

Archaeology and Community Resource Pack



Hello!

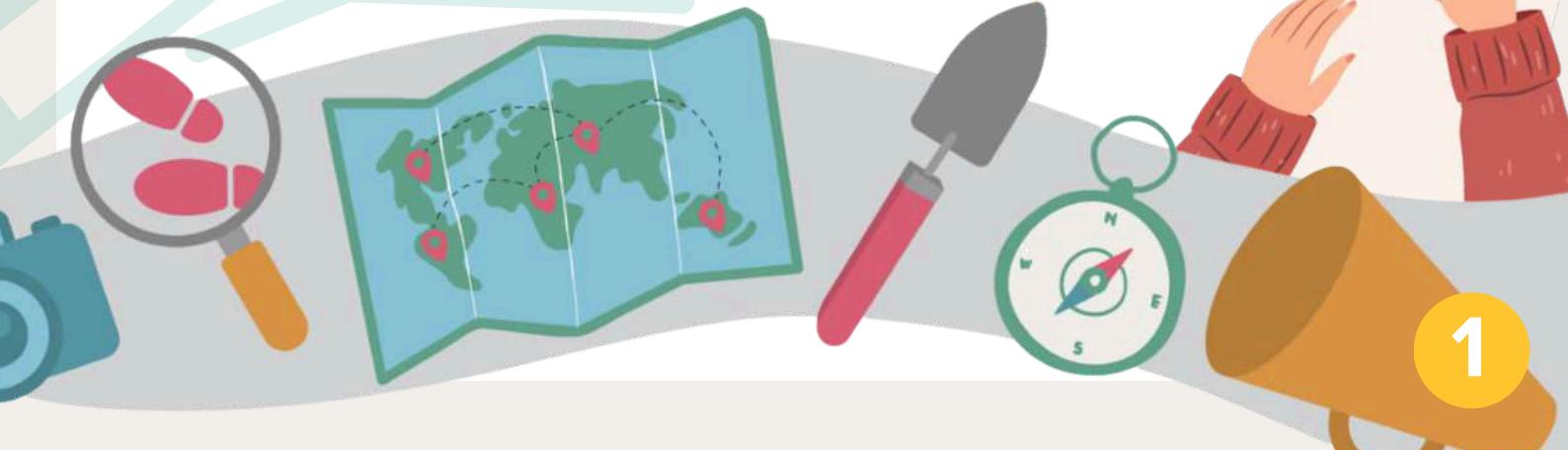
To celebrate the 2024 Festival of Archaeology, the Young Archaeologists' Club (YAC) have created a bumper resource pack with activity ideas based on the Festival's theme of **Archaeology and Community**.

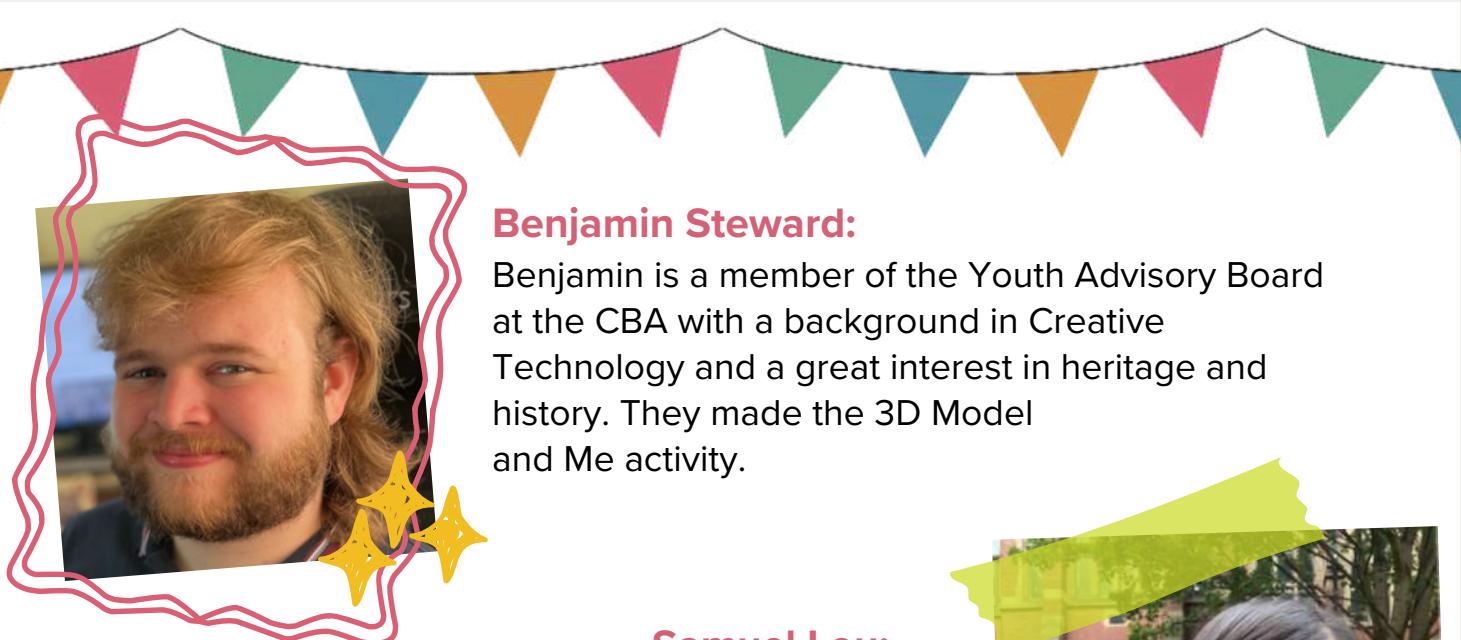
At its heart, archaeology is all about people and how we explore and interpret the past through the lens of the present day. Archaeology has the unique ability to bring people from all walks of life together through our shared sense of community – what it meant in the past, what it means to us now, and how we can shape our future.

The YAC believes in the power of youth voice; part of which includes providing young people the space to develop and deliver projects of interest to them.

This resource pack has been co-created by young people for young people. All of the resources have been created by the Council for British Archaeology's Youth Advisors and student placements. You can meet our contributors on the next page.

Together they have created an exciting set of activities aimed at anyone aged 8–16 and are they are free to access.





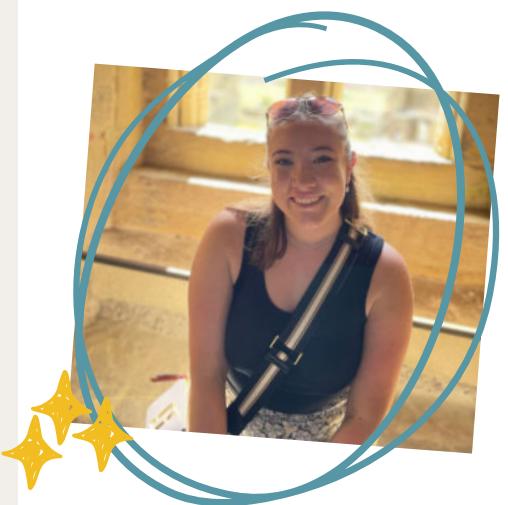
Benjamin Steward:

Benjamin is a member of the Youth Advisory Board at the CBA with a background in Creative Technology and a great interest in heritage and history. They made the 3D Model and Me activity.



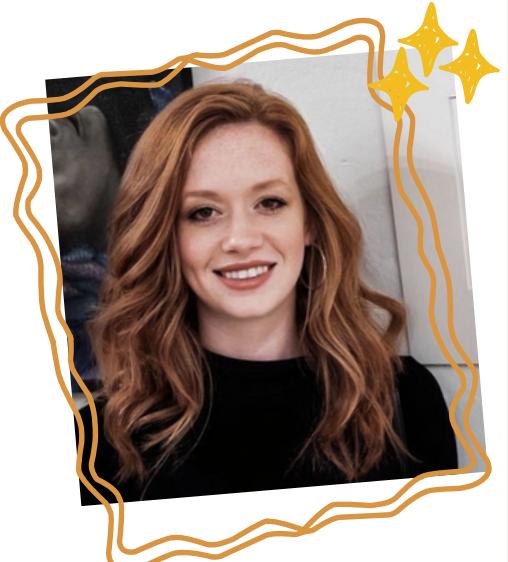
Samuel Lou:

Sam is a Youth Advisor with CBA Youth Advisory Board. She has a background in history and is interested in art, likes maps and tattoos! AS you might have guessed Sam created the Polynesian Tattoos and Mapmaker activities.



Anna Robson:

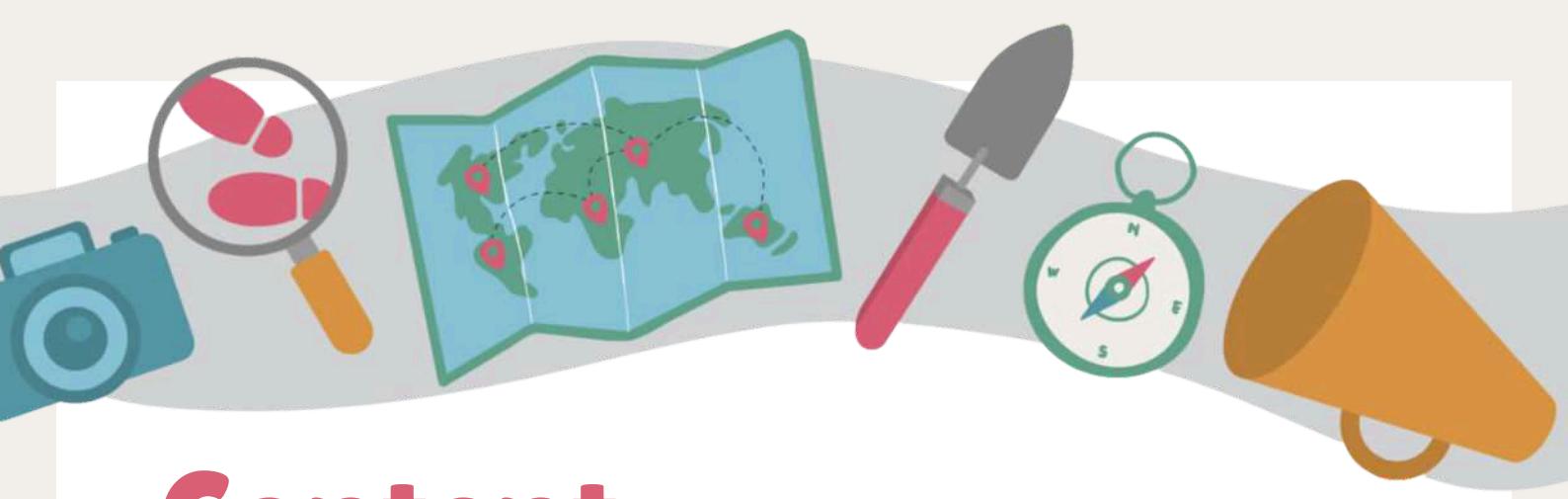
Anna is currently a curatorial intern for the Archaeology and Biosciences Collections at Durham University, and has a research interest in young people in the North East's sense of pride and connection to their local heritage. Anna created the 'When Things go Plop' activity.



Evelyn MacMahon:

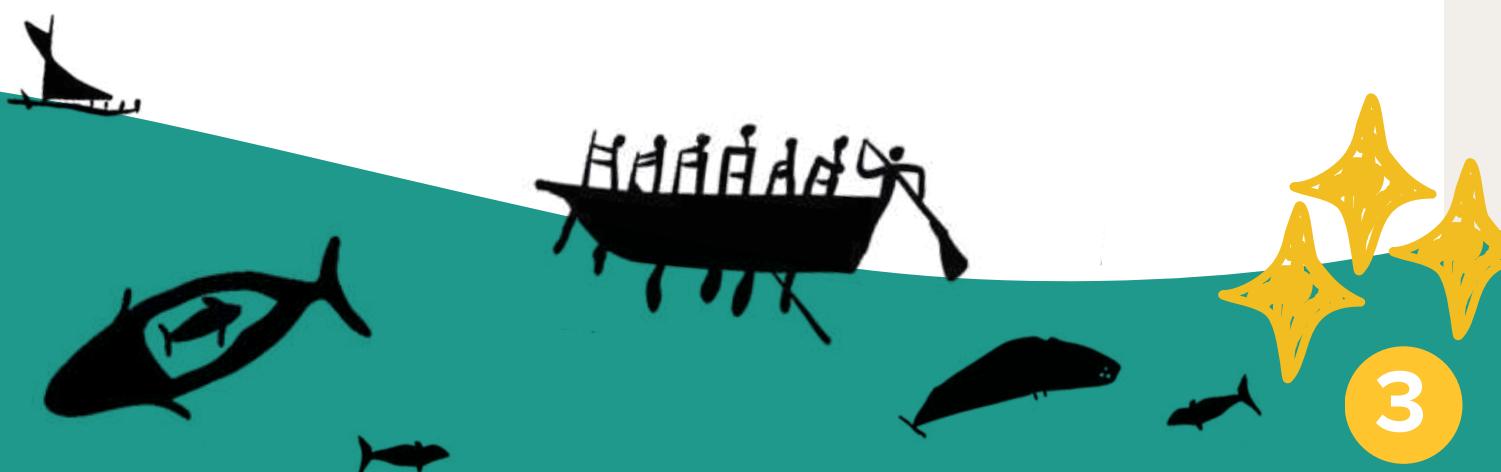
Evelyn is a postgraduate student studying Cultural Heritage Management at the University of York with a special interest in making historical education fun for all. She is fascinated by ancient civilisations from around the world - especially their art and mythologies. Evelyn created the Summer Solstice activity.





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1

Summer Solstice

In this activity, we will explore some of the ways communities all over the world come together to celebrate the summer solstice.

Background

The northern hemisphere receives more daylight than any other day of the year on the summer solstice, a day recognised by many cultures throughout history as an important part of the changing seasons. Across civilisations, humans have observed the summer solstice as a marker for planting and harvesting. In a world without electricity, the daylight was extra important.



Yet this day of longest light is bittersweet, as it signals the beginning of a gradual return to darkness, with days shrinking and nights stretching. From the Stone Age to today, communities have come together in different ways to celebrate the solstice and prepare for the colder, darker months ahead. From firelight festivals to sharing mythical stories to creating artworks, the solstice is a time to think about and spend time with the people around you.

Activity



Solstice Myths

In this activity, you will read a few solstice myths from around the world and then create your own!

The changing of the seasons could be scary and they did not understand things, like the tilt of the earth, that we do now. So all over the world, people created stories to explain why the sun came and went throughout the year. These myths have been passed down through communities across the ages. Let's visit some of those who celebrate the longest day: the summer solstice.

Maui Captures the Sun – Polynesian Mythology

Have you ever seen sunbeams? To the ancient Polynesians, these were the legs of the sun upon which it ran across the sky.

One day, the great god Maui noticed that the sun hurried across the sky so quickly that there was barely enough time for humans to do the work that needed to be done.

Maui wanted to capture the sun, so he crafted a plan. He used his mother's special ropes to catch the legs of the sun and tied them to the wiliwili tree. The sun tried to escape, but Maui used his grandmother's magic stone axe to disable eight of the sun's sixteen legs.

So, for half the year, the sun moves swiftly on its good legs across the sky and the days are short. The other half of the year the sun is slower because it is limping and we have Maui to thank for our long days of enjoying the warmth and glory of the sun.

The Oak King and the Holly King – Celtic

The Oak King is the ruler of summer and growth, and his brother, the Holly King, rules winter and darkness. They meet for battle twice a year at the solstices.

At the Summer Solstice, the Holly King defeats the Oak King. The days become shorter, and the world returns to dormancy and darkness. The trees drop their leaves, and the days get colder.

At the Winter Solstice, the Oak King rises again to overcome the Holly King, and the growing year begins again. Days will start to get longer, and the forests will flourish once more as life returns.

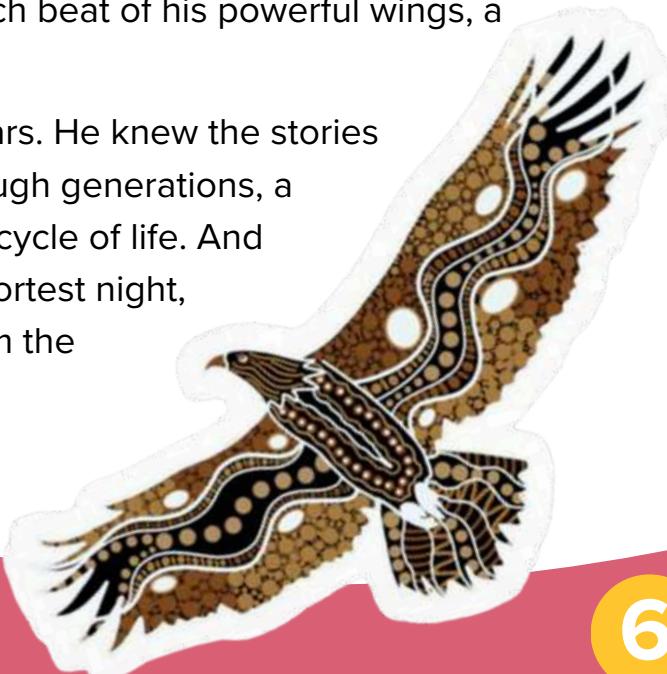
The brothers represent the two halves of the year: half of growth and half of decline. This cycle is essential to keep nature in balance as old life makes room for new life year after year.

Bunjil, the Guardian of the Land – Australian Aboriginal

On the eve of the summer solstice, many people gathered on the beach, lit small fires, shared stories and songs, and made music. A boy named Koa listened intently to the story of Bunjil. “Bunjil, with his mighty wings, watches over us. He brings balance to the earth and harmony to our hearts. On this night, he flies closest to our world.”

Koa gazed up, and there in the moonlit sky, was the majestic figure of Bunjil in the form of a wedge-tail eagle. With each beat of his powerful wings, a gentle breeze swept across the beach.

As Bunjil flew off, Koa looked up at the stars. He knew the stories of Bunjil would live on, passed down through generations, a symbol of hope, balance, and the eternal cycle of life. And so, as the longest day gave way to the shortest night, the people on the beach carried with them the blessing of Bunjil, the guardian.



Activity One: Create your own solstice myth!

Age: 8+
Time: 30 Mins

After reading these solstice myths from all over the world, can you write your own? Think about where you are from, the people in your community, and your culture's history.

Method

1. Read through the myths on the previous few pages and discuss the themes of those stories.
2. Use the prompts on the following page to begin outlining your myths.
3. Write out your myth on some paper.
4. Share your myth with your group or family – storytelling is an important part of how myths are passed down through history!



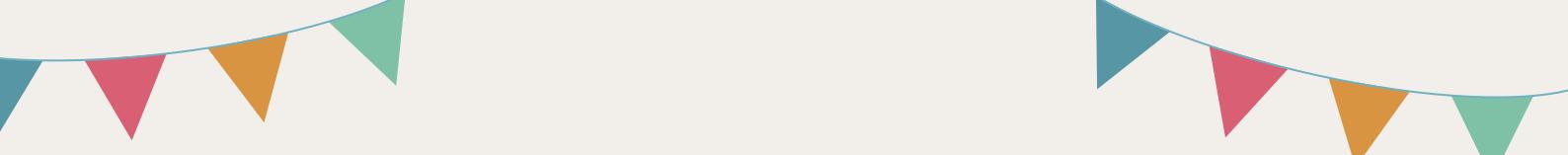
Bonus Activity: You can make illustrated drawings of your myth to accompany your story using coloured pens, pencils, markers or crayons!

TOP TIP

Remember, myths take place in an imaginary world or time – they do not have to be historically accurate, but it may be interesting to get inspiration from certain parts of your community's landscape, history, or landmarks.

What you will need:

- A pencil or pen
- Spare paper
- Optional: coloured pens, pencils, crayons, or markers



Activity One: Create your own solstice myth!

Outline Prompts

WHERE?

What is the setting for your story? Can you connect your myth to your own environment?

WHO?

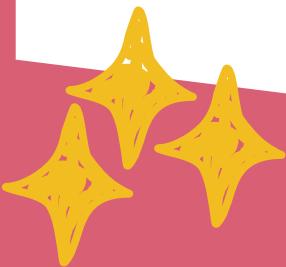
Who are the characters in your story? Do they have special powers or backgrounds?

WHAT?

What are the events in your myth and in what order do they happen?

WHY & HOW?

Why are these events happening? How does your myth explain or relate to the summer solstice?



Activity Two: Solstice Art – The Aztec Sun Stone

Age: 8+
Time: 2 hours

Cultures all across the world created art and built monuments about the sun and the solar calendar, which is based on a full revolution of the earth around the sun and the seasons throughout the year.

Background

The Aztec Sun Stone (created in 1502-1520 CE) is a monumental piece of art which holds great historical and cultural importance for the ancient Mesoamerican civilisation. It is really big – measuring about 3.6 meters in diameter and weighing more than 24 tonnes. Archaeologists used to believe that the stone was a functioning calendar or solar disk which could be used to determine important dates.



Now most agree that it was made to display important parts of Aztec history and cosmology with engravings that represent time cycles, creation myths, and religious beliefs.



The Sun Stone has lots of concentric circles which display two different Aztec calendars, stories about their gods, and important cultural events. They used intricate carvings of symbols and patterns to display these ideas. Different kinds of symbols, such as rain or certain animals, are associated with different times in their solar year and events in their history or mythology.

Create your own Sun Stone!

Now it's your turn! How can you represent your life and events in your community throughout the year in symbols or drawings, just like the Aztecs did?

What you will need:

- Coloured pencils, crayons, or markers
- Scissors
- Paper

Method:

1. On a piece of paper, begin to think about the different things to add to your Sun Stone. You can use the outline below to plan out your images or design your own!

Think about these kinds of questions:

What activities or holidays happen in the summer? Does your community celebrate New Year's Eve in a certain way?

2. Use your writing tools to draw and colour your Sun Stone in the template on page 12.

3. Use scissors to cut out your Sun Stone circle.





TOP TIP:

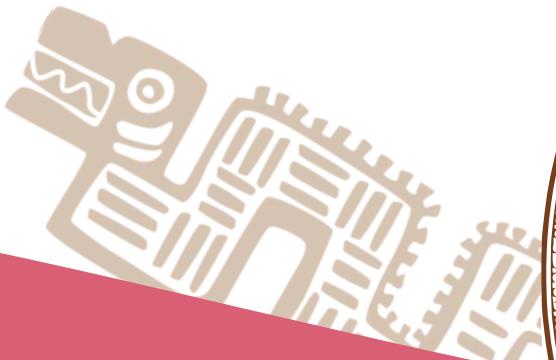
You could research symbols or patterns from your community's history online to find inspiration for your Sun Stone. The Aztec Sun Stone has lots of patterns, as well as symbols – here are a few ancient patterns and symbols found in the archaeological record:



Bonus Activity:

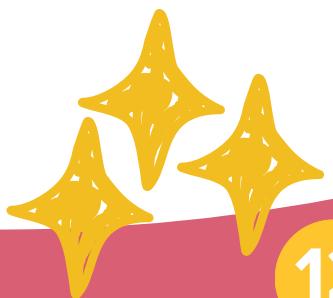
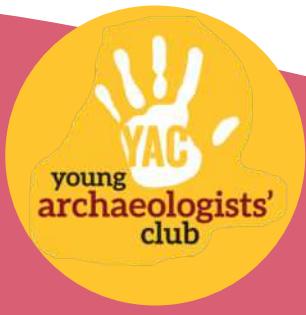
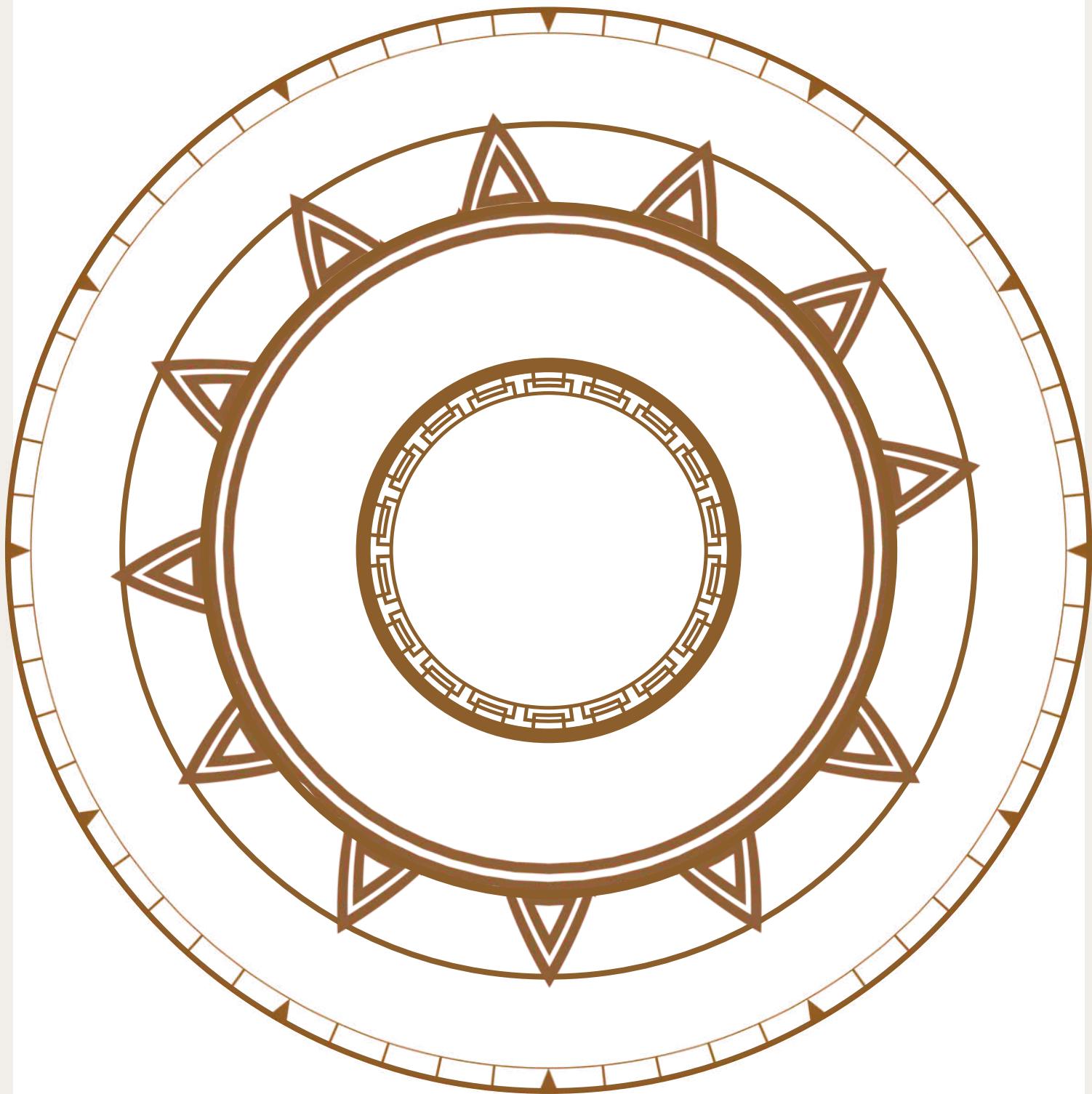
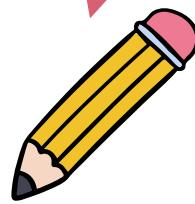
If you really want to have a go at Aztec carving for yourself, try using air dry clay to create your own 3D replica Sun Stone.

- Roll out your clay and use your drawing as a size guide.
- Cut out your sun disk and place it on your clay.
- Use a dull pencil or stylus to trace your drawing/symbols onto the clay
- Remove the paper and use tools to carve out your shapes.
- Dry for 12–24 hours
- Paint your clay - just like the Aztecs originally painted their Sun Stone.



Draw your Sun Stone!

Use this template to draw your own Sun Stone.





Age: 8+
Time: 40
Mins

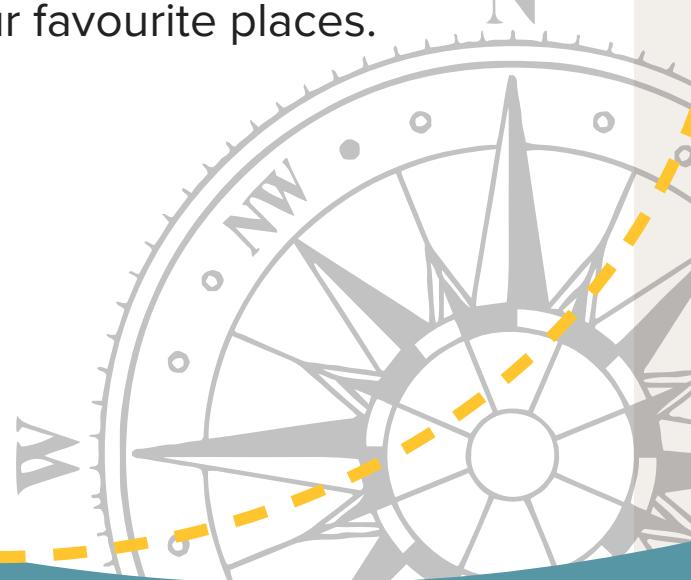
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Be a Mapmaker

Mapmaking and cartography are a key part of how humans understand and navigate the world. Although it is uncertain how this idea originated, the skill is believed to have been invented by each early culture independently. Unlike how we might use tools like Google Maps, our ancestors also used maps as a way of storytelling.



Symbolic drawings on maps represent geographic features while acting as language in storytelling. In this activity, you can create your own map and record your favourite places.



Activity

Activity: Create Your Own Map

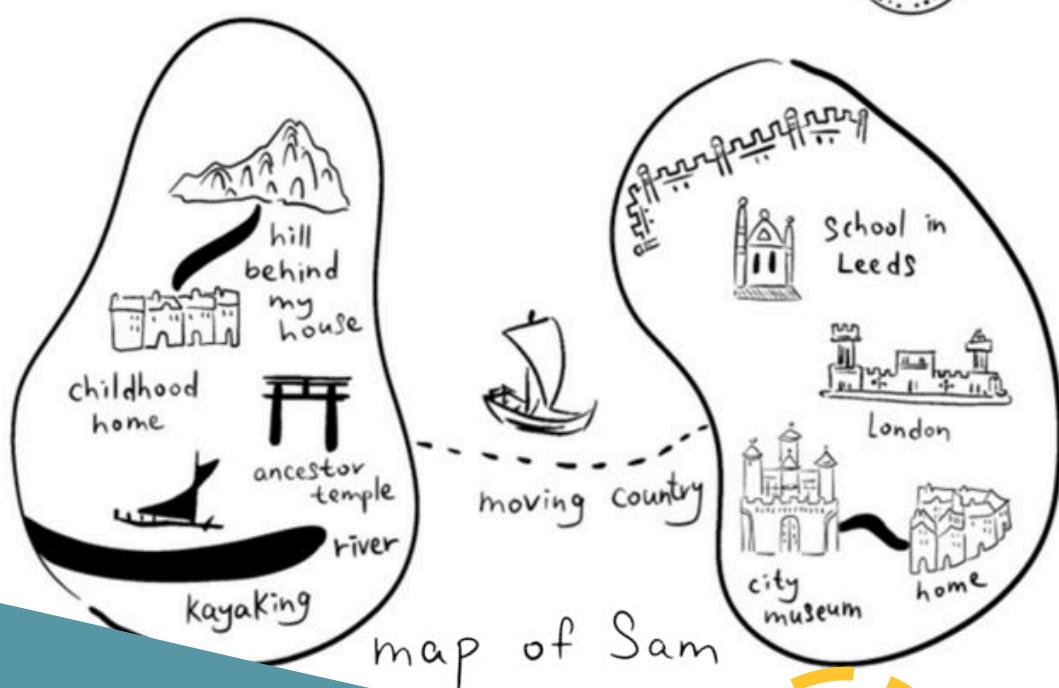
What you will need:

- Coloured pencils, crayons, or markers
- Scissors
- Spare paper



Method

1. Draw an outline of any shape you like – this will be your map outline.
2. Pick a style for your map from the resource sheet at the end of this activity or you can create your own!
3. Draw a compass with 'N' facing upwards at any of the four corners. This will represent 'North'.
4. Now, think about the important places, spaces and structures you might like to add. These can be natural (like rivers and forests) or human-made (like buildings, statues or bridges). Add the symbols for these to your map. You can also add colour if you wish.
5. Write the name of these places on your map.
6. Decorate the surroundings of your map.
7. Write 'Map of [your name]' and the date at the bottom.





Bonus Activity 12+:

Create your own symbols of buildings and geographic features. For example, this can be a simple outline of a real-life building. You can also add humans and animals to tell your story on the map. Remember to sprinkle them with your creative ideas!

Also consider adding a scale at the bottom, which will help others understand the size of the place in real life. You can also add a short caption on the side explaining the places you chose to include.

TOP TIP:

You can draw more than one shape to represent different areas and link them with bridges or a type of transport! You can also mix symbols from different periods and/or cultures in your map.



Group Activity:

Co-create a community map of your local area to showcase important places in the community.

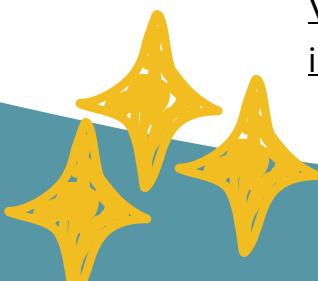
Glossary:

Cartography: The art and science of presenting places in drawings, usually on a flat sheet.

Want to know more?

If you want to learn more about cartography and their different styles why not take a look at some of the links below?

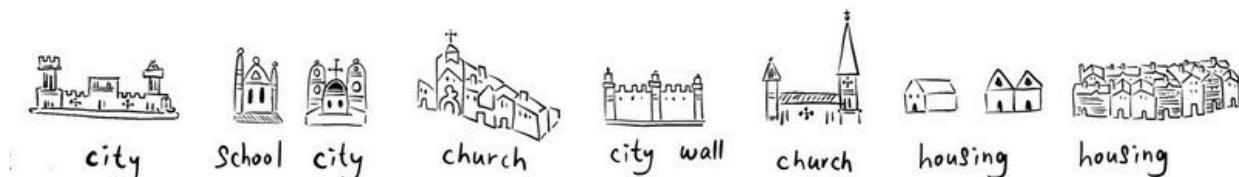
- [Hereford Mappa Mundi](#)
- [Chukchi Sealskin Map, ca. 1870](#)
- [Map of Valley of Mexico, ca. 1542, showing a scene of the Valley of Mexico before Spanish invasion](#)



Examples of Building Symbols Used in Different Maps

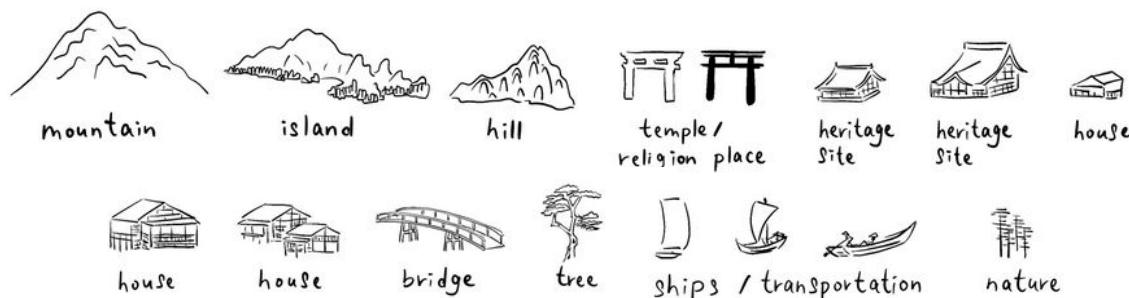
Medieval Europe

Mappa Mundi refers to maps from Medieval Europe. Ink lining, basic and repeat colour filling, flat and straightforward buildings are the style.



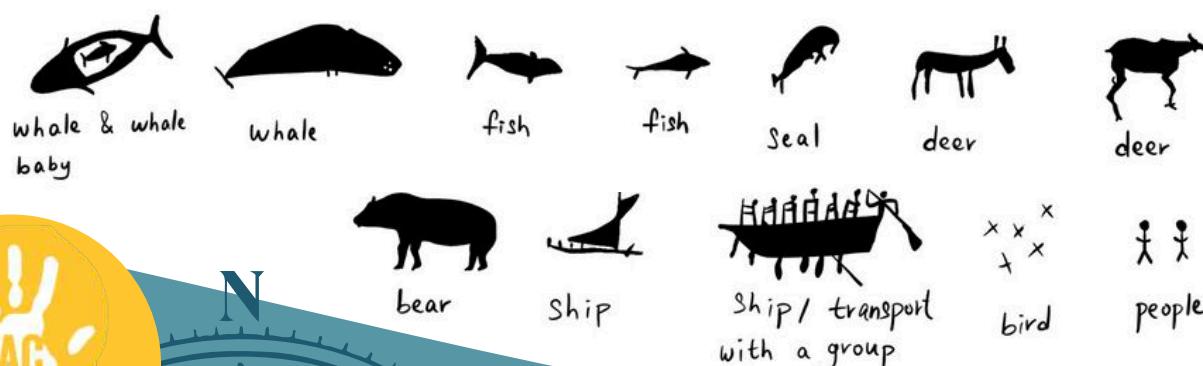
Simplified Ukiyo-e

A Japanese painting style. Flat, floaty, ink lining and watercolour style with gradient. Scenes in the painting can be cropped at the edge of the paper.



Artic and Subartic Eurasia

These maps mostly show the structure of mountains, seas, movement of tribal groups, hunting, fishing, whales and other wild animals in the area. They are flat and single-coloured ink figures.





Age: 8+
Time: 40
Mins

3 Explore Polynesian Tattoos: creativity and community

In this activity, you will imagine what tattoo you might have if you were an ancient Polynesian.

Background

Polynesian is a mix of different groups who live in the region of Oceania. These groups include Marquesans, Samoans, Niueans, Tongans, Cook Islanders, Hawaiians, Tahitians and Maori. Polynesian tattoos are traditionally used as an expression of identity and personality, while also showing the ranks within society.

As a way of storytelling, each Polynesian group has tattoos with unique meanings. They acted as words for Polynesians to communicate within their community. It is said that the word 'tattoo' first appeared in European society after Captain James Cook returned from New Zealand in 1771.



William Hodges, 1st February 1777, A Maori man with tattoos on his face, encountered by Captain Cook.

Activity



Activity: Create Your Own Ancient Polynesian Tattoo Design

What you will need:

- Printed body outline (see below)
- Example sheet of Polynesian tattoos (see below)
- Pen of choice

Method

1. Add some facial and body features to the outline so that it represents you.
2. Choose one tattoo or more from the example sheet. This can be something you feel represents you or just one that you like!
3. Present your tattooed human to members of your group and share why you chose the tattoos.

Want to Know More?

Follow these links to discover more!

- [10,000 Islands: A Brief History of Traditional Polynesian Tattoos](#)
- [In Polynesia, tattoos are more than skin deep](#)
- [Traditional Tattoos In Hawaii | Ink Experience](#)
- [Polynesian Tattooing Tools](#)

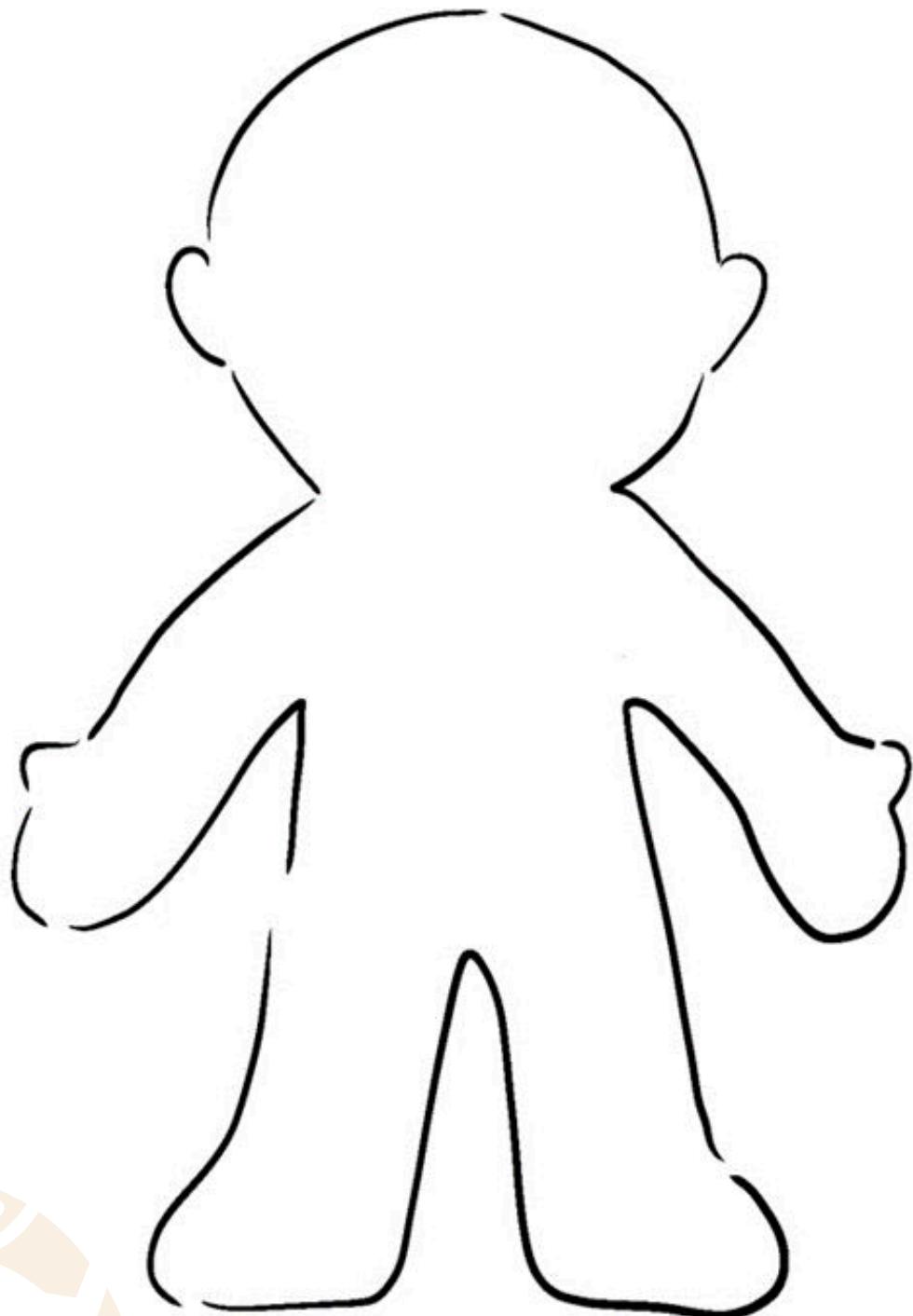
Bonus Activity (12+):

Different tattoo patterns carry different meanings in each society and culture. Explore tattoos in other cultures; what are their meanings and their technics? As a medium of storytelling, you can also design a tattoo which is about you.



Draw your tattoos!

Use this template to draw your tattoos.

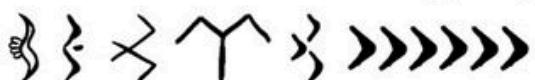


Examples of Polynesian Tattoos and their meaning

People



birds — ancestor / long voyage



fish — group of people / warriors / protection



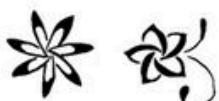
ocean wave — travel



ancestor(s)



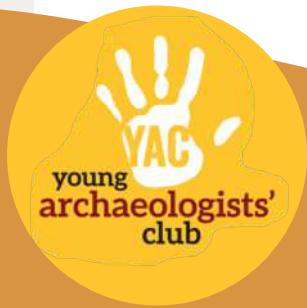
flowers — a) beauty & welcoming b) protection



Spirit / breath of life



lizard — bring good luck





Age: 8+
Time: 40
Mins

4

When Things Go 'Plop'

Ritual archaeology on bridges

Build your own bridge and draw your own river in this activity, including items that are meaningful to you or things you would have thrown into the river to say thank you to a Roman god.

Background

People have thrown special items into rivers for thousands of years. Have you ever thrown a shiny coin into a wishing well? Well, even the Romans used to gather as a community to do something very similar!

It is thought when they threw something shiny or meaningful or even something broken into the water they were repaying a debt to the gods. This practice continued into the medieval period, and in Durham there are thousands of objects in the river from pilgrims and merchants.



Reconstruction of
Piercebridge Fort bridge
(c) Durham University
Museum of Archaeology



Activity



Activity: Create your own bridge, river and offerings to the gods!

What you will need:

- Lollipop sticks or crafting sticks (or you could use building blocks)
- Glue
- Blue card/paper/tissue paper
- White card/paper
- Colouring pencils
- Scissors

Method

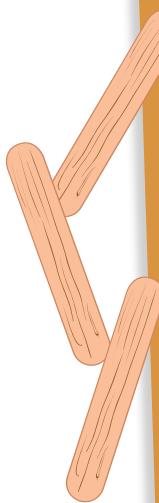
1. Build your bridge using the materials you have. For guides to creating a bridge using lollipop sticks, see the examples and/or follow the step-by-step guide at the end of this activity.
2. Create a river to go underneath your bridge using paper, cards, pencils, or anything you like! Is it based on a river near you?
3. Create and draw your objects. You could cut them out or draw them directly onto the river.
4. Share your creation with friends and family. You could ask them what objects they would throw in a river and why.

Bonus Activity:

Go outdoors! There are many archaeological sites near water, can you find one near you? Why do you think people liked to live close to the water?

Safety:

When using scissors ask an adult to help and make sure you put newspaper or a cover over your work area so you do not make a mess with the glue and colouring in.

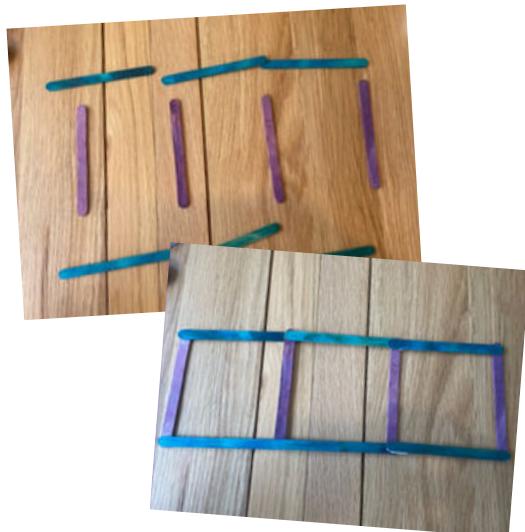


Upload your creation on social media, don't forget to use the hashtag **#FestivalofArchaeology** and tag **@archaeologyuk** or **@YAC_CBA**, or ask a trusted adult to do it for you.



Here's an example of a bridge and river we made with step-by-step instructions:

a) First, make your river by drawing or painting it on a piece of paper or card. It can be any shape you would like. Add some waves to make it more realistic.



b) Next, you will need 4 sticks going vertically and 6 sticks going horizontally, 3 for the top and 3 for the bottom. This will make the base of your bridge.

c) Glue these together. It helps to overlap the horizontal sticks to give your bridge more strength.



d) Next, make 6 triangle shapes, 3 for the top and 3 for the bottom. Glue just the point of the triangles for now.

e) Then glue a bottom onto each triangle, still keeping each triangle separate.

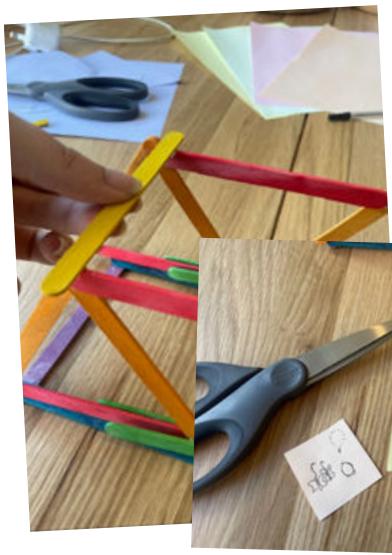


f) Glue all the triangles together using two sticks on each side where the join is.

g) Now you have three separate parts of the bridge.

h) Carefully put lots of glue on the base you made earlier.

i) Gently press down your triangle sides onto the strips of glue on the base. Carefully hold down for a few minutes to make sure it's stuck!



j) Glue some sticks to join the top and bottom of the sides to make sure it doesn't fall.

k) On a piece of paper or card, draw the objects you have chosen to throw in your imaginary river.

l) Add all your elements together.

Well done on making your own Roman bridge and archaeology objects!





Age: 12+
Time: 1 hour

5

3D Modelling and Me

Photogrammetry is the process of taking lots of photos of an object or place and using software to create 3D models from those images.

Photogrammetry is used a lot in archaeology to help survey sites and objects. As a result, models of those objects can be made available to people all over the world so that they can be studied and enjoyed without having to have the physical objects or go to the physical site.

The ability to make a detailed model of an object or site and to share it with anyone around the world is an excellent way to bring communities together and to share their stories and histories.



Background

In the professional world, photogrammetry is usually done with a quality DSLR camera and PC-based software like Agisoft Metashapes. However, this can certainly seem intimidating to try out as a beginner. Luckily, these days, most phones are powerful enough to use photogrammetry, and several apps now exist that let you give it a go!

In this activity we are going to try and scan an object using a phone to make a 3D model. We will be using an app called KIRI Engine. While many apps do exist this is one of the best choices as the app is free and has very minimal

restrictions on what you can do with it without having to pay. It also works on both iOS and Android phones from the last few years

Activity

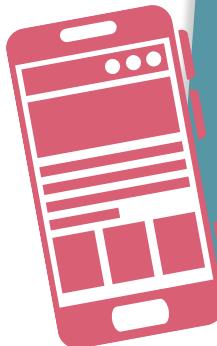
What you will need:

- Wifi connection to download the app and process your model.
- Smartphone
- Object to scan

Method

Tip:

Maybe ask an adult to help if you are not sure if you have a wifi connection.



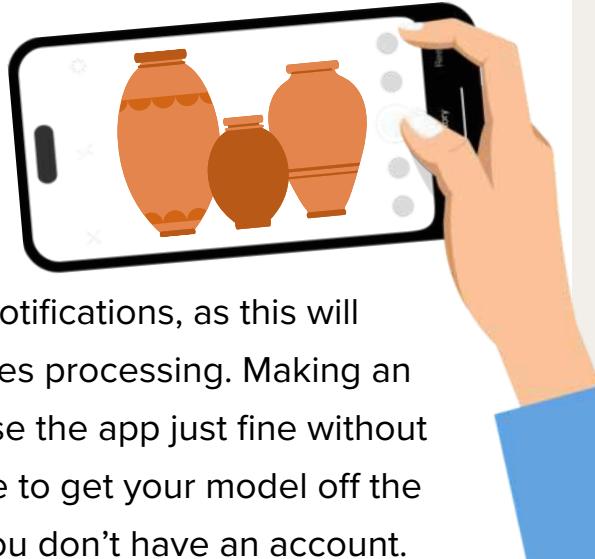
1. First off you want to pick an object to scan into a 3D model. It can be anything you like, from a piece of pottery, a tool or even something like a family heirloom. Smaller objects are easier to scan, especially on a phone, so if you can, try and pick something that isn't too large.



2. Now you want to set up your object for scanning. Place the object in a well-lit place that you can easily circle 360° around. Try to avoid having any harsh shadows or lighting on the object, as this can make it harder for the software to scan it.

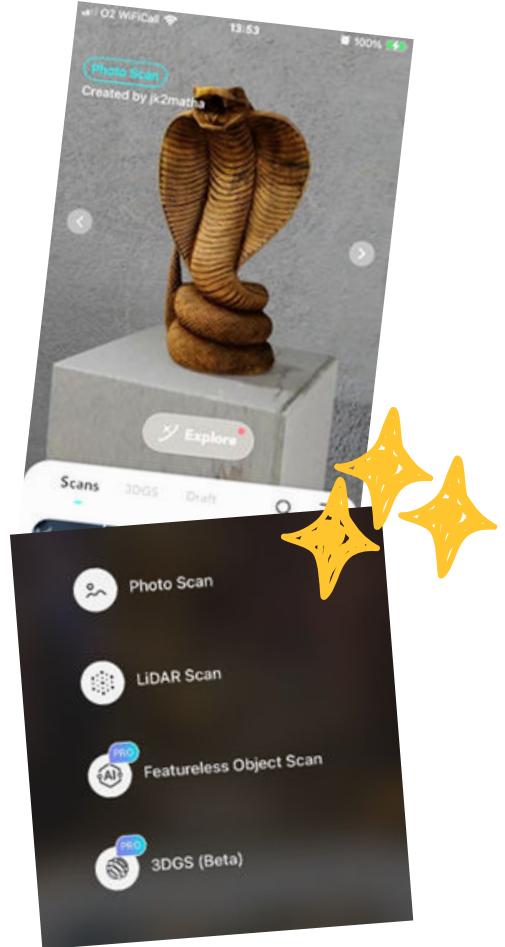
3. Next, you'll want to download the KIRI Engine app from either the App Store or Play Store. Make sure to ask an adult for help if you need it, and make sure that you have permission as well!

4. Once the app has finished downloading, open it up and swipe left through the introduction screens until you are prompted to make an account. I recommend allowing notifications, as this will make it easier to see when your model finishes processing. Making an account isn't strictly necessary, as you can use the app just fine without one. However, you won't be able to get your model off the app at the end if you don't have an account.



5. After making an account or skipping past that step, the app will give you some prompts that you can safely go past by pressing next. Once you are on the app's home screen, press the large plus button at the bottom to start a new scan.

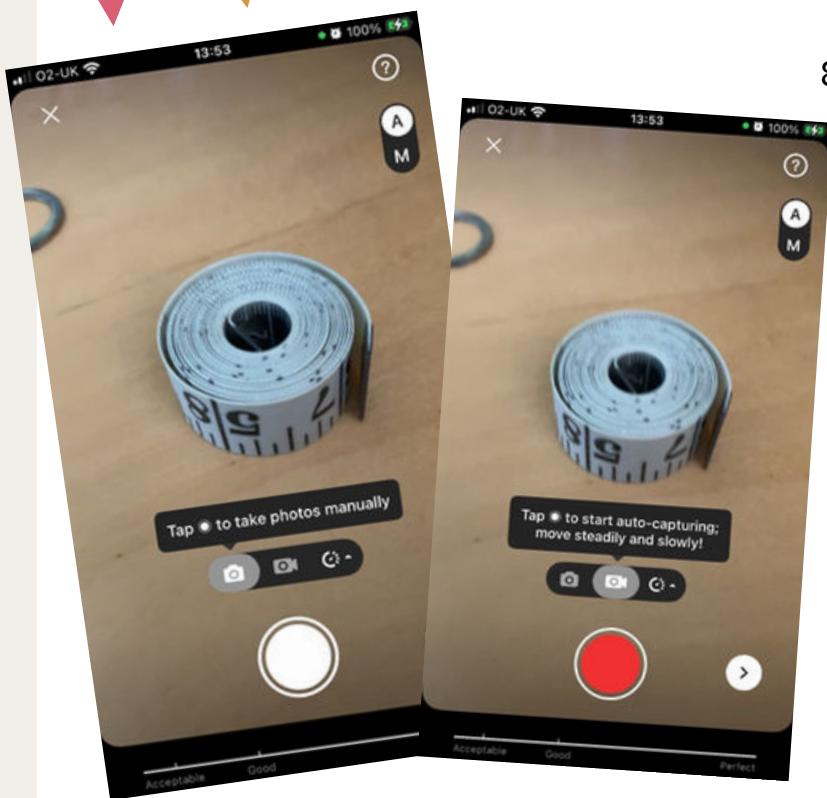
6. After pressing the button, you want to select the photo scan option, followed by the take photos option. If the app asks for access to your phone's camera, accept it. This will take you to the photo screen. You can safely close the prompts that appear describing the advanced camera settings as these aren't necessary to create a decent model. However, feel free to play around with these later if you'd like.



7. Now it's time to scan your object! By default, the app will be set to take photos manually; however, if your device supports it, you can set the camera to 'automatic photo mode', which is the button next to 'manual mode'. In manual mode, you must walk around your object and take photos of it in a full circle from various angles. In automatic mode, it's the same except the app takes the photos for you at regular intervals. Which method you use is down to personal preference. Have a go experimenting with both if you can!

At the bottom of the screen, you'll see a bar labelled 'Acceptable', 'Good', and 'Perfect'. The higher that bar is filled, the better. Don't worry if you don't fill it to perfect, or even good, as you can always start again and even an acceptable level of photos can produce a good model.

Be aware that on the free version of the app, you can only take up to 70 pictures.

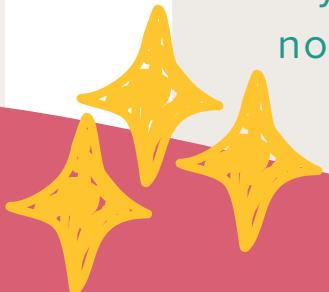


8. Once you have finished taking your pictures, press the little arrow button to the right of the camera button. This will take you to the edit page, where you can give your model a name. There are several settings here that can be changed; however, you don't need to worry about most of them. You can turn off 'Train AI' and 'Visibility' if you'd like, and make sure the file format is set to OBJ.

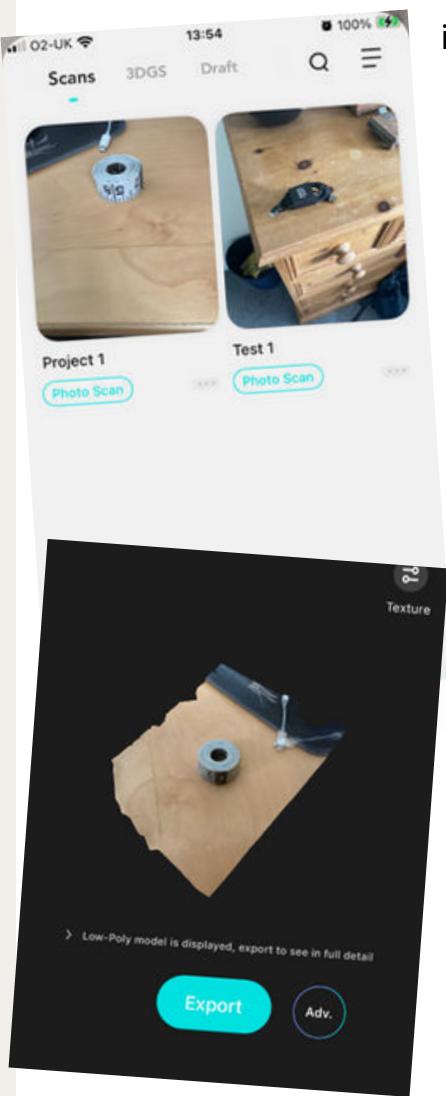
9. Finally, press upload to complete the process! It may take a little while for your model to upload depending on what the internet connection is like where you are. Make sure you don't close the app while the pictures are uploading. Once the images have been uploaded, you'll be taken back to the main page of the app, where you will be able to see your model listed with the status of 'Queueing.' This means that the app is processing your pictures into a 3D model.

Top Tip!

Once your model is Queueing, it's safe to close the app. If you have notifications enabled the app will let you know when it's finished. If not, don't forget to check back in!



10. Queueing and processing your model can take some time. In this example, it took around 20 minutes for my model to be completed. During this time have a think about how the object you've chosen ties into your community. Is it an artefact from your local area? Is it a tool that was used in the past? Perhaps it's related to some local history?

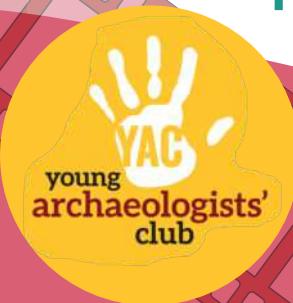


Once your model is finished, you'll be able to view it in the app and see how it came out. On the home screen, just tap on your model from the list. If you're happy with it you can press the large export button at the bottom of the page. You'll be taken to the export page but if you didn't make an account at the beginning, you won't be able to export it. However, your model will be saved on the app, and you can come back to it later.

When exporting, make sure to select 'Free Export Coupons' before you export. The app gives you three free exports every week, otherwise you will have to pay a fee to export your model.

Once you've exported your model, it will send a copy via email to the address you created your account with. You can then open it on a computer to view it better.

Good luck and have fun!



Bonus Activity:

Try sharing your model with the rest of your YAC group. Try researching more about your object and its place in your community. Maybe it's related to an object someone else in your group used for their model. Maybe your object could help connect you with other communities.

