

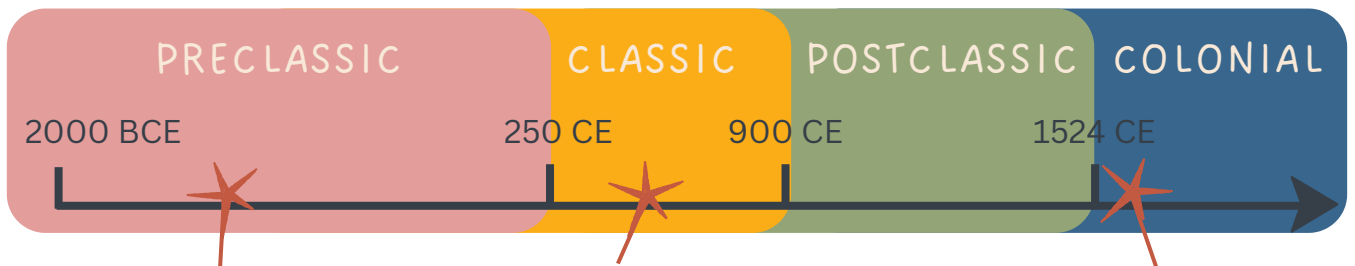
THE ANCIENT MAYA



Young
Archaeologists'
Club

c.2000 BCE - C16th CE

The Ancient Maya were an extraordinary civilisation who lived in what is now Mexico, Guatemala, Belize, Honduras and El Salvador. They built vibrant cities, created beautiful art, developed the only full writing system in the Americas, invented the concept of zero and made remarkable discoveries about the stars. Maya people are still here today, speaking around 20 Mayan languages and continuing their traditions.



c.1323 BCE: Tutankhamun dies

c.410 CE: Roman rule in Britain ends

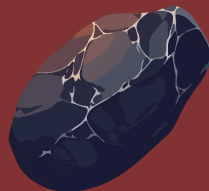
1547 CE: Henry VIII dies

This civilisation thrived in a landscape of rainforests, mountains, coastlines and fertile valleys, stretching from the Pacific Coast to the Gulf of Mexico. Independent city-states emerged as small kingdoms, each with its own rulers, traditions and specialities. They traded goods, shared ideas, formed alliances and sometimes fought. Over thousands of years, this world grew from early farming villages into great cities such as Tikal, Calakmul and Chichén Itzá, with stone pyramids, palaces, ballcourts and carved monuments - all created without metal tools, the wheel, or draft animals.



Material Culture of the Maya World:

Maize



Obsidian

Jade



Limestone



Cacao



ANCIENT MAYA MAP



Chichén Itzá

Chichén Itzá was a later Maya city famous for its huge ballcourt, where players competed in the ancient game of Pok-ta-Pok.

P12

At Calakmul, LiDAR survey revealed hidden causeways, temples, and extensive urban sprawl, transforming our understanding of the city's scale and layout.

PALENQUE was the home of King Pakal (615–683 C.E.), one of the Maya world's most iconic rulers, famed for his jade burial mask.

Yaxchilan is a Maya city famous for carved lintels, like this one showing King Shield Jaguar and Lady Xoc in an important royal ritual.



P7

Known as the Pompeii of the Americas, JOYA DE CERÉN was preserved when a volcanic eruption buried the community around 600 C.E.

Chichén Itzá

Calakmul

Chan Chich

BELIZE

El Mirador

Tikal

Yaxchilan

MEXICO

Palenque

GUATEMALA

Copan

HONDURAS

Joya de Cerén

EL SALVADOR

P3

El Mirador



Seen as the earliest MAYA city dating to around 300 B.C.E., with pyramids of impressive height.

At Chan Chich photogrammetry was used not only to create 3D models of artefacts but also to reconstruct architecture and document excavations.

P9



Now a UNESCO World Heritage Site, TIKAL was a major Maya centre during the Classic Period (250–900 C.E.)

Copan Stela H



The cast of Stela H can be found in the British Museum it represents a Copan king as the Young Maize God.

MEET THE ARCHAEOLOGIST

Archaeodiscovery met up with Maya archaeologist **Dr Diane Davies**:



What do you love about your job?

I love finding things that no one else has seen before, artefacts that are over 2000 years old and I am the first person to touch them – it is really special – you feel like you are touching the fingerprints of the past.

What is your best discovery?

Working with a team discovering the earliest Maya paintings was pretty amazing. They are called the murals of San Bartolo, Guatemala and they date to 100 BCE and depict parts of the Maya creation myth, showing the maize god, as well as the oldest Maya king we know to date. The paintings also revealed very early Maya writing, so early that they have yet to be deciphered, although the last word appears similar to a later Maya word – Ajaw meaning ruler/king.

What is your favourite Maya site?

The site of El Mirador in the Petén, Guatemala, which is seen as the earliest Maya city. The site includes several hundred structures distributed over a 6 square mile area and around 300 BCE pyramids of great heights were built! El Tigre pyramid was over 50 m high and La Danta was over 70 m high, one of the tallest pyramids in the world.



Scan the QR code and discover why Dr Davies wanted to become an archaeologist!



Why are you so interested in the Maya?

The Maya created an incredible civilization in the rainforest. They built spectacular temples and palaces without the use of metal tools, the wheel, or any pack animals. They were the only civilization in the whole of the Americas to develop a complete writing system like ours. They were only one of two cultures in the world to develop the zero in their number system and so were able to make advanced calculations and became great astronomers. Most importantly, we have the ancient Maya to thank for the wonders of chocolate of which I am a great fan!

DISCOVER:

Want to know more? Why not check out Dr Diane's website www.mayaarchaeologist.co.uk for more wonderful resources and videos

Dr Diane offers in-person and virtual school visits.

Book here: www.mayaarchaeologist.co.uk/school-workshops/school-visits/.

Age: 8+
Time:
40 mins

Activity: Make your own WORRY DOLL

You will need
(per person):

x1 wooden peg
x1 pipe cleaner
Scissors
Felt tip pens
Access to 2-3 colourful balls of yarn

Optional:
x1 small feather
x1 scrap of colourful fabric cut into
a rectangles (roughly 10x6cm)



TOP
TIPS



- If you do not have wooden pegs you can replace with lollipop sticks.
- Younger members may need help tying knots. So make sure older members or adult volunteers can assist.

What is a Worry Doll?

A worry doll (muñeca quitapena in Spanish) is a tiny handmade figure made from colorful textile leftovers.

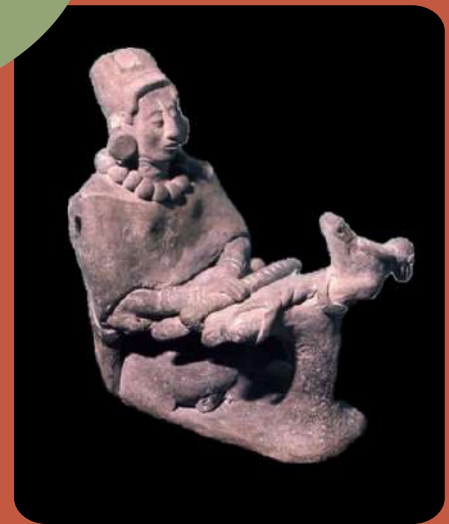
What is a huipil?
Pronounced "wee-peel", this is a traditional cotton blouse worn by both ancient and modern Maya women.



Before you start

Get inspired! Around 8 million Maya people still live today across Central America. Many continue to speak Mayan languages, make traditional crafts and wear colourful, hand-woven clothing. Maya weavers are highly skilled at spinning, dyeing and weaving and many of their designs carry special meanings. We can learn a great deal from living Maya communities as well as from the archaeological artefacts left behind.

According to Maya tradition, if you tell your doll your troubles before bed, then place it under your pillow by morning the doll has carried those worries away.



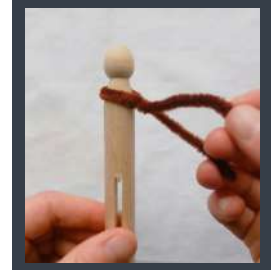
Weaver with Backstrap Loom
Photo credit: National Museum of Anthropology (Mexico)

Do it for
yourself

Activity: Make your own WORRY DOLL

1. Make the arms

Wrap your pipe cleaner around the peg just under the “neck”. Twist the ends together at the back to secure it. Then gently bend the pipe cleaner so the arms curve around to the front.



2. Wrap your doll in yarn

Choose a colourful piece of yarn and cut it to the length of your arm. Tie it to the peg just under the “head”, then begin wrapping it around the peg and pipe cleaner to create the top of the outfit. When you reach the end, tuck the loose end under a previous loop and pull tight. (If any knots/ends show, you can hide them by wrapping more yarn over the top.)



3. Continue wrapping

Pick a new colour of yarn, cut it to the length of your arm, and tie it on. Keep wrapping to build up the clothing. You can choose to wind each “leg” separately if you want your doll to look like it’s wearing trousers.

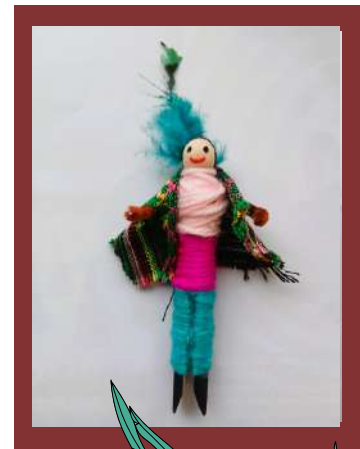


4. Add the features

Use a felt-tip pen to draw shoes and a simple face.

5. Optional Extras

Decorate your worry doll with feathers by tucking them into the yarn. You can also use a small piece of fabric to make a traditional huipil (blouse) or corte (skirt).



Worry dolls are important in Maya tradition and stories. Sometimes they are linked to the creation goddess Xmucane. Scan the QR code to watch a Maya mother explain how these dolls are passed down from generation to generation.



DID YOU KNOW?
Beautiful quetzal feathers were worn by Maya elites as symbols of wealth and power.

MAYA MATHEMATICS

The Maya invented a wonderful maths system made of dots and lines. They were also one of the few cultures to invent the idea of zero, which they had developed by at least 36 BCE, making their maths much more powerful.

They stacked numbers from bottom to top, with each new layer worth 20 times the one below. With these simple symbols they could count huge numbers, make calendars, and even track the stars. Look below: a dot = 1, a line = 5, and the shell = 0. Each layer goes up $\times 20$.

Maya Numbers

Place Value $\times 20$

8000s		E.g.
400s		$1 \times 400 = 400$
20s		$2 \times 20 = 40$
1s		$5 \times 1 = 5$

↑
Maya number place values increase by a factor of 20 as you move from bottom to top

Can you complete the sum underneath by writing your answer in Maya style? Then convert the Maya numbers below, using the colour frame to help you identify which place value level (units, 1s, 20s, 400s, etc.) you are working in. You'll find the answers on page 15.

$$\dots + \equiv =$$

What is a codex?

A codex is a folding book made by the Ancient Maya to record astronomy, calendars, rituals and other important knowledge. Only four survive today because most were destroyed during the Spanish conquest.

DISCOVER:

Explore the Dresden Codex [here](#). Can you spot any numbers?

GOOD LUCK

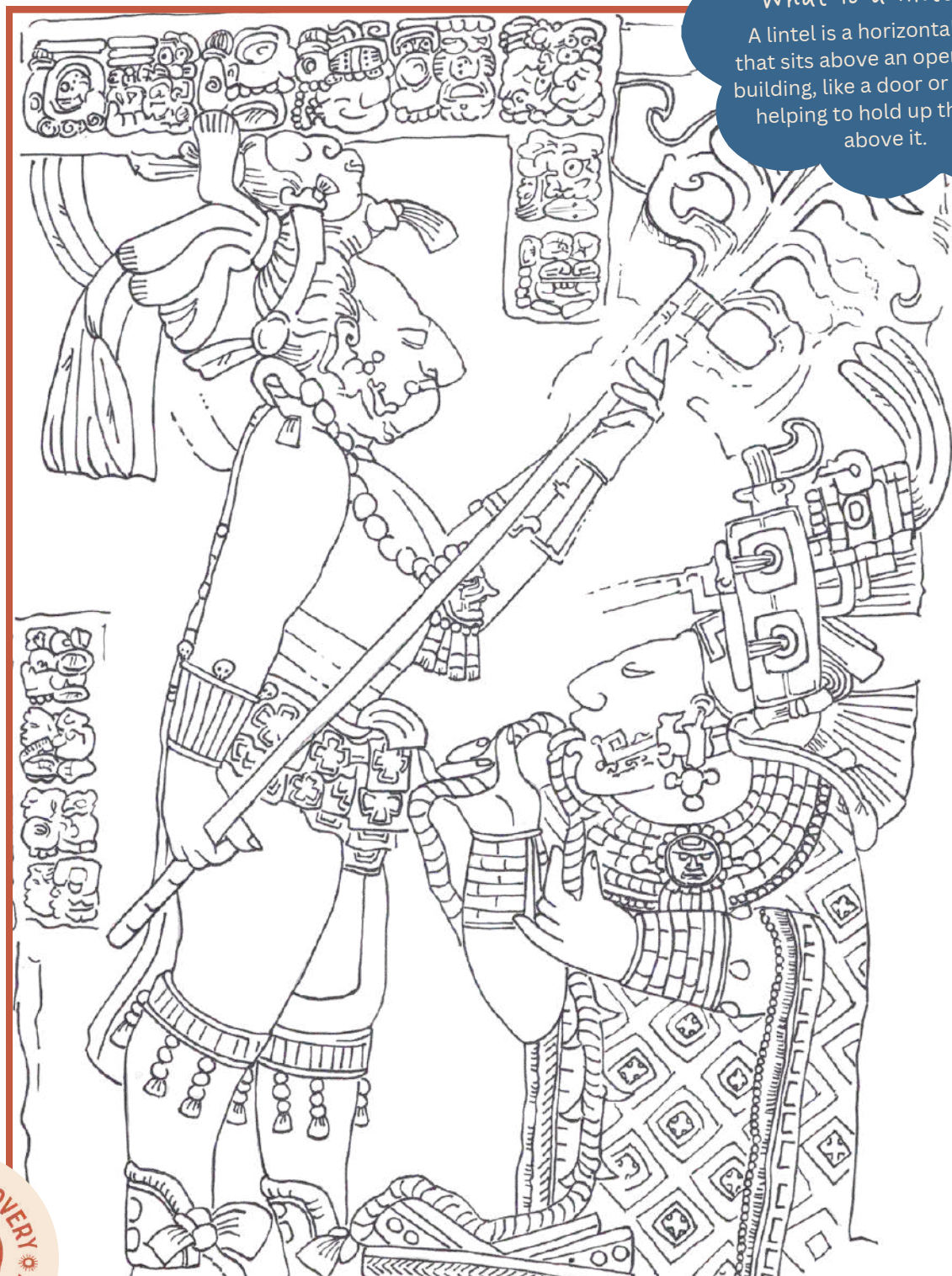
COLOURING!

Grab your pens and pencils and bring this carving to life with colour! This lintel comes from the ancient city of Yaxchilán in Mexico. It shows King Shield Jaguar and Queen Lady Xoc taking part in an important royal ritual.

The king is standing with a bright torch, while Lady Xoc kneels in her beautiful woven huipil. She's pulling a thorn rope through her tongue - in an act know as *bloodletting*. Maya elites would let blood to honour their gods, we know this ceremony took place on 28th October 709 C.E. thanks to the hieroglyphs at the top.

What is a lintel?

A lintel is a horizontal beam that sits above an opening in a building, like a door or window, helping to hold up the wall above it.



MAYA MYTHBUSTER

Follow the instructions below to make a paper cocotte, then challenge a friend to play.

How?

1. Cut out the square.
2. Place it face down and fold each corner into the centre.
3. Flip it over and fold the corners into the centre again.
4. Fold the small square in half (symbol side up).
5. Then slip your thumbs and fingers into the pockets and pinch towards the centre .
6. Find someone to play with.
7. Ask them to choose a colour and open the cocotte as you spell it out.
8. Ask them to choose a number and open it that many times.
9. Ask them to pick a final number, lift the flap, and read the question.



7 True or False: Maya predicted the end of the world in 2012?

8 Name an animal the Ancient Maya tamed?

4 Name the Maya ballgame?

1 True or False: Maya civilisation collapsed after 900 C.E.?

3 True or False: Our word 'chocolate' comes from the Mayan word 'xocolatl'?

2 Do we say 'Mayan' or 'Maya'?

6 True or False: Maya and Egyptian pyramids are the same?

5 What is a stela?

False: It was simply the end of a cycle in the Long Count calendar

Turkey, bee or duck

Pok-ta-Pok

False: There are still Maya living today

False: 'Xocolatl' is an Aztec word. 'Kakawa' (cacao) is a Mayan word.

MAYA - we only say 'Mayan' when talking about the language

False Egyptian pyramids are different in shape and function

True A tall carved stone slab the Maya used to show important rulers

TOP TIPS



Use your scissors to lightly score the dotted lines to make the folding easier!

Activity: WHISTLE LIKE THE ANCIENTS

Age: 8+
Time:
45 mins+

You will need
(per person):

- x2 lollipop sticks (plus scissors to cut off the rounded end on one to make it square)
- x1 toothpick
- x1 disposable wooden knife
- x1 metal teaspoon
- Air drying clay (3 balls of clay each the size of a golf ball)
- Access to a rolling pin, some water and a spatula (good for unsticking).
- x1 paper bag/plate to carry your creation home!

How a Whistle Works?

When you blow into the whistle, the air rushes through a tiny tunnel, hits a sharp edge, and starts to oscillate, creating sound waves.

Those sound waves tumble around the resonating chamber and then come out as the whistle sound you hear.

Before you start

Get inspired! The Ancient Maya played lots of different instruments. They made trumpets from wood and conch shells. Gourds and turtle shells became rattles, and clay or bone was shaped into whistles and flutes that often looked like animals or people. This clay bird whistle was unearthed at the site of Chan Chich in western Belize in 2017 by students from Texas Tech University.



Joining Clay Whistle Pieces

To make sure the different parts of your clay whistle stick together firmly, score and slip your joints:

- **Score:** Use a toothpick to gently scratch criss-cross lines on both surfaces you want to join.
- **Slip:** Add a tiny bit of water to make the clay slightly sticky.
- **Join:** Press the two scored areas together and smooth the seam.

This helps the clay bond properly so your whistle stays strong as it dries.



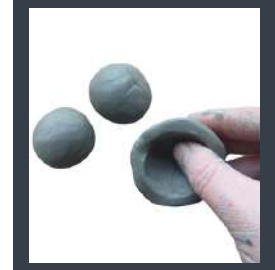
Click [here](#) to view the 3D model!

Activity: Make your own BIRD WHISTLE

Make the Whistle Body

1. Shape the pinch pot

- Take one ball of clay.
- Use your thumb and fingers to make a pinch pot with walls at least 3 mm thick.
- This hollow space will become the whistle's air chamber- so keep it even and don't let the walls get too thin.



2. Create the base

- Take a second ball of clay and split it in half.
- Put one half aside for later.
- Roll the other half into a flat disc, again at least 3 mm thick.



3. Join the two pieces

- Place your pinch pot upside-down on top of the clay disc – it should look a bit like a tortoise shell.
- Use your knife to trim away the extra clay around the edges.
- Carefully smooth the two pieces together with a lollipop stick or your fingers.
- Important: Keep the inner chamber intact. Don't press so hard that you collapse the hollow space inside.



Make the Mouth Piece

Use the half-ball of clay you set aside to form the bird's tail, which also becomes the mouthpiece. Split it in half again, roll it into a ball, and shape it into a wedge-shaped tail that's thick enough to hold the airway. Line it up with the base of the whistle body and join it gently.

****See TOP TIPS****



REMEMBER!



Keep that inner chamber intact!



Don't let your clay whistle stick to the surface you're working on.



Activity: Make your own BIRD WHISTLE

Attach the Neck and Head

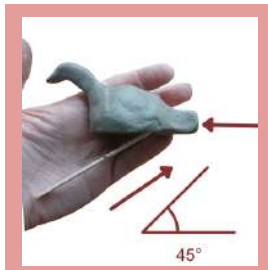
Roll some of the remaining clay into a small cone for the neck and head, then bend the tip to make the beak. Cut a 45° wedge from the base so it fits neatly onto the body. Press the neck onto the whistle and smooth the join with your fingers or a lollipop stick. If the clay feels dry, dab on a tiny bit of water to help it blend. Add a little extra clay if the neck needs more support.



Make the Whistle (Tricky part!)



Push a lollipop stick horizontally through the tail (mouthpiece) until it reaches the body chamber. Leave it in place – letting the clay firm up for a few minutes can make the next step easier.



Slide the squared-off lollipop stick under the body at a 45° angle towards the tail until it touches the first stick. Make a small opening here using your knife, then tidy the edges with the end of your metal teaspoon.



Carefully remove both sticks, making sure the airway stays open and the angled hole is still sharp. Blow through the mouthpiece to test it. If it doesn't whistle, reinsert the sticks and clean up the edges again.



Finishing Touches

Use your toothpick to add details like feathers, wings, or patterns. Let your whistle dry fully in a warm place for a few days. Once it's completely dry, you can paint it in bright colours- maybe at your next YAC meeting.



For trouble-shooting or if you're struggling with written instructions why not watch this YouTube tutorial on how to make a clay whistle.

BONUS ACTIVITY

You will need:

This is a body percussion exercise so no need for instruments- just a group of about 10 people and a conductor.

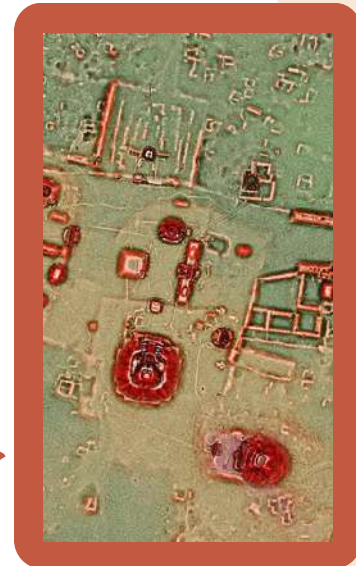
Maya Soundscape

Before you start

Get inspired! The Maya rainforest is the largest tropical forest in the Americas after the Amazon, stretching across Mexico, Guatemala, and Belize. The dense vegetation makes archaeological work difficult, but technologies such as LiDAR have revolutionised our ability to map Ancient Maya sites hidden beneath the canopy. Since many of us have never visited a rainforest this soundscape offers an immersive way to experience that environment and appreciate the world the Ancient Maya inhabited.

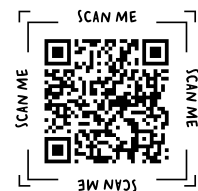
Age: 6+
Time:
15 mins

This is a great ice breaker activity to warm up a group!



LiDAR Survey of the ancient city of Calakmul, Mexico.

© Bajo Laberinto Archaeological Project and Instituto Nacional de Antropología e Historia.



TOP TIPS



Why not use the whistles you've just created to build the sound. Or see if one of your group wants to imitate a howler monkey?

Scan the QR above to watch the Rainforest Orchestra

1. Get Ready

Ask everyone to form a line.

2. Make the Rain

You are the conductor. Walk slowly along the line and each person copies you only when you reach them.

- First pass: Rub your hands together to make the sound of soft rain. Keep walking until everyone is doing it.
- Second pass: Click your fingers to make raindrops. Start slowly, then speed up.
- Third pass: Pat your legs. Begin gently, then get faster as the rain gets heavier.
- At the front: Raise your hands to signal a big jump for thunder.

3. Change the Conductor

Let someone else lead the rain, or split the group so different sections make different sounds at the same time. You can also add simple instruments to build the storm.

4. Adapt as Needed

The group can stay seated. If finger-clicking is tricky, try tapping the table. If jumping isn't suitable, clap for thunder instead. Encourage creativity and let the group experiment with their own storm sounds.

Makes up to 20 servings

Age: 8+
Prep time: 30 mins

Recipe: Maya hot chocolate

You will need:

- 200g cacao nibs
- 454g jar of honey
- 43g jar of cinnamon
- 43g jar of chilli powder
- 10ml bottle of vanilla essence
- 4 pints of whole milk (or milk alternative)
- Sauce pan and hob (to heat up milk)
- Kettle (to boil water)
- x1 teaspoon per person
- x1 mug per person
- Pestle and mortar
- Blender (as back-up - grinding nibs is hard work!)

MAKE THIS RECIPE ANYWHERE!
In a kitchen, over a camp fire, with a camping stove, or using a thermos.

Before you start

Get inspired! The Maya were the first people to harvest and process cacao on a large scale, and the word cacao itself comes from the Maya word KaKaWa. Rather than eating chocolate in bars, they enjoyed it as a spiced, bitter drink, flavoured with chilli, honey or cinnamon, and poured from pot to pot to create a thick, foamy top. So why not try making your own version and sample with one of the most delicious traditions of the Ancient Maya:

1. Grind the cacao nibs

Using a pestle and mortar, grind the cacao nibs into a fine powder. Let everyone have a turn. Grinding by hand is hard work, so you can use a blender to speed things up if needed.

2. Mix the ingredients

Each child takes 1–2 teaspoons of cacao powder and puts it into their mug. Add up to 3 teaspoons of honey (or sugar), one drop of vanilla essence, and a teaspoon of cinnamon and/or chilli powder to taste. Mix everything together to make a smooth paste.

3. Add your liquid

An adult adds roughly 200 ml of hot water or 100ml milk to each mug. Stir well, then allow the drink to cool a little before tasting.

IMPORTANT!

- Check all allergies and dietary requirements beforehand.
- Take care with hot liquids to avoid scalds.
- Keep chilli powder away from eyes and wash hands after handling spices.

enjoy!



Photo credit: www.mexicolore.co.uk

Archaeologists have found several Maya vessels with tiny chemical traces of chocolate. A famous cup from Río Azul in Guatemala even shows a hieroglyph that expert David Stuart interpreted as the word 'cacao'.

DISCOVER:
You can read about Dr David Stuart who began studying Maya ruins and hieroglyphs as a kid—[here](#).



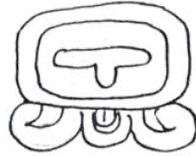
MAYA ASTROLOGY

The Maya were skilled astronomers who tracked the movements of the sun, moon, stars and planets, using advanced mathematics to create accurate calendar systems. They used these calendars for both functional purposes and sacred divination. Their main calendars were the 260-day Sacred Calendar (Tzolk'in) and the 365-day Solar Calendar (Haab), alongside the Long Count, which measured vast spans of time from a fixed starting point – the beginning of creation on 13 August 3114 B.C.E.

Use Dr Diane's Spirit Companion Calculator to discover your Maya Star Sign:
www.mayaarchaeologist.co.uk/school-resources/maya-spirit-animals/



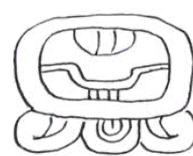
Imix
(Crocodile)



IK
(Wind)



Akbal
(Night)



Kan
(Sky)



Chikchani
(Snake)



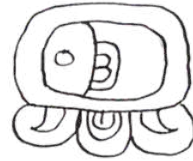
Kimi
(Death/Transformation)



Manik
(Deer)



Lamat
(Venus)



Muluk
(Moon)



Ok
(Dog)



Chuwen
(Howler Monkey)



Eb
(Tooth/Jaw)



Ben
(Maize/Corn)



IX
(Jaguar)



Men
(Eagle)



Kib
(Light/Flame)



Kaban
(Earth)



Etnab
(Obsidian/Flint)



Kawak
(Storm/Lightning)



Ajaw
(Ruler)



Why not colour in your Maya Star Sign or even try to draw it yourself?

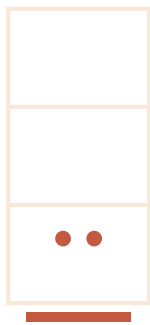
Did you know?

The Ancient Maya believed each person had a spirit/animal companion, called a *Way* (pronounced 'Why')

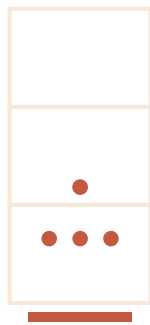
Answers:

p6

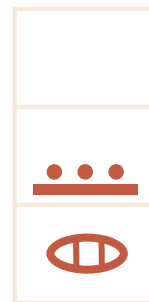
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7?



28?



160?



Young Archaeologists' Club

This resource pack was produced to answer the demand by Young Archaeologists' Club (YAC) members for more World Archaeology themes (based on the YAC Impact Study 2023-24).

It was created by Felicity Thompson and Gemma Ward- Archaeodiscovery and Brighton YAC Leaders. The pack is full of activities and ideas based on the Ancient Maya theme.

Special thanks go to Dr Diane Davies ([Maya Archaeologist](#)) for her contributions.

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media!

