# Instructions

1. Have a careful look at a variety of leaves you've collected.
2. What words would you use to describe the different leaves?
3. Look carefully. What similarities and differences can you notice?



# Instructions continued...

Draw a set of circles on the floor of the classroom using your tape or hula hoops!

Work together to sort the leaves according to different categories.

These could be:

- **Classify by type:** evergreen or deciduous
- **Classify by size**
- **Classify by texture:** smooth or rough
- **Classify by shape**
- **Classify by colour**

Or you could even come up with some of your own categories as well!

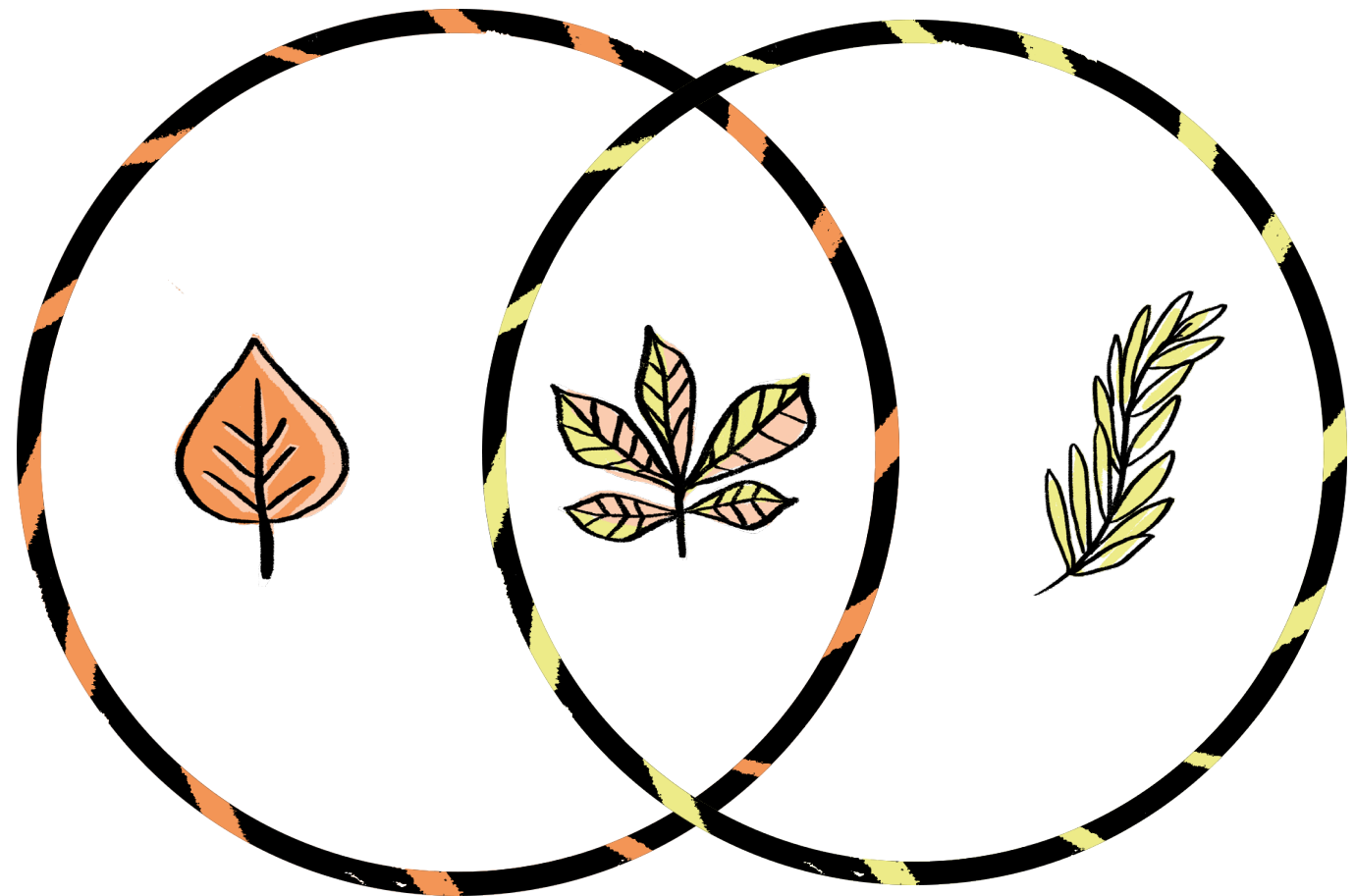




When looking for different criteria, be sure to come up with reasons for each of your choices.

Some leaves might be able to fit in more than one category so you could put them in overlapping circles (e.g. like a Venn diagram).

Some leaves might not fit into any of your categories and might need to go on the outside of your circles - that's ok too!







# Nature Stencil Prints

Medium: Printmaking

*Create prints, sort them and make a science/art display to link back to the classification activity.*

## You will need:

- Natural materials e.g. leaves, flowers, pine cones, twigs etc
- Newspaper or table covering
- Some paper
- Spray bottles and water
- Paint or natural inks





# Instructions

1. Choose a selection of leaves from the sorting activity.
2. Set up your work area and cover the table you are working on with either newspaper or a tablecloth.
3. Fill the spray bottles with a mixture of water and either paint or natural inks.



# Instructions continued...

4. Arrange the leaves or natural objects in a composition on your paper.
5. Spray them with your spray bottle.
6. Try spraying from different directions to capture as much detail as possible.
  - You could also experiment with using different colours or layering different objects.
7. When you are finished, lift up your leaves to reveal your Natural Stencil Print!





# Suggested Artists

## Lorenzo Duran

Kaitlin says: *“Lorenzo Duran is a Spanish self-taught artist who carves beautifully detailed artworks into leaves. He was inspired by watching how a caterpillar made holes in a leaf by eating it!”*

## Andy Goldsworthy

Andy Goldsworthy is a British artist, who uses natural materials to create site-specific artworks which explore the relationship between humans and their natural surroundings.

## James Brunt

James Brunt lives and works in Yorkshire and creates artworks using leaves to make patterns and shapes. What patterns can you create using the leaves you have collected?

# Animal Habitats

With Year 2



# Habitat Sketchbooks

Medium: Making Sketchbooks / Collage / Painting

Have a go at creating your very own habitat concertina sketchbook. Your sketchbook could have a page for each of the seven habitats.

Quiz: Can you remember what these are?

Temperate  
Forests

Deserts

Oceans

Wetlands

Tropical  
Rainforests

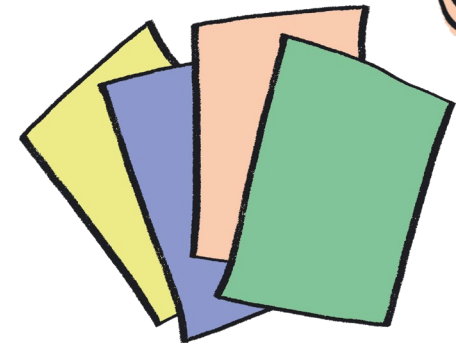
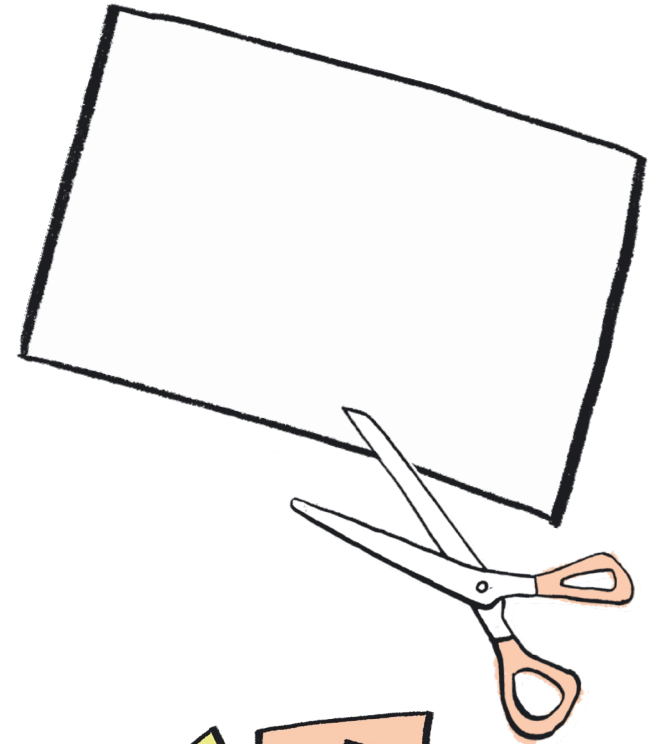
Polar  
Regions

Grasslands



## You will need:

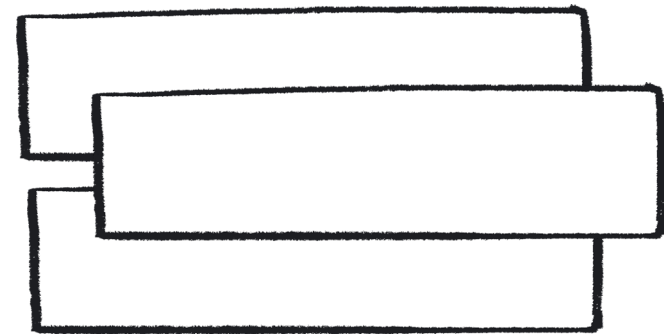
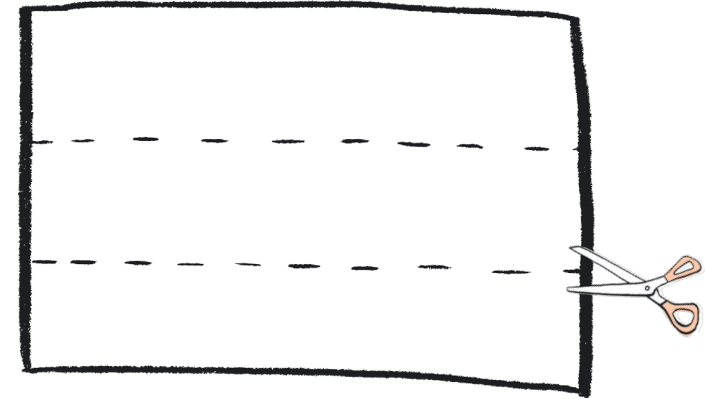
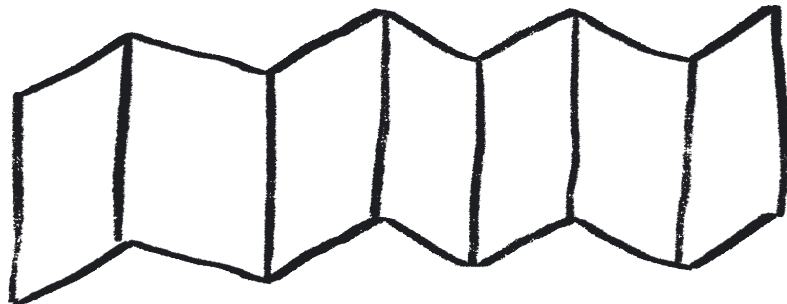
- Scissors
- Pencil
- Tape measure or metre stick
- Large piece of thick white paper or card - ideally A1 (You should be able to make 3 sketchbooks per one A1 sheet)
- Option 1 - Materials to collage e.g. paper/printed imagery
- Option 2 - Materials for painting e.g. paints/brushes/palettes



# Instructions

First, create your concertina sketchbook:

1. Cut your A1 piece of paper into 3 sections length ways.
2. With one of these strips, fold it over and then back on itself in 12cm wide sections 7 times to create the sketchbook of 7 pages.





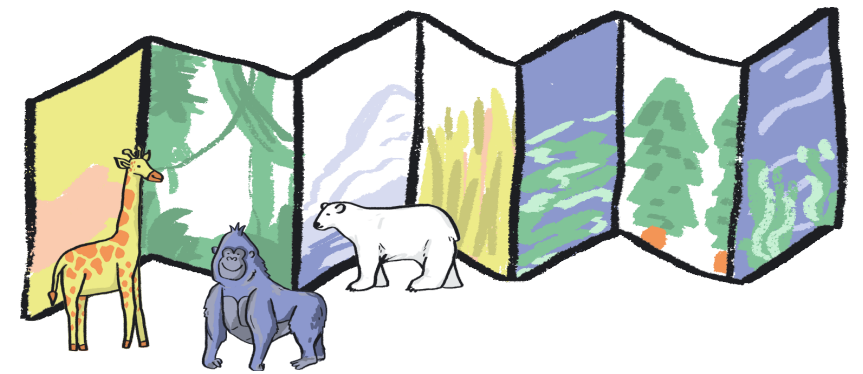
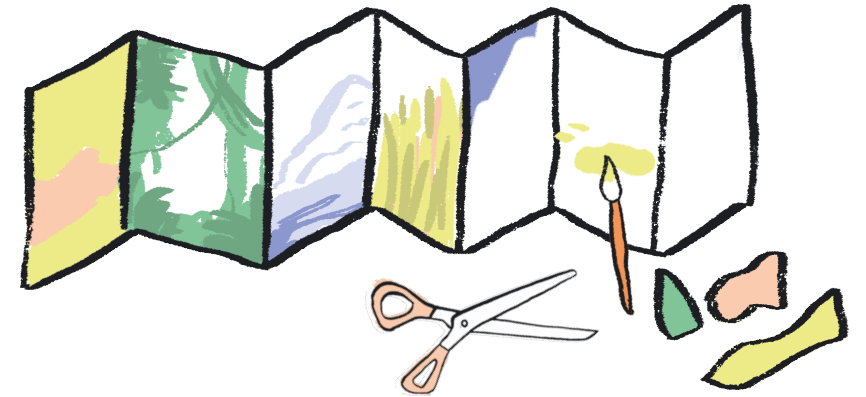
# Instructions continued...

3. On each of the pages of your sketchbook, create a background scene from one of the seven habitats (or just choose a few and use more than one page for each).

You could do this by collaging photos or images, or by painting different scenes.

4. Once your sketchbooks are decorated and dried, you can prop them up on a table and use them as a background scene to sort your animals or plants into each one of the seven habitats.

You could do this by using animal toys or laminated printed images of the different species.



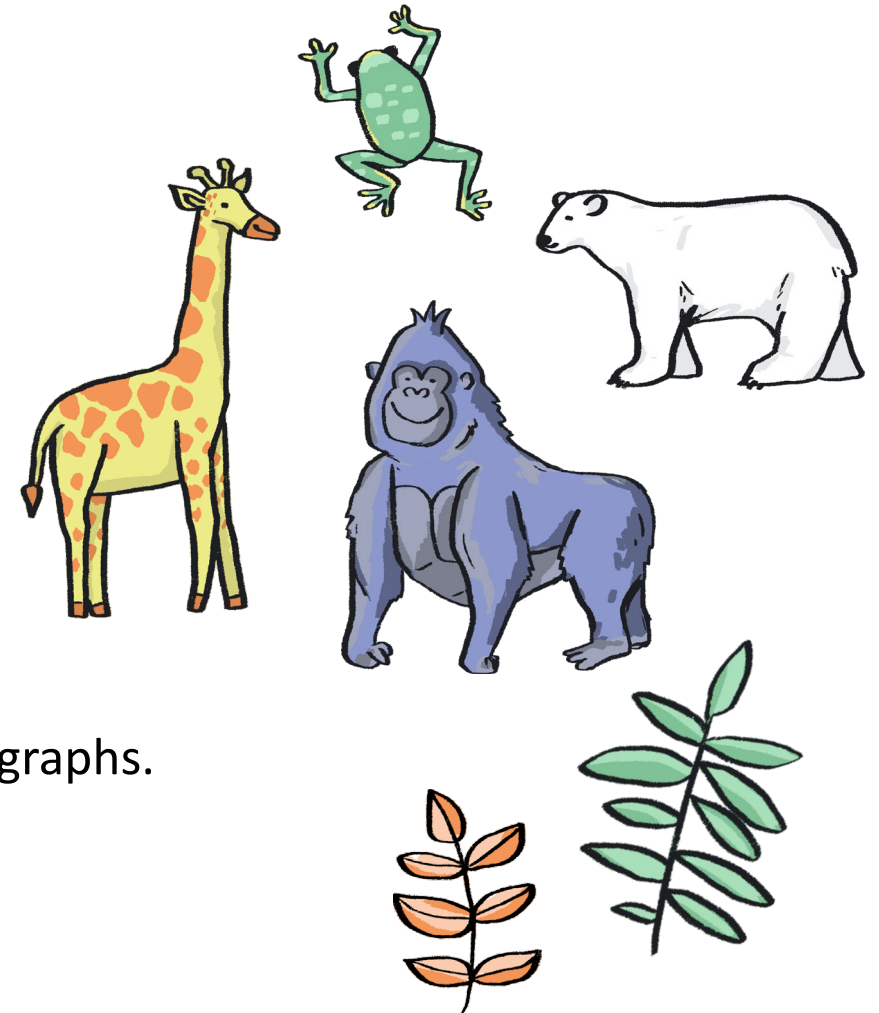


# Animal Habitats

*Group animals according to their habitats.*

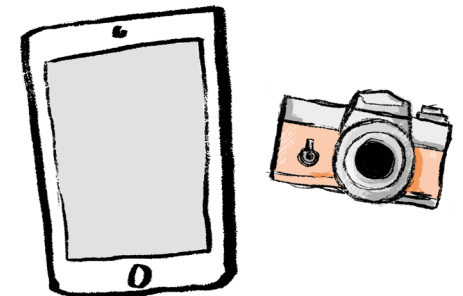
## **You will need:**

- A variety of animals/plants from each habitat.
  - You may wish to use model animals or print outs of photographs.



# Instructions

1. After you have made your concertina habitat sketchbook, have a go at sorting the animals/plants into their appropriate habitats.
2. Think carefully about what an animal or plant needs to survive in that habitat.
3. For example, a polar bear would live in a polar habitat because it has thick fur to keep it warm.
4. You could add labels or speech bubbles to your sketchbook to explain your choices.
5. Or you could take a series of photographs of your compositions.





# Suggested Artists

## Abel Rodriguez

Abel Rodriguez creates very detailed images which demonstrate his knowledge of the ecosystem of the rainforest. Abel grew up in the Columbian Amazon region, and his pictures are drawn entirely from memory.

## Elisabeth Frink

Elisabeth Frink was a British sculptor and printmaking who has inspired by natural forms, in particular animals, such as birds, cats, horses as well as the human figure.

## Albert Namatjira

Albert Namatjira was an artist of the Western Arrernte people, a group of Aboriginal Australian people from Central Australia. He painted many images of the landscape of Central Australia, which included lush green hills as well as dramatic rock formations and arid desert.

# Rocks

With Year 3

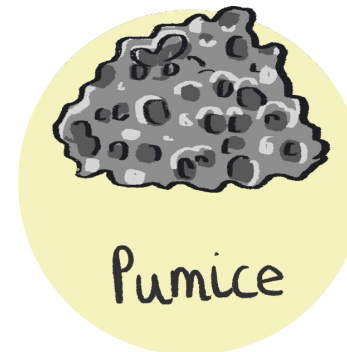


# Identifying and Sorting Rocks

Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties

## You will need:

- Rock Identification Chart (next)
- Variety of rock samples including marble, granite, sandstone, slate, pumice, obsidian.





# Rock Identification Chart



Does the rock have more than one colour?

Yes

No

Does the rock look like it has veins in it?

Does the rock have visible layers?

Yes

No

Yes

No

Marble

Does the rock look like it has crystals in it?

Does the rock have visible grains?

Does the rock look like it is full of holes?

Yes

Yes

No

Yes

No

Granite

Sandstone

Slate

Pumice

Obsidian

# Instructions

Have a careful look at our rock identification chart, follow the key to see if you can identify different rock samples.

Next:

1. Start by choosing two rock samples.
2. What question could you ask to differentiate between them?
3. What questions could you ask to differentiate three rock samples?
4. Continuing this thought process, can you make your own key to identify the rock samples?



# Soft Strata

## Medium: Textiles

*Create a geological artwork, which explores the different textures of rock as well as the layers the earth, using recycled materials!*

### You will need:

- Selection of rock samples
- Scraps of fabric (recycled if possible)
- Magnifying glasses (optional)
- A thicker piece of fabric as a backing e.g. canvas
- Pencil and piece of paper
- Scissors
- Option One – Sewing: Pins, needle and thread in a variety of colours.
- Option Two – Fabric glue (or if you don't have this PVA will work!)





# Instructions

1. Begin by looking at the rocks you have classified and their different textures, looking carefully with your magnifying glasses.
2. Try sketching the patterns you see for inspiration.
3. Imagine digging up and looking at a 'borehole' or tunnel section of earth from 10000 metres below your feet.
4. Have a go at sketching what you think the layers would look like.

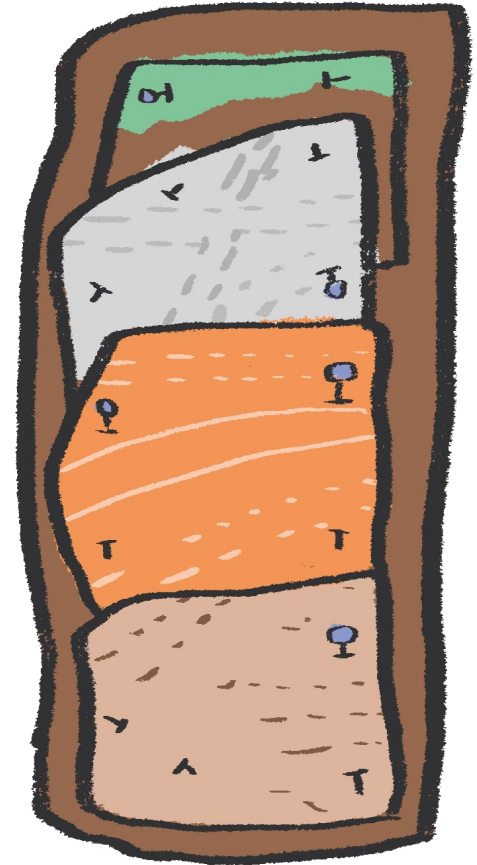
*Fun fact:* Each layer is called a 'strata'.



Kaitlin Ferguson's Soft Strata Artwork Example

# Instructions continued...

5. Once you have sketched your design, sketch it out onto your thicker backing fabric.
6. Choose some different fabrics to represent the different layers or rock types you have drawn.
7. Attach each layer to the base fabric by pinning it down with pins or a spare needle, then sew each layer on and remove the pins as you go. If you don't feel confident sewing, you can use fabric glue instead.
8. Once you have attached each layer of 'strata' you can begin to add detail of the different textures of your rock. You can do this by:
  - sewing on patterns
  - adding pieces of fabric in contrasting colours
  - experimenting with different threads and stitches





# Suggested Artists

## Julienne Dolphin-Wilding

*"I really like Julienne Dolphin-Wilding's artwork 'Matrix Revealed' which is a public sculpture on display in Thetford Forest Park in Norfolk. It is a giant geological core sample showing what is deep underneath our feet."* Kaitlin

## Kaitlin Ferguson

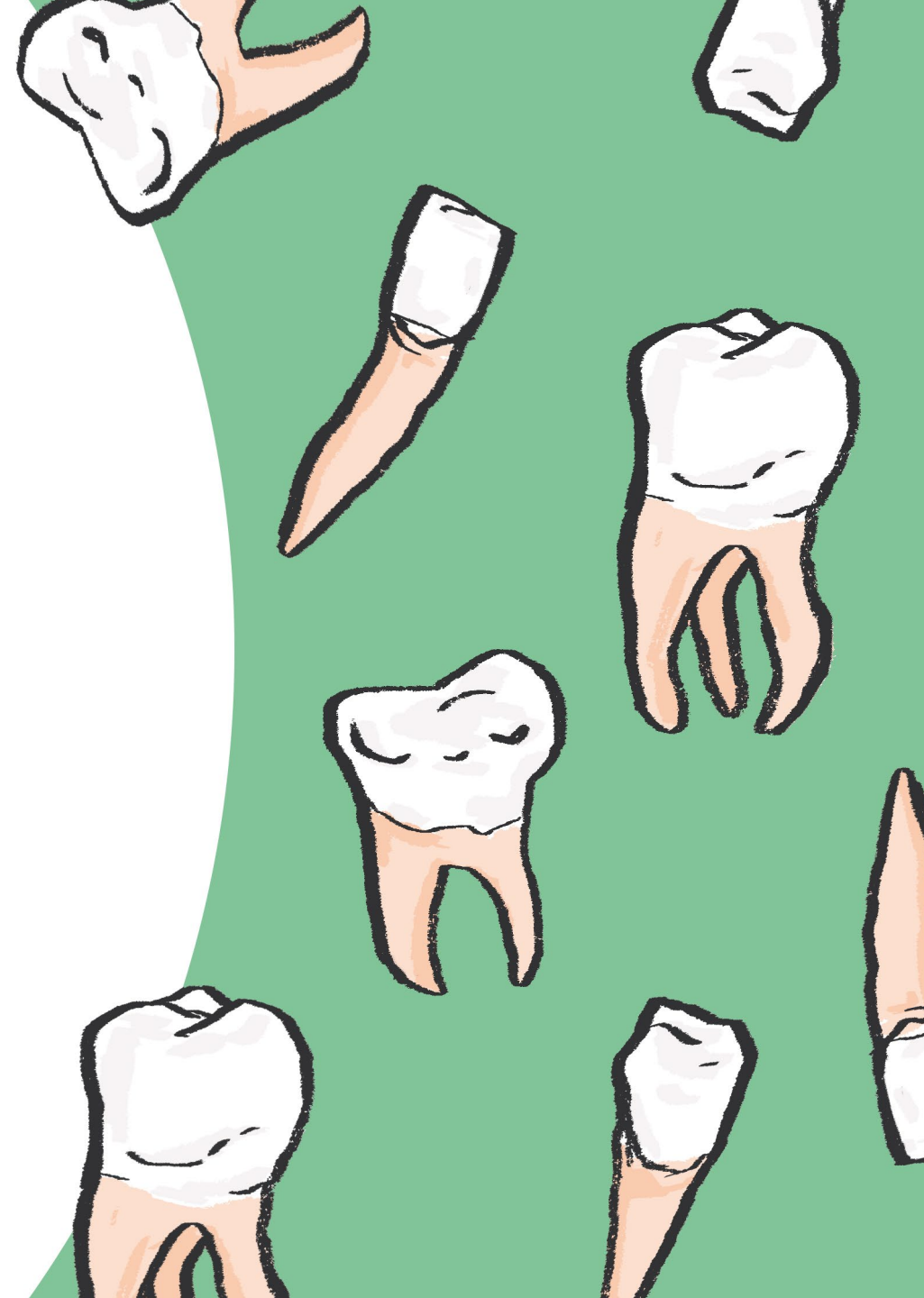
*"What do you get when you combine geology and creativity? Take a look at Kaitlin's website and discuss her varied approaches to making art which draw on geology and science. You could take inspiration from Kaitlin's prints and create your own series of artworks inspired by rock samples and fossils."* Gill

## El Anatsui

El Anatsui is a Ghanaian sculptor who works with recycled materials. He often creates installations using pieces of aluminium (aluminium comes from minerals found underground), which are sewn together using copper wire, to make large metal wall sculptures that look like they're made of cloth. El Anatsui's work often has lots of different colours, layers, shapes and textures within it.

# Teeth

With Year 4

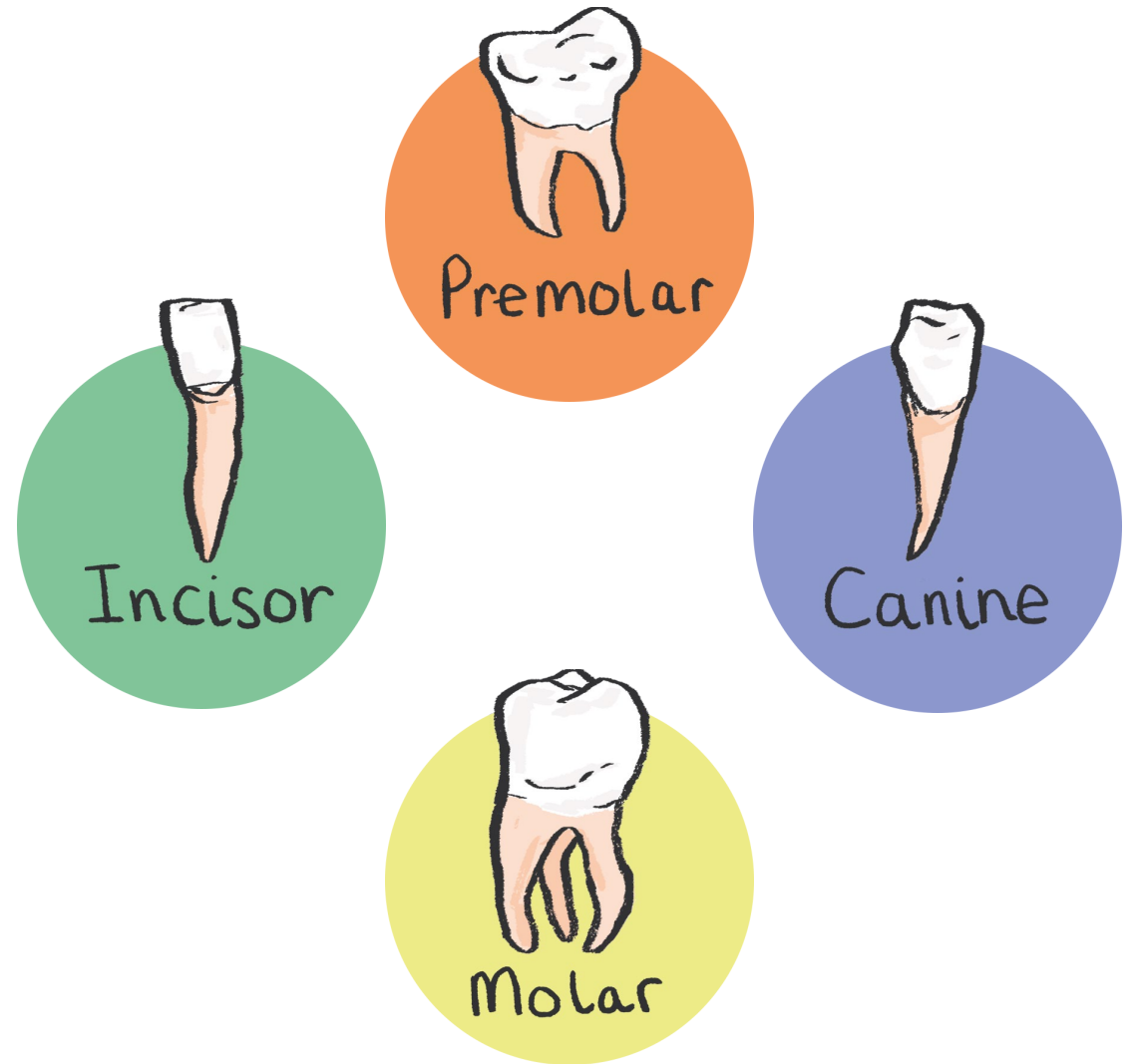


# Sorting Teeth

*Compare teeth and organise into groups, by either types of teeth or different species.*

## **You will need:**

- Pictures of different types of human teeth.



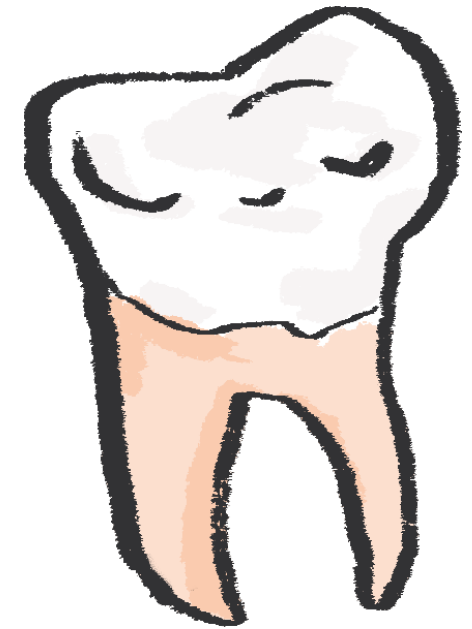
# Instructions

1. Have a careful look at your selection of teeth images.
2. Discuss the functions of the different types of teeth.
3. Sort the teeth pictures into their types.

*Quick Quiz: Can you remember what they are?*

- Incisor
- Canine
- Premolar
- Molar

4. Look carefully at the shapes of the teeth and think about the kinds of marks they make.

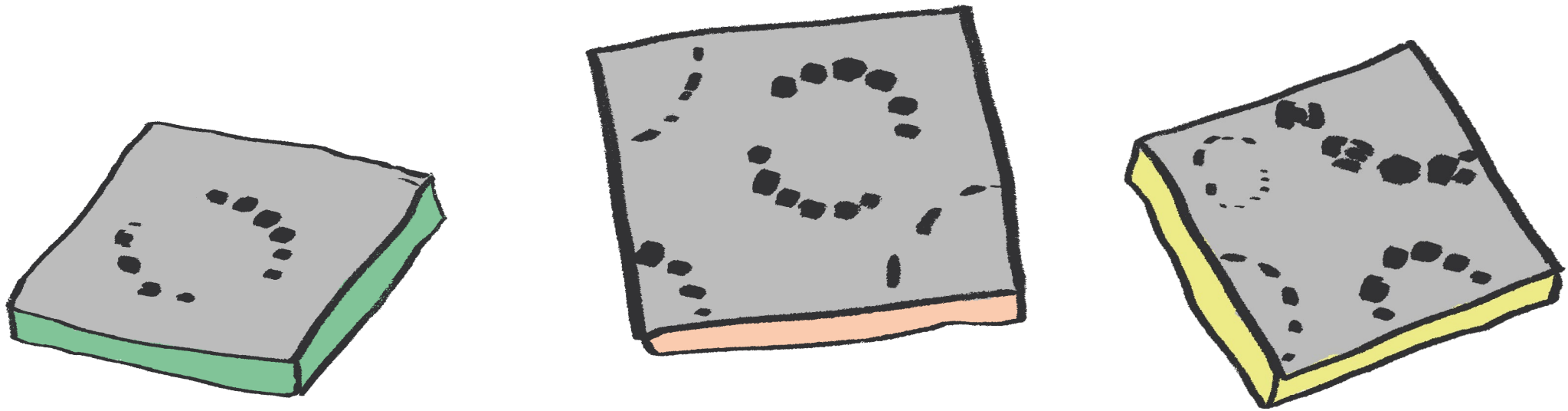




# Teeth Texture Tiles

Medium: Clay / Sculpture

Explore the imprints and textures created by different types of teeth, using clay to create relief tile sculptures.

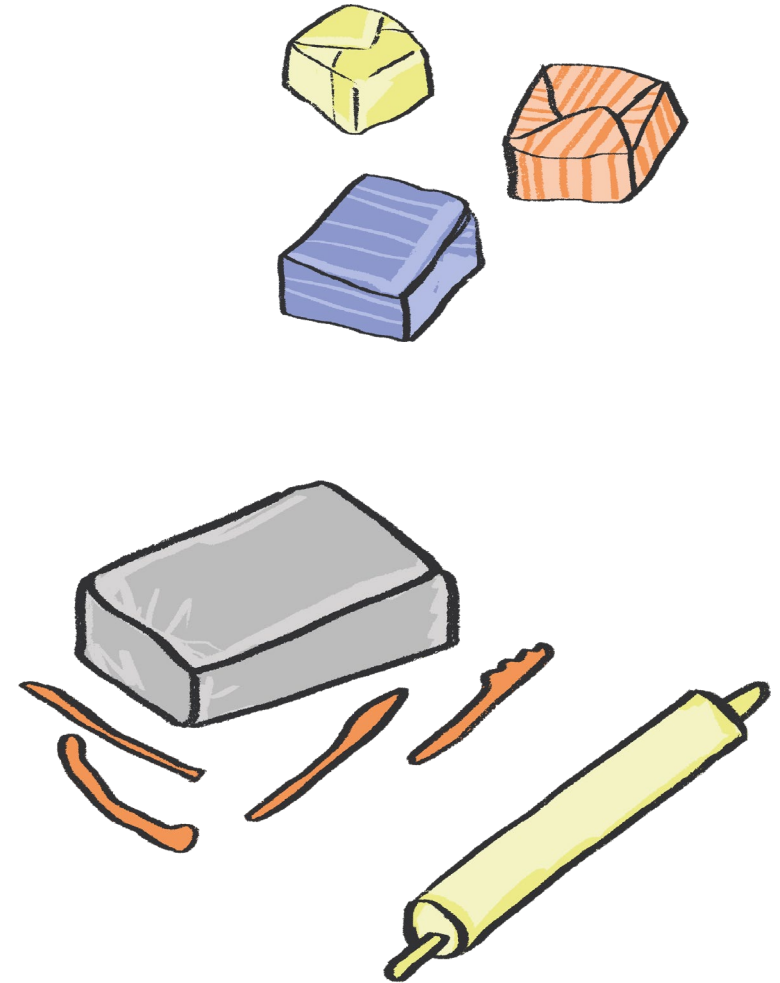




# You will need:

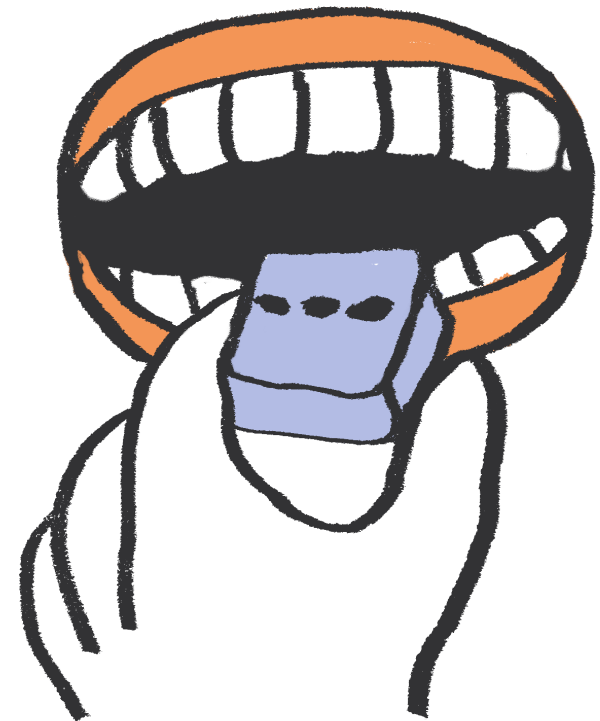
- Chewy sweets such as Starbursts, Fruitella, etc (few per person)
- Air drying clay
- Aprons
- Ruler
- Clay tools
- Rolling pins
- Table covering or boards to roll clay out on
- Paper and pencil

*Top tip! For those who do not like the feeling of clay on their hands, try wearing gloves when handling it!*



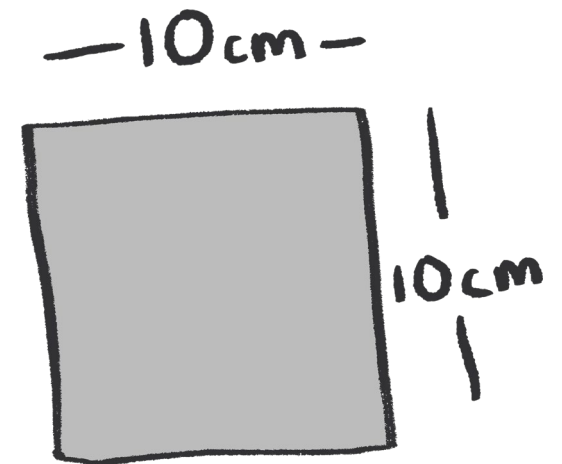
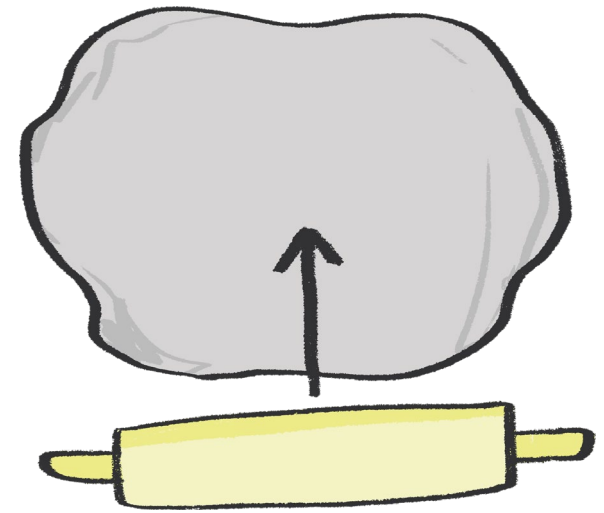
# Instructions

1. Cover the table you are working on with a table covering or put down a board to work on.
2. With clean hands, start by carefully pressing your different teeth into the chewy sweets and see what marks they make.  
*Be careful not to chew and swallow them as you need to keep them for reference!*
3. Look carefully at the different shapes and marks your teeth make.
4. Can you match the imprints of your teeth to the different types of teeth you've learned about?



# Instructions continued...

4. Take a block of clay which is roughly the size of your fist and roll it out on the table.  
*Top tip: this will stop the clay sticking to the table!*
5. Every time you roll the clay, pick it up and turn it over and roll the clay from the other direction.  
*Top tip: you can use wooden spacers to help with this.*
6. Roll your tile until it is about 2cm thick all the way across.  
*Top tip: you can use wooden spacers to help with this.*
7. Using a ruler cut a square that is roughly 10cm by 10cm and trim off any excess clay.  
*Top tip: you can put this back in the bag and use for later.*



# Instructions continued...

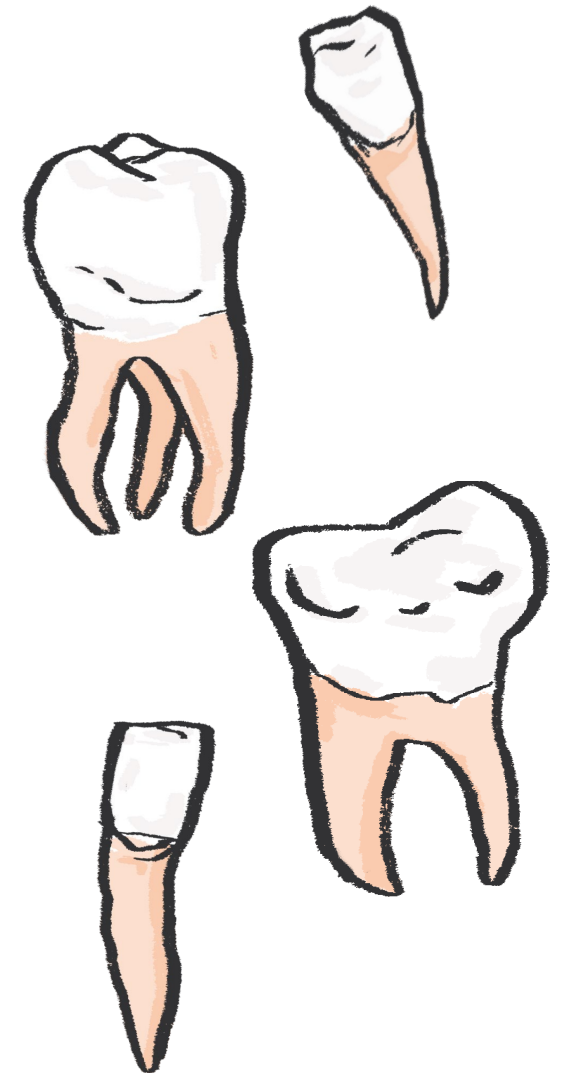
8. Look back at the images of the different types of teeth as well as your sweets. Can you remember what all of the different types of imprints of teeth are?

For example, canines might make sharp pointy lines or molars might make bumpy wobbling marks.

9. Using your clay and tools, create a pattern drawn into the clay made up of marks made by different types of teeth.

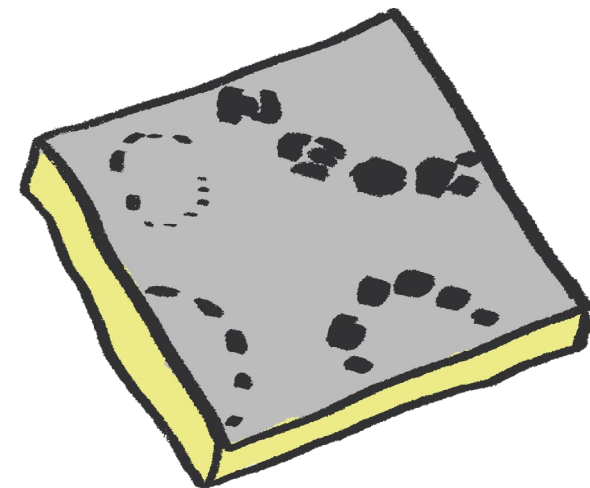
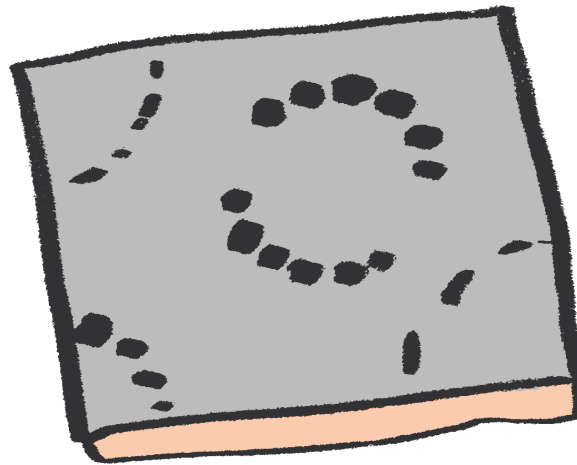
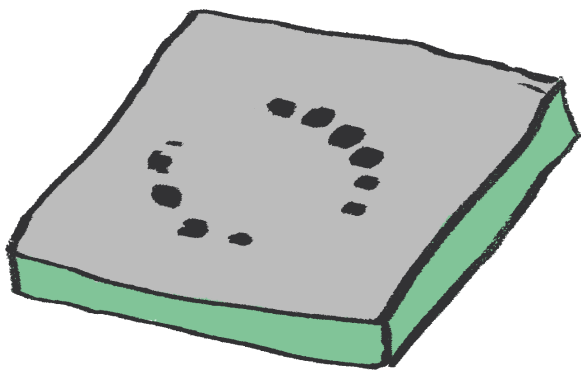
Alternatively you could follow the layout of teeth in a human or animal.

10. When carving into the clay, try not to press too deeply as it will pierce a hole in it and might crack when it dries.



# Instructions continued...

11. When you have finished your design, leave your tile somewhere dry and warm for a few days until it is fully dried out.
12. After you've made your clay tile, lay the final piece onto a sheet of paper and annotate it to explain the different teeth you have represented and their functions.



# Suggested Artists

## Holly Hendry

*“Holly Hendry is one of my favourite artists, she creates sculptural artworks which often feature different body parts. See you if can spot any teeth!” Kaitlin*

## Barbara Hepworth

Barbara Hepworth was an English artist and sculptor, who took inspiration from the natural landscape. Try having a careful look at the different textures Hepworth created on the surfaces of her sculptures.

## Jacques Lipchitz

*“Jacques Lipchitz was a Cubist sculptor who created some fascinating reliefs, they might give you some ideas about how to draw into your clay.” Kaitlin*

# Life Cycles

With Year 5





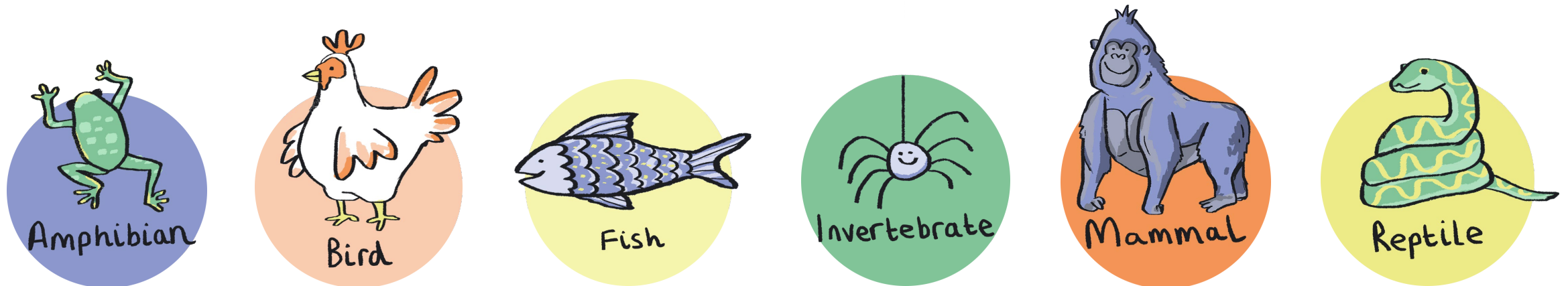
# Animal Life Cycles

*Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.*

## You will need:

- Pencil and paper
- Images of **TWO** different animals from **TWO** different animal classes.

Quiz: Can you remember what the six different animal classes are?

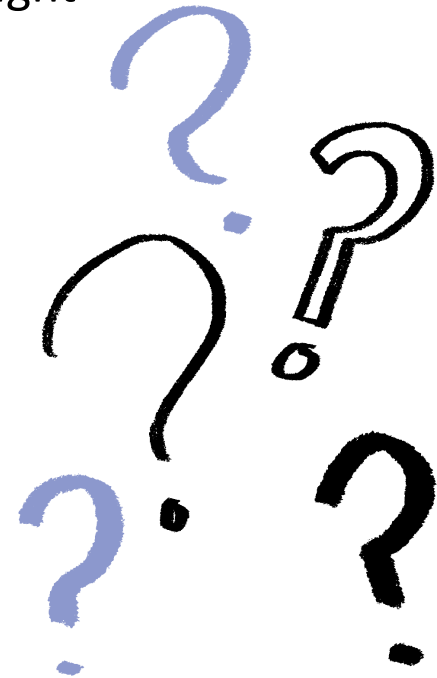


# Instructions

1. Have a careful look at images of two different animals' lifecycles, from two different classes.
2. Think carefully about the similarities and differences between their life cycles.
3. Try drawing a **Venn diagram** to explore the similarities and differences you have thought about.

*Top Tip:* Look at an example Venn diagram on the next slide...

4. Write down the reasons for your decisions.



Frog



Amphibian

Eggs are fertilised after they are laid

Recently hatched young have gills and breathe through them

Also breathe through moist skin

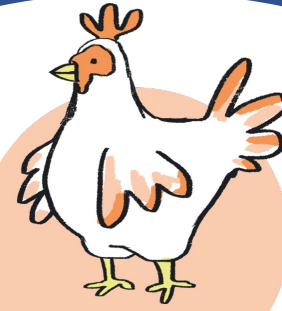
Go through metamorphosis – a change in the animal's body structure

Both Frog & Chicken

Lays eggs

Adults breathe through lungs

Young are not directly fed by their parents



Bird

Chicken

Adults mate

Recently hatched young have lungs and breathe air

Body structure does not fundamentally change as they grow

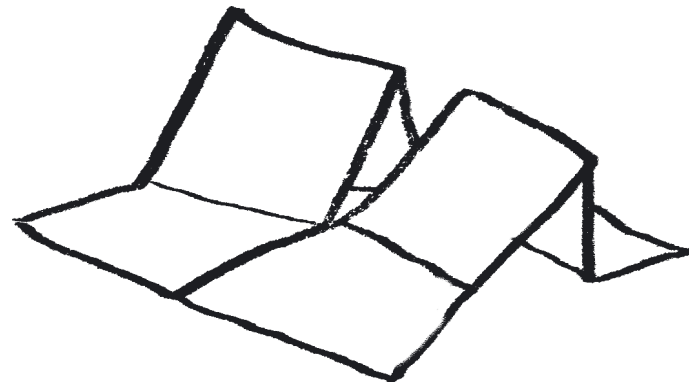
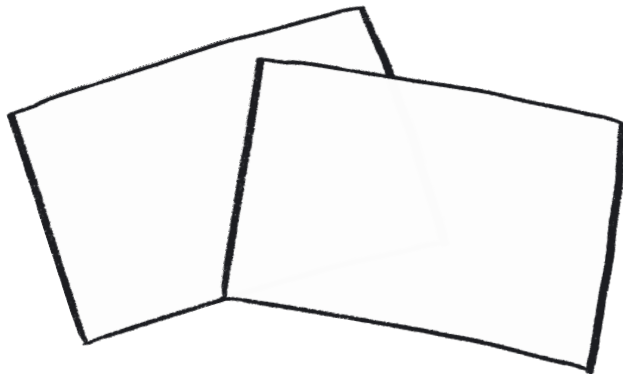
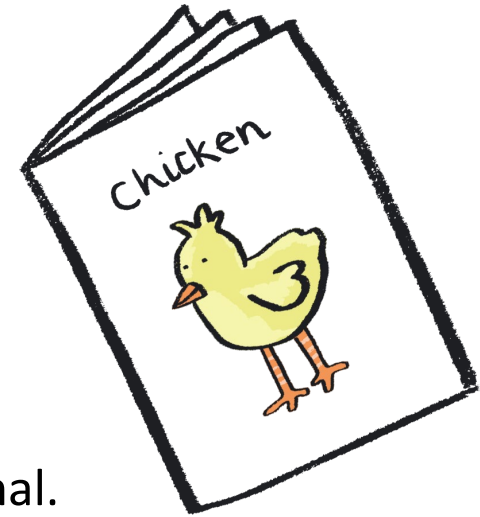
# Animal Life Cycle Zine

Medium: Zine Making and Mono printing

A zine is a magazine hand-made by artists.

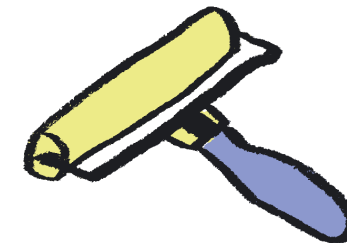
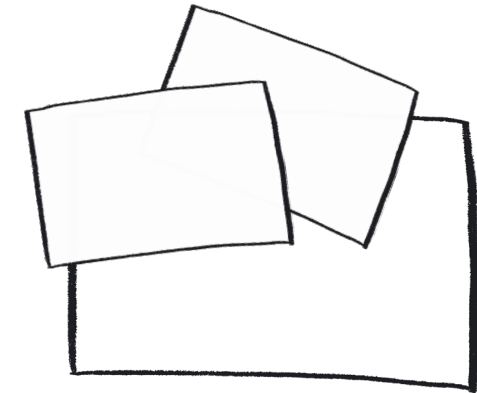
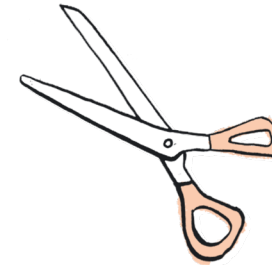
For this activity, have a go at making a zine inspired by the lifecycle of an animal.

Create artwork to go inside by trying a type of printmaking called 'mono-printing'.



## You will need:

- A3 paper (1 per person)
- A6 paper sheets (multiple sheets per person)
- Scissors
- Table coverings
- Aprons
- Reference images of animals during different stages of their lifecycle
- Acetate sheets (1 per person)
- Printing rollers
- Printing ink
- Arts and craft tray for rolling ink out
- Pencils
- Glue



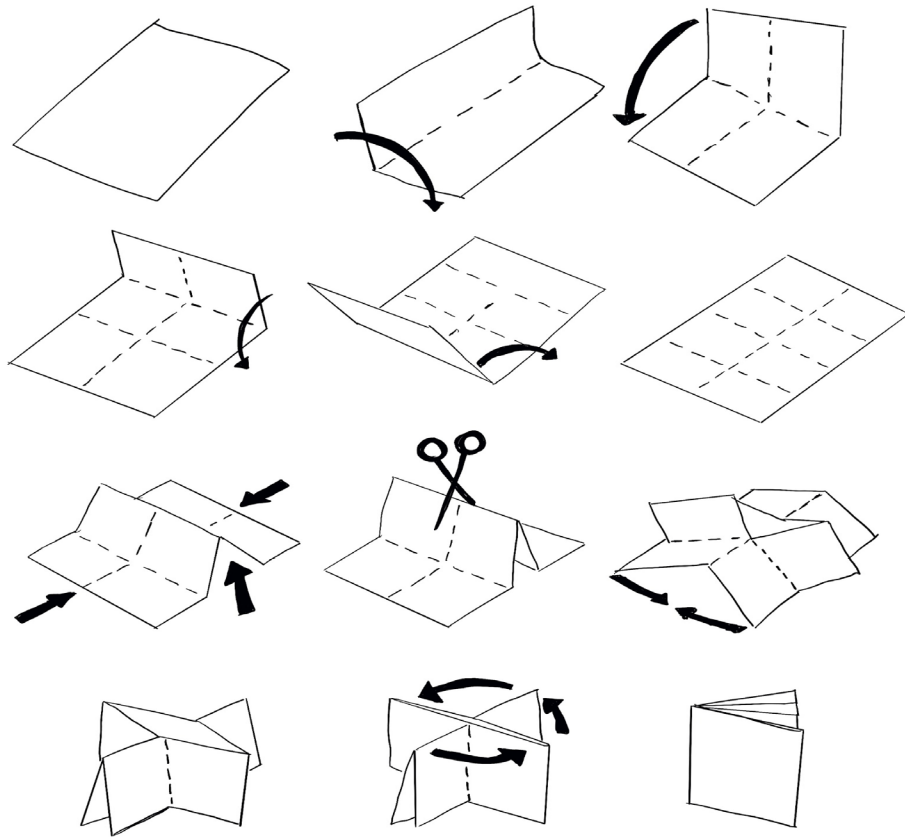
# Instructions

Stage 1: How to Fold a Zine

[Click here to watch Kaitlin on YouTube...](#)

# Instructions

Stage 1: How to Fold a Zine – the steps...



- Take A3 piece of paper.
- Fold your piece of paper in half lengthways.
- Fold your piece of paper in half width ways.
- Unfold the piece of paper.
- Take one of the shorter sides and fold it in to meet the middle crease.
- Open the piece of paper back out.
- Repeat the last fold again on the other side.
- Unfold your piece of paper so that it is flat. You should be able to see eight boxes.
- Turn the paper over.
- Push the shorter ends of the piece of paper towards each other. This will lift the central fold upright.
- Cut along the side where the crease is. Be sure to only cut half-way down the piece of paper.
- Open your zine up by bringing the corners on the long sides together.
- This should create a booklet shape.
- Then fold each one of the pages down to create a folded zine.



# Instructions

## Stage 2 - Design the Artwork for Your Zine

You are going to be making a different monoprint for each stage of the lifecycle of your chosen animal.

You'll be printing these on smaller pieces of paper.

When they are dry, you will cut these prints up and stick them in your zine so make sure they are the right size!

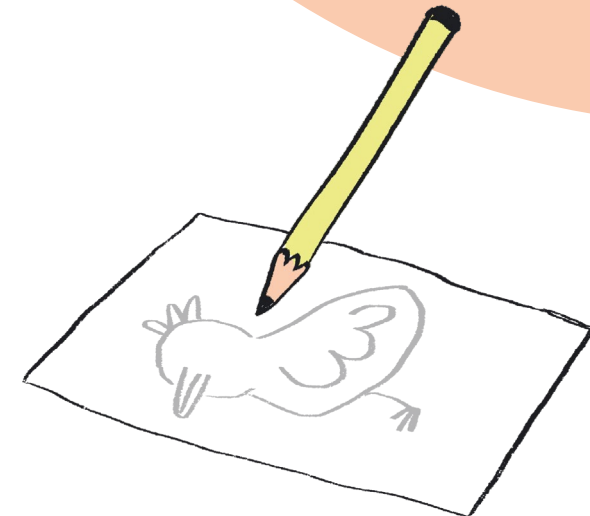
But first:

1. Choose an animal lifecycle you would like to focus on.
2. Research the different stages of its life.
3. With a pencil, lightly sketch each stage on a different page in your zine.

To create the artwork in your zine we are going to try

## positive monoprinting

It's a really easy  
printmaking  
process!



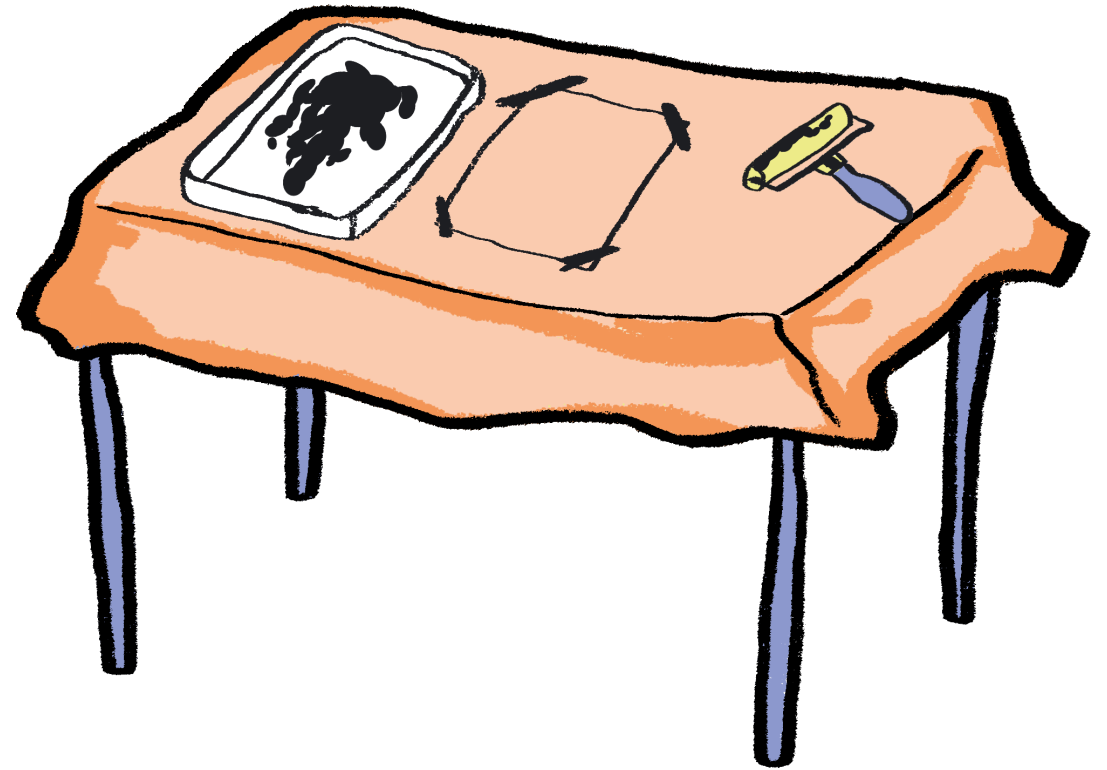
# Instructions

## Stage 3 - How to Monoprint

4. Cover the table you are printing on with newspaper or an old tablecloth, to protect it from stains.
5. Put a small blob of ink (the size of a 1p coin) on your printing tray and roll out the ink.

*Top Tip - When you hear a sticky sound, you know the ink is evenly applied to the roller!*

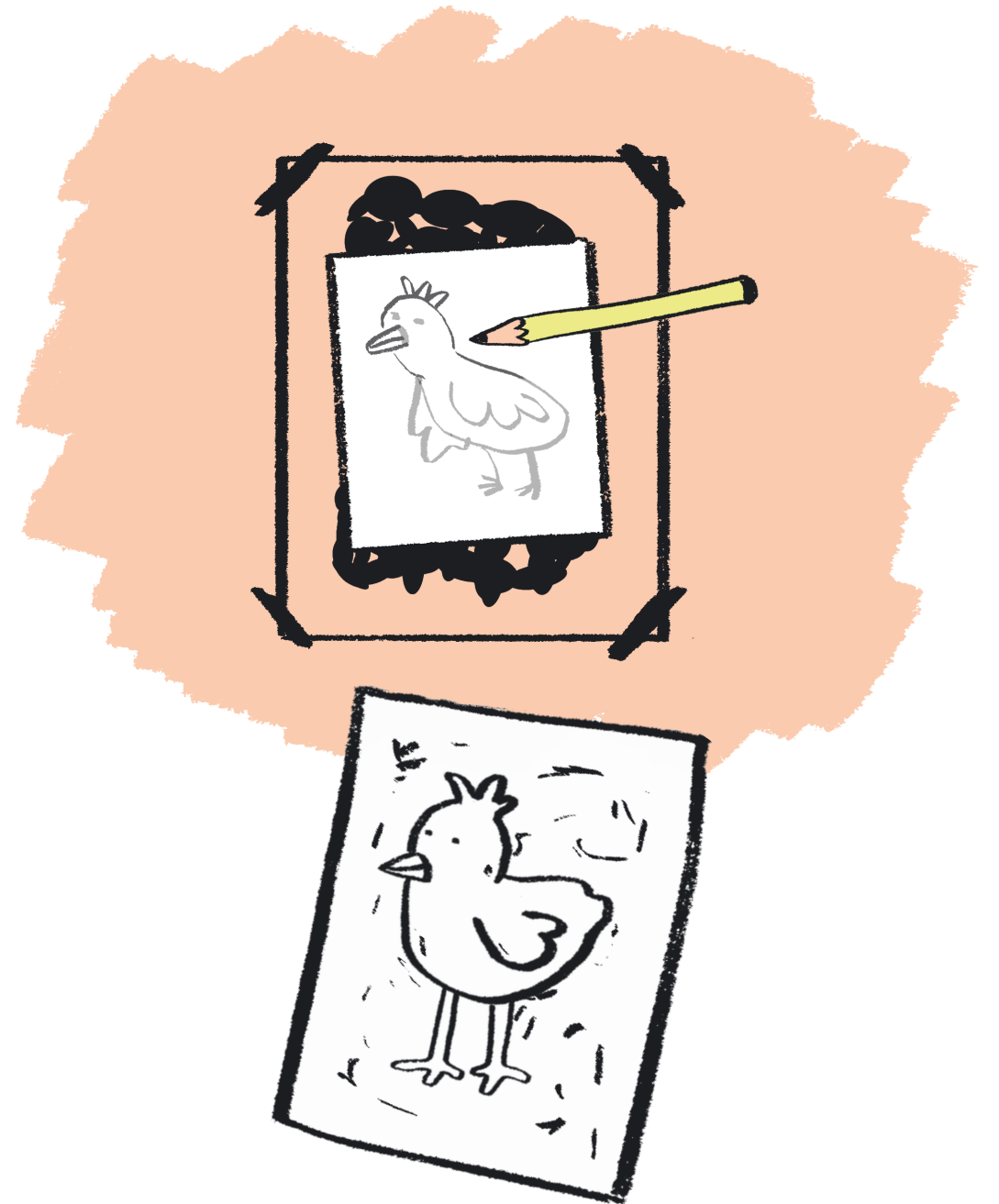
6. Take a sheet of acetate and either tape or hold down on the table.



# Instructions

## Stage 3 - How to Monoprint

7. Roll the ink out on the acetate for a minute in different directions to make sure the ink is evenly distributed.
8. Very gently place the piece of paper on top of the acetate with the ink on.
9. Using a pencil, draw your design on the back of the paper, being careful not to press with your hand on the paper.
10. When you are done, gently peel the paper off to reveal your print!



# Instructions

## Stage 3 - How to Monoprint

11. To make another print, either re-roll the ink to go again or wash the acetate off and add a new colour.
12. Try experimenting with different pressures for different thicknesses in your lines.
13. Once your prints are fully dry, cut them up and stick them into the different pages of your zine.
14. Add a title page to your zine and annotations (explanatory notes) which explain the lifecycle stages of your animal.





# Suggested Artists

**Sangeeta Gupta**

*"Look at Sangeeta's abstract prints. Look at ways of creating backgrounds for prints" Gill*

**Georgina Brown**

*"For detail in drawings into ink. Create layered monoprints using the two techniques - perhaps using some of the animals and fossils studied in the science investigations" Gill*

**Naum Gabo**

*"I have always really loved Gabo's monoprint series, and how he draws so carefully directly into the ink" Kaitlin*

# Evolution: Fossils

With Year 6



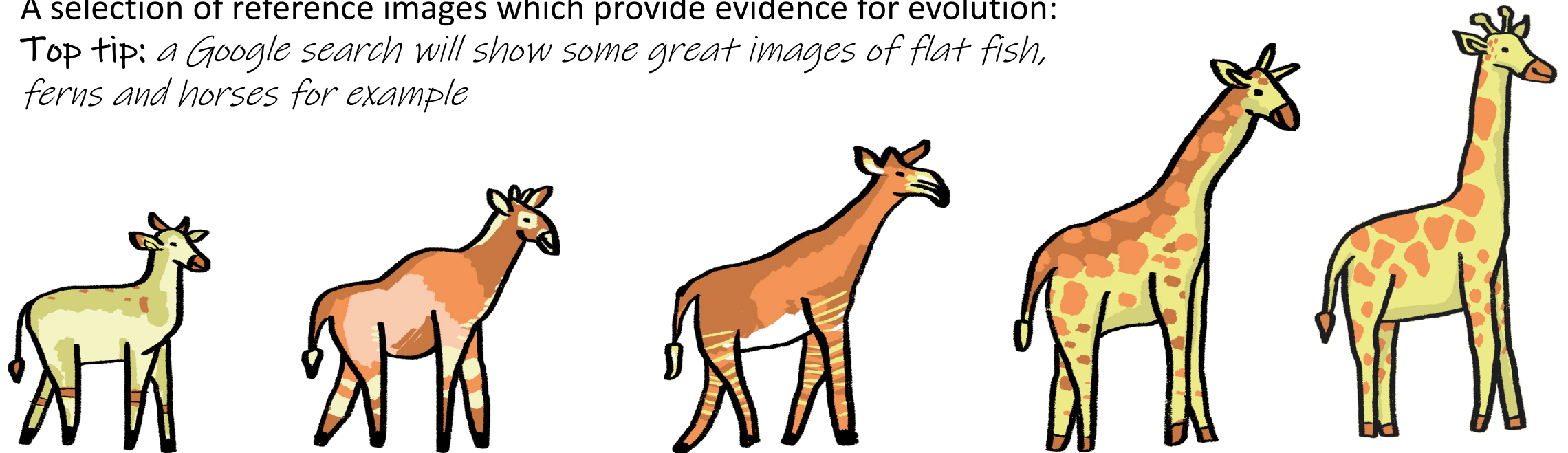
# Evolution

*Sort and classify a selection of animal skeletons from the different stages of their evolution.*

## **You will need:**

A selection of reference images which provide evidence for evolution:

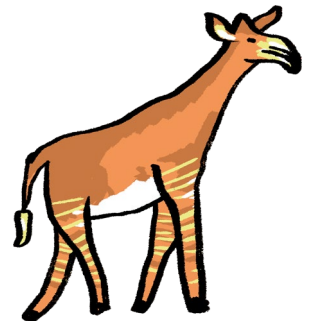
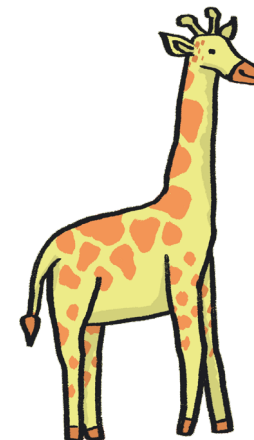
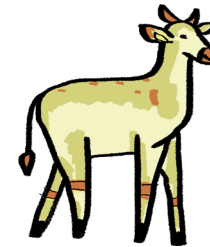
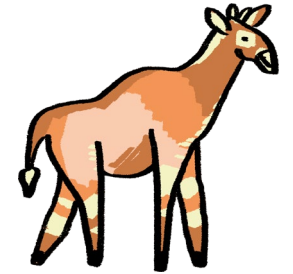
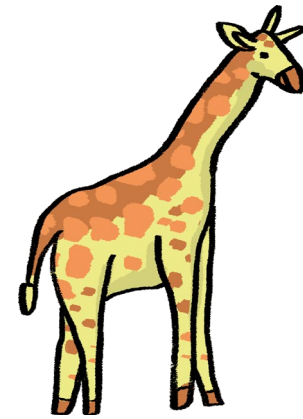
*Top tip: a Google search will show some great images of flat fish, ferns and horses for example*





# Instructions

1. Imagine you are an Evolution Detective!
2. Start by looking carefully at the selection of images you have.
3. Try to sort sets of pictures into chronological order.
  - What similarities and differences do you notice?
  - What can you conclude about how the organism has changed?
  - Does this provide evidence for evolution?

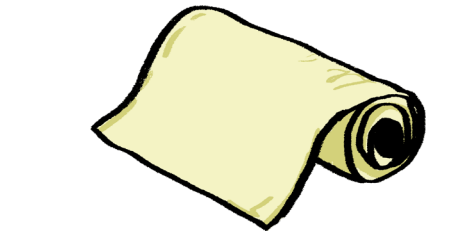
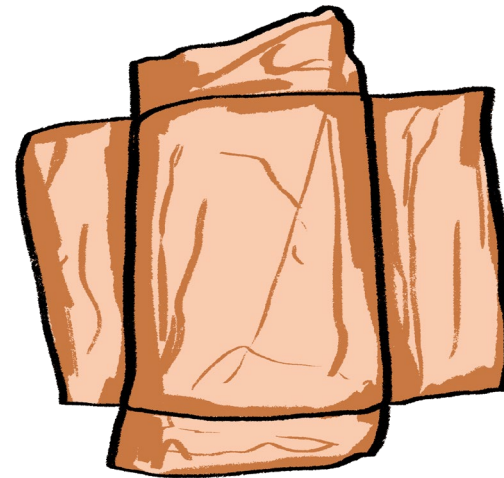
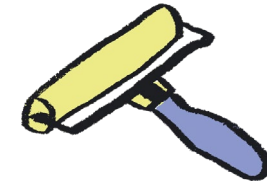
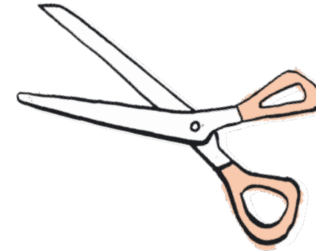


# Evolution Wallpaper

Medium: Block Printing

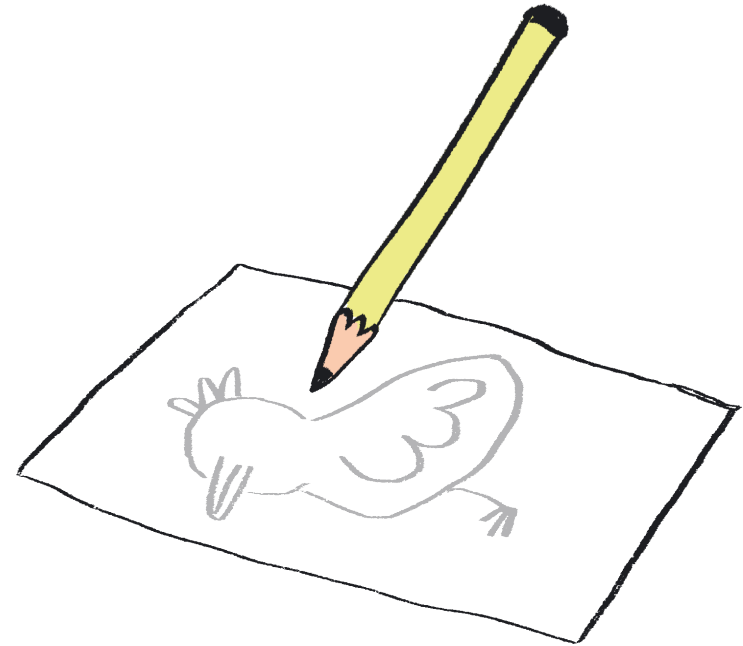
## You will need:

- Long rolls of paper (wallpaper backing or lining paper)
- Masking tape (to secure paper)
- A4 paper for test prints
- Scissors
- Block printing water based ink
- Art and craft tray
- Printing rollers
- Pencil
- Cardboard
- Sticky-back foam sheets



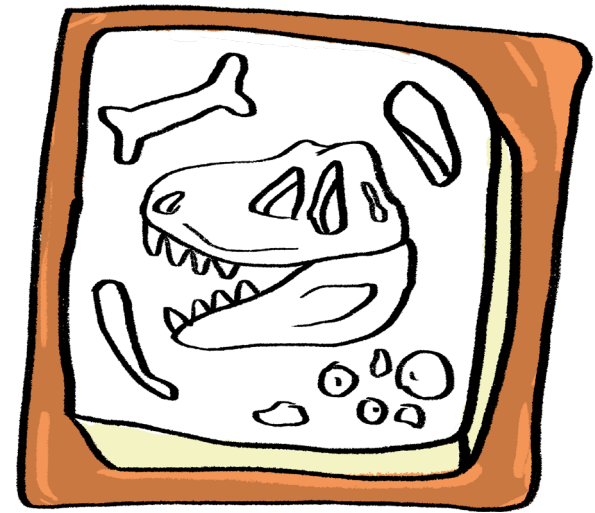
# Instructions

1. Choose a species to research and find out about the stages of its evolution.  
You could sketch these out or print pictures from a computer.
2. To create the artwork for your prints, we are going to have a go at a type of printmaking called 'block printing'.
3. To create the 'Evolution Wallpaper' artwork you're going to make some printing stamps for the block printing, one for each stage of your species evolution.



# Instructions

1. Firstly, using your pencil, draw out your design for your printing stamp on the foam. Press firmly into the foam with the pencil when creating any detail to ensure the lines come out clearly in the print.
2. Cut out your stamp design.
3. Attach it to the piece of cardboard by peeling off the backing paper and sticking it down.
4. Trim the edges of the cardboard around your design, so that there is a centimetre of cardboard around the design. This will make it easier to hold when you're printing.



# Instructions

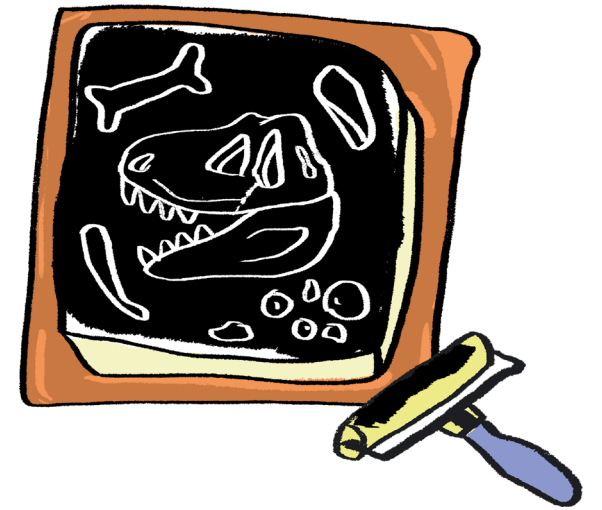
1. Cut a strip from the roll of paper and secure it on the table with masking tape.
2. Squeeze a small blob of printing ink out on your tray. Roll the ink out using your roller.

*Top Tip: when you hear a sticky sound, you know the ink is evenly applied to the roller!*

3. Roll out the ink on the foam side of the stamp, being careful not to get any ink on the cardboard.
4. Press the stamp onto your paper, applying even pressure (you can do this by hand or with a dry roller).

*Top Tip: Try to be careful not to move it so that it doesn't smudge.*

5. Peel off your stamp to reveal your print!
6. Build up your design by printing the different stages of the evolution of your species across the paper.



# Suggested Artists

## William Morris

*“Have a go at examining how Morris used nature in his wallpaper designs. You could make links to maths and symmetry by taking images of your own prints and use ICT to create symmetrical patterns e.g. by flipping and rotating the photographs.” Gill*

## John Banting

‘Snake in the Grass, Alas’, Linocut

*“John Banting was a British artist and writer. I really like his linocut print ‘Snake in the Grass, Alas 1931’ because of the bold lines and ombre fade of the bright colours in the print. Just like block printing, linocuts are another form of relief printing, and is easy to have a go at.” Kaitlin*

## Althea McNish

Althea McNish was a textile designer, originally from Trinidad, who used printing techniques to create bold, colourful and eye-catching designs. She often created repeating patterns which were inspired by plants.

# Credits

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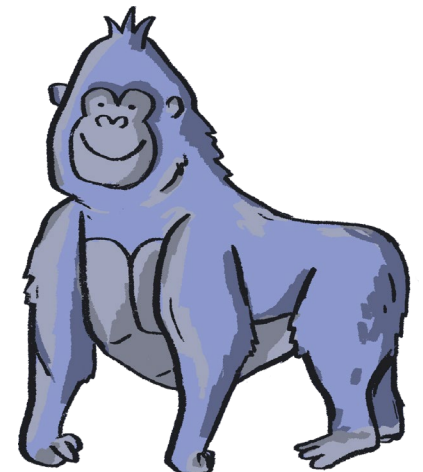
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The City of London provides the  
Guildhall School of Music & Drama  
and is the founder and principal  
funder of the Barbican Centre





# References

*Below are some links to more resources for supporting creativity in learners:*

<https://www.researchgate.net/publication/305218451> A Five Dimensional Model of Creativity and its Assessment in Schools

<https://www.thomastallischool.com/tallis-habits.html>

<https://nnfestival.org.uk/festival-bridge/schools-education/resource-bank/>

<https://www.groundworkgallery.com/exhibitions-about-environment/virtual-tour/>