

MUSEU
ARQUEOLÒGIC
D'EIVISSA
I FORMENTERA

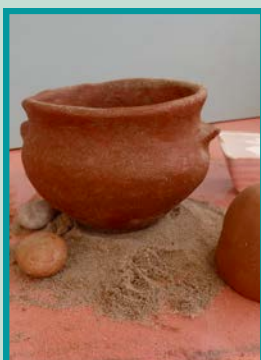


MUSEO
ARQUEOLÓGICO
DE IBIZA
Y FORMENTERA

PEDRA, PAPER... MUSEU!!

Rock, paper... museum!!

30 Projects
to have fun with the
Archaeological Museum
of Eivissa and Formentera



Spotted lizard

Dark-coloured cardboard, acrylic paint, tools for dotting (toothpicks, the back of a paintbrush, needles, etc.), scissors, adhesive tape, a copy of the template on page 47.



1



The necropolis of Puig des Molins is a reserve for the Pityusan lizard. An endangered species renowned for its striking colours, this lizard is the only endemic terrestrial vertebrate of the islands.



Print and cut out your lizard template on the inside. Secure the template onto the cardboard with adhesive tape to hold it in place while painting your dots. .



Paint dots with a needle, a toothpick or a cotton swab—you can make your own using a stick and a bit of cotton, a more eco-friendly and cheaper option.



Use your favourite colours, but remember that lizards have striking colours such as turquoise and emerald green.



Allow a few minutes for the paint to dry before removing the template. Your lizard is now ready!!

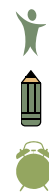


1



Hedgehogs of Puig des Molins

Pinecones, felt, stuffing fibre, scissors, needle and thread, plastic eyes, glue, a wooden base.



2

A small colony of hedgehogs live in the necropolis. Though these animals are naturally shy, they can sometimes be spotted at dusk. They are also depicted in the display cases of the Monographic Museum Puig des Molins.



Choose a pinecone for the body. Place it in the oven for one hour at 250°C, this will make it dry and it will open. Clean it thoroughly with a brush. Remove the top of the pinecone and keep the central part.



Draw a circle on the felt, cut it out and then cut it in half. Then, cut one of the halves in half again (this will be the head). Cut the other half in two and shape them into drops (these will be the ears).



Shape a cone with the half-circle to form the snout, sew or glue the edges on the bottom side. Stuff with the fibre and glue to the end of the pinecone.



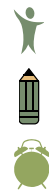
Glue or sew in place the base, ears, eyes and nose (made with a circle of brown felt).

2



Plant 3D print

Vegetable material, plasticine or modelling clay, plaster, a plastic bottle, a rolling pin, watercolours, paintbrushes, gloves...



3

Dinosaur and other animal fossils are the most popular though it's also possible to find fossil records of plants which provide plenty of facts about the environment where our ancestors lived.



Get some flowers, leaves or branches with well-defined shapes so they will leave deep traces (for instance, a daisy would be better than a poppy). Knead the plasticine or modelling clay and make sure its surface is smooth and even using a rolling pin. Or use sandpaper to add texture to the surface.



Arrange the flowers and leaves to create a landscape. Remember that it changes constantly with the seasons, so each engraving will be unique.



Press with the rolling pin to print the leaves and flowers without deforming them. Then carefully remove them using tweezers.



Create a 2cm border with plasticine or clay all around to hold the plaster.



Follow the instructions to make the plaster under adult supervision. Mix and tap the mixture on the table to remove air bubbles, then pour it carefully. Remember not to dispose of the leftovers down the sink or wash tools while wet. Plaster can be removed easily when it hardens. Use gloves, as plaster can dry and burn your skin if you are not careful.

Dinosaur eye

A box, a stone or can, air-drying clay, paper, acrylic paint, texturing tools, crayons, water-based varnish.



4

Dinosaurs look scary, right? How about making a terrifying piece such as a paperweight or a warning sign for your bedroom door or for a box that no one will dare to open?



1 Draw a circle for the eye. Paint it giving it a reptile-like appearance (elongated black pupil and green or orange iris). If you are not good at drawing dinosaur eyes – that happens to us too—search the Internet and print one. Glue it onto your box.



2 Knead air-drying clay, mark a circle slightly larger than the eye and split in half to form the eyelids. Knead two long and thick strips that will be used to surround the eye. Use an old toothbrush or some sticks to add texture simulating the rough skin of the dinosaur.



3 Set to dry and paint with bright acrylic colours. Add some touches using a nearly dry brush and golden or silver acrylic to create depth and a realistic effect. If you want, you can varnish the entire box to protect it.

4



Dinosaur footprints

Ingredients and recipe to make biscuits (see page 36), a biscuit cutter (or a glass), plastic dinosaurs, baking paper, a rolling pin, edible powder pigment, cinnamon or cocoa powder.



5

Sometimes, dinosaur footprints in swampy areas, riverbanks, marshes and deserts eventually became fossilized. We can make a tasty version!



Follow the recipe to make the biscuit dough. When ready, use a rolling pin to make a 1cm-thick layer. Place it on a tray lined with baking paper and refrigerate for 15 minutes.



Using the cutters, shape the biscuits (leftovers can be kneaded again and flattened with the rolling pin so none of the dough is wasted). Make sure the plastic dinosaurs are clean and dry.



If you use fossilized dinosaurs (those that only preserve the bones), the result will be much more realistic. Have the dinosaur walk on the biscuit, gently pressing. Pre-heat the oven to 200°C, place the biscuits on the middle rack and bake for 10-12 minutes.



When ready, remove from the oven and place on a rack to cool. Use a brush to mark the footprints with edible pigment, a little cinnamon or cocoa powder. Enjoy!



5

Fossilized amber

Yellow glass nuggets, crayons, glue, magnet, a piece of wire, pliers, varnish, a copy of the template on page 46.



6

Palaeontologists often find insects, spiders, crabs, plants, mushrooms, microorganisms, tiny birds or even remains of larger animals trapped in amber. It's like having a sample frozen in time from the dinosaur era in their hands.



Draw insects, flowers or leaves and choose a yellow-coloured glass nugget that fits the shape and size of your drawing.



Colour your picture and glue it, front side up, to the base of the nugget.



When the glue is dry, seal the back of the paper with a layer of clear varnish.



You can turn your fossilized amber into a pendant or keyring making a jump ring with copper wire and pliers. Or stick a magnet on the back and use it to decorate your fridge.



6

Bronze axe

A print of the axe from page 47, salt, flour, vegetable oil, acrylic paint, Kraft paper, string.



Bronze was one of mankind's first great inventions. By mixing two minerals—copper and tin—they produced bronze, a hard metal that could be used instead of stone. Axes like this one are often found in votive, ritual or reserve deposits, in this case at can Mariano Gallet (Formentera), between the years 1100 and 850 B.C.



The recipe for salt dough is simple: a cup of salt, a cup of flour, a teaspoon of vegetable oil and some water. Mix all the ingredients and knead in a bowl until you get a fine elastic dough.



You can use the printed image as a model to shape your axe.



Use a pencil to shape it and pierce the rings.



Let the piece dry for a couple of days or place in the oven for two hours at 120°C.



Decorate with acrylic paint and seal with a layer of varnish. Cut a long strip of kraft paper and twist it so it will look like wood. Fold the strip over the axe and secure it with string.



Prehistoric Bowl from es Fum cave

Clay, sand, wooden sticks, smooth stones, a piece of fabric, string.



8



Ceramic was another great invention. It revolutionized the way of transporting, cooking and storing food. It needs some practice, but the creative possibilities are endless. This item comes from the cave of es Fum (Formentera).



Work the clay mixing and kneading it with sand to make it stronger and mouldable. Make a ball and shape the base using your thumbs.



When the base is ready, make clay rolls and coil them upwards around the base to create a wall. Using wooden sticks you can “stitch” the rolls together.

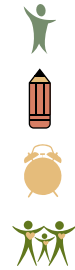


Allow to dry for a few hours until it feels like leather, as potters call it. Now you can burnish the surface using a piece of fabric. You may decorate it using skewers, strings or shells. You can let it dry in the air or dry it in the oven.



Tomb of Ca na Costa

Potato starch TiPs, cardboard, scissors, glue stick, acrylic paint, white glue and sand.



9

The megalithic tomb of Ca na Costa is located at a prominent point in the western side of the island of Formentera with spectacular panoramic views. It served as a burial site from 2040 to 1600 B.C. and is one of the oldest megaliths on the Balearic Islands.



Draw two concentric circles on the cardboard. The inner circle will be the chamber and the outer one will be the buttress of the tomb.



Glue the potato starch TiPs from the inner circle vertically. Cut grey-coloured TiPs for the base of the walls.



Glue the outer circle buttresses, we did it using the colour green.



You can leave it like that or paint it using acrylic colours for a more realistic touch. Add touches of white glue mixed with sand to provide roughness, as the TiPs will deform when in touch with the moisture of the glue, producing an eroded stone effect.

Sumerian clay tablets

Modelling clay, a rolling pin, wooden sticks, an awl.



10

Cuneiform is the oldest script in human history and was used from the late fourth millennium B.C. to the first century A.D.



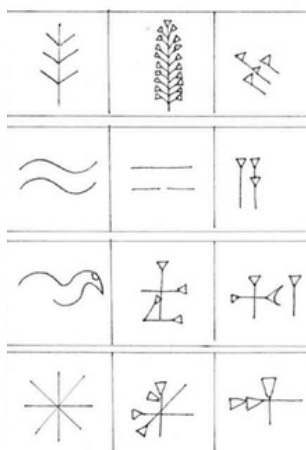
1 Prepare the tablet, which was usually square-shaped with rounded edges. Make sure its surface is even and smooth, with no cracks, to make writing easier.



2 The symbols were traced using a sharp awl made of bone, wood or reed to produce small wedges, which are the origin of the name of this script.



3 Signs evolved making pictograms simpler eventually becoming symbols that would seem meaningless unless you were taught them in a school of scribes. We suggest you practice writing some of them: water, star, barley, bird.



Barley

Water

Bird

Star



10

Sumerian ziggurat

Two rectangular pieces of sponge cake (see recipe on page 36), wooden skewers, a knife, chocolates.



11

Ziggurats were stepped pyramids with a rectangular, oval or square base. The inside was built with sun-dried bricks and the outside was coated with glazed colourful bricks. The temple had side or spiral steps that reached the top, where Mesopotamians approached the gods.



This ziggurat will be very, very sweet. You can use the recipe at the end of the book or any other that you prefer as long as the cake has a firm texture. You will need two rectangular chocolate sponge cake sheets.



Cut the cakes into squares.



Place one cake on top of the other, using wooden skewers to join the different levels placing the temple at the top. Cut out the access staircase and attach it to the side of the ziggurat using two skewers.

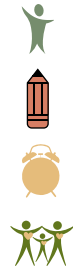


Use a knife to cut out the temple's access doors and finish the tower decoration with chocolates or some of the cake scraps. Enjoy a temple like the ones found in the cities of Ur and Uruk, amongst others.



Sumerian seal cylinder

Coloured polymer clay, skewers, awls, leather cord.



12

Mesopotamian seals were engraved cylinders made of stone (obsidian, soapstone, amethyst, carnelian) which were used as personal signatures to mark authenticity. The seal was rolled on fresh clay and had pictures of gods, mythological animals or cuneiform inscriptions.



1 Knead the coloured polymer clay using colours that remind you of semiprecious stones. Form two balls with the clay. Using a rolling pin, make a sheet about 4mm thick and a flat cylinder by rolling a stick or needle inside. Make it the same height as the short side of the sheet.



2 You can engrave simple symbols with an awl. Be careful not to deform the sheet. The deeper the grooves, the better the result.



3 Gently lift the sheet and place it over the cylinder. To make it stick roll carefully on a flat surface, but not too hard or you'll lose the depth of the engraving.



4 Follow the instructions to bake the clay, usually in the oven for a short time at low temperature. You will need an adult to help you with this.



5 You can use the seal on clay or on paper if you add some ink. Hang it from a cord, like the Sumerians, and you'll have a personal seal and a piece of jewellery.

Egyptian scarab

Air-drying clay, wooden sticks, watercolours or diluted acrylic paint, paintbrush and clear varnish.



13

The scarab beetle is the ultimate amulet. It represents the god Khepri as a dung beetle, pushing a solar disk symbolizing Ra. It alludes to eternal life and endless transformation, protects against evil and gives life, power and strength. In the context of death, it is a symbol of regeneration and rebirth in the Afterlife.



Form a ball with the clay and make an oval shape. To prevent deformation, it helps to pierce it with a stick. This way, if you want to use it as a pendant it will already be pierced.



You can use a photograph as a model or follow these instructions: use a stick to mark the surface; one line for the head and body and another line for the wings. Shape the head by pressing the sides and mark the eyes. Don't forget to mark the legs on the sides of the scarab.



Underneath, you can engrave a hieroglyph such as your initials. Let it dry in the open air for at least 24 hours.



Paint with watercolours to imitate the greenish-blue of the original creatures and apply darker tones for extra realism. Let it dry and cover with a layer of clear varnish.

Udjat amulet

Coloured Hamma Beads, a small square base, an iron and baking paper, the models from page 47.



14

The Eye of Horus or Udjat had magical, protective and healing powers. Horus fought his uncle Seth to avenge his father. In one of their confrontations Horus lost his left eye but thanks to That's intervention, it was replaced by the Udjat and he regained his sight. For this reason, it is considered an effective amulet against eye diseases and the evil eye and it protects the deceased.



Prepare the materials, a small square base and the colours yellow, blue, white and black. Arrange the Hamma Beads starting from the upper-left corner and follow the pattern so you will not drag them with your hand while you work. You can use tweezers to set them in place.



Once the design is complete, cover with baking paper to iron it. This is best done by an adult. You will see that as it is ironed, colours become more intense, that means it is ready (it shouldn't take more than 30 seconds). Let it cool on a flat surface and put some weight on top so it doesn't warp.



You can create other Egyptian elements using this technique: the scarab (a) or the sign of eternal life, the ankh (b).

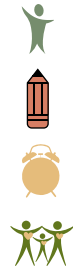


Once it has cooled completely, you can attach a magnet or a ring to make a keyring or whatever you fancy.



Great Egyptian pyramid

A print of the pyramid from page 47, cardboard, a ruler, paper tape, white glue, fine sand, acrylic paint, a paintbrush.



15

Pyramids were one of the wonders of the ancient world. They were built of white limestone and were used as the burial sites for pharaohs such as Cheops, Chephren and Mykerinos though the way they look nowadays is very different from what they looked like in the year 2600 B.C., when they were first built.



Draw and cut out the model on page 102 and draw the same pattern on four cardboard rectangles. Cut them out carefully.



Draw the marks of the large stones that make up the pyramids and trace them with a black marker.



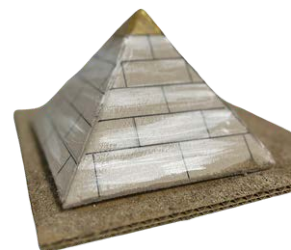
Join the four sides of the pyramid with paper tape on the inside. The base can also be glued to the cardboard.



Dilute white glue with water (50-50) and cover the cardboard adding fine sand. Remember that what we now see is not what the pyramids looked like originally, so wait for it to dry and apply a layer of white acrylic paint over the pyramids. The final touch will be painting the tip of the pyramid with gold paint.

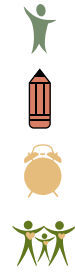


15



Egyptian papyrus

Kraft paper, scissors, glue, acrylic paint, instant coffee, tape, paintbrush.



16

Papyrus, used by Egyptians, Greeks and Romans for writing and drawing, was an Egyptian invention obtained from the stem of a plant of the same name that grew in the River Nile. The Egyptians kept secret how it was made and attributed its creation to Thot, the god of wisdom.



Leaving about 1cm free at the top, draw vertical lines down the sheet of kraft paper every 1cm. Place the paper vertically on baking paper using tape at the top so it stays in place when you do the horizontal lines.



Interleave the horizontal lines, one below and one above the vertical lines.



Mix equal parts of water and white glue and add a teaspoon of instant coffee. Use a paintbrush to apply a thin layer of the mixture.



Place another sheet of baking paper on top and press with a rolling pin. Remove the baking paper and let the papyrus dry preferably hanging so it does not stick to another surface.



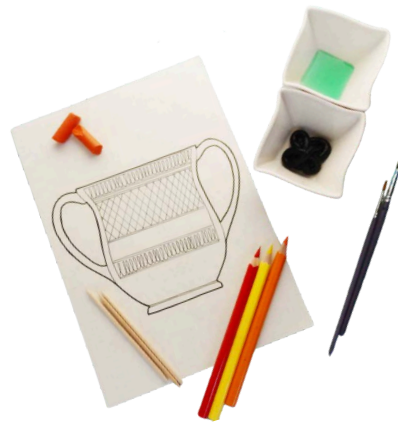
When it's dry you can paint the god Thot on it or whatever you prefer!

16



Attic Kantharos

A print of the model on page 47, red and orange crayons, black acrylic paint, wooden sticks.



17

The MAEF houses a fine collection of Greek ceramic pieces such as this kantharos from the middle of the fifth century B.C. These items were made in Athens (Greece) and brought to the island of Ibiza by Phoenician-Punic traders. Black varnish was applied with a brush leaving parts of the original red surface uncovered. Later, white details were added.



1 Cut out and colour your kantharos with orange, red or yellow crayons.



2 Mix black acrylic paint with a teaspoon of washing-up liquid. Colour the kantharos as many times as needed to cover the entire piece properly.



3 Let the paint dry. With pointed wooden sticks or skewers remove the black paint following your model or create your own images.



17

Trojan Horse

A print of the image on page 48, ice lolly sticks, glue, scissors, cardboard, round sticks, string, crayons.



18

A wooden horse helped the Greeks defeat the Trojans. Pretending to abandon the fight, a wooden horse was left at the foot of the city wall and it was taken into the city by the Trojans, unaware that Greek soldiers were hidden inside. That night, the soldiers opened the gates of the city causing the Trojan's final downfall.



1 Print two copies of the horse and four wheels. Glue them on thin cardboard to make them stronger.



2 Use a ruler to mark parallel lines simulating wooden boards. Colour with assorted crayons to make the horse look ancient.



3 Cut sticks to add a rustic look. You can darken them using a brown marker and glue them.



4 The mane can be made with coloured thread dipped in white glue.



5 You will need a small cardboard box to join the two sides of the horse. Use a hole puncher to make holes in the centre of the wheels. Slide the round sticks into the holes. Make a ladder with the skewers and some string.



Seal of the god Ares

A print of page 48, eraser, pencil, tracing paper, gouges, wood scraps, an ink pad.



19

The god Ares—Mars for the Romans—was the god of war, always ready for battle. He was depicted with a spear, a sword and a shield. This scarab represents a naked Greek hoplite or soldier ready to fight.



Print the picture. Cover the back with graphite and trace it over the eraser (a) or copy it on tracing paper placing it face down on the eraser and rubbing it to transfer the graphite (b). You can now carve the image removing the extra bits. Use a small V-shaped gouge to trace the outer edges, then outline the inner ones.



If you need to remove a lot of the rubber, use a U-shaped gouge. For details, use a small gouge gently. Using the flat blade, cut out the motif to give it a scarab shape.



Attach the stamp to the base with glue, this will allow you to print more easily on paper or cardboard or even on fabric, if you use the appropriate ink. You can even print the wooden base before attaching it to the stamp.



Simple cardboard loom

Yarn, cardboard, ruler, scissors, lolly sticks, cotton, coloured wool.



20

Phoenicians were renowned for the variety and quality of their colourful wool, linen and esparto fabrics. The preservation of archaeological fabrics is not easy but the examination of objects related to spinning, dyeing or weaving reveals that they brought innovations like those found in Sa Caleta.

1 Mark the lines leaving two centimetres on each side and fold them upwards. Cut small tabs to form the warp. To assemble it, cross the yarn from one end of the cardboard to the other and pass it through each tab, alternatively above and below until all the gaps are covered.

2 Thread a needle with some wool or make a shuttle with a lolly stick. The idea is to weave the wool above and below alternatively. When one line is finished the next one should be done in reverse. Make sure to tighten the wool at the end of each line to tighten the weaving.

3 When you finish, carefully tie the beginning and the end. The fabric will remain in place when you remove the cardboard and set each of the ends to remove any gaps.



20



Small decorated "ostrich egg"

An egg, an awl, plaster, sandpaper, a knife, acrylic paint, wooden sticks, paintbrush, pattern on page 49.



21

Ostrich eggshells decorated in red ochre symbols and vegetable patterns are interpreted as an element of rebirth after death and are amongst the most remarkable pieces of the Museum of Puig des Molins.



Carefully drill a hole in the narrowest part of the egg and gradually make it larger. You can save the egg contents to make an omelette.



Wash the inside of the egg with water and soap. It is very fragile so be very careful!



Make the plaster following the instructions. Place the egg on a steady base, (a glass will do) and fill it with plaster up to about two thirds of its volume using a teaspoon. Let it dry. It's best to wait up to 24 hours.



Carefully peel off the egg using a knife. You can ask an adult for help. Smooth the plaster egg with sandpaper.



Punic necklace beads

Coloured polymer clay, a cutter, a rolling pin, string, wooden skewers, varnish.



22

Punic beads served not only as personal ornaments but were also used to protect the deceased on their journey to the Afterlife and as amulets to ward off the evil eye.



1 Knead the clay until it's soft and shape it into a black cylinder. Using the rolling pin flatten a plate of another colour of the same size as the cylinder and wrap the plate around the cylinder. Roll the resulting cylinder to extract any air bubbles. Repeat the process as many times as you like using contrasting colours.



2 These colourful rolls are called murrine. Use a cutter or blade to cut very, very thin disks.



3 Make smooth clay balls and stick the murrine disks on them. Gently roll the balls on the table to make them stick well.



4 Carefully pierce the beads with a skewer and place in the oven for 30 minutes at 110°C. Once cool, they can be varnished.



Votive offerings of the goddess Tinnit

Cardboard, golden acrylic paint, crayons, scissors, adhesive tape, a cardboard roll, a print of the pattern on page 50.



23

Thousands of bell-shaped offerings to the goddess Tinnit (full figurines and fragments) were found in the cave of Es Culleram (Ibiza). They have a winged cape formed by wings that fold and symbols linked to the goddess (lotus flower, caduceus, astral symbols, etc.), clear evidence of the eclectic Punic art, with Hellenistic and Egyptian elements.



1 Print the image on page 50 on white cardboard.



2 The original clay pieces were decorated using mineral pigments rich in iron oxide, calcium carbonate, charcoal and Egyptian blue as well as goldleaf. To get a similar effect, lightly colour it with brown crayon to imitate clay and add colour details (white, red, blue and black).



3 Carefully cut out the decoration elements and glue them. Then cut about two centimetres of cardboard roll and use double-sided tape to hold the figure.



Glass bearded head

Coloured felt, needle and thread, scissors, cotton, a copy of the picture on page 51.



24

Just as the Punic necklace beads protected against the evil eye, glass bearded heads have large eyes to protect those wearing them from danger. Two of these pendants are preserved in very good condition in Ibiza, one is brown and one is turquoise. Which do you prefer?



Print the picture on page 51. Cut out the parts of the head and place them on coloured felt. Secure with needles so the pattern does not move when you trace it with a pencil.



Place the front of the head first. Then stick the nose, eyes, hair and ornaments (the headband and earrings) and the beard.



Sew the top of the head to the back, it will look better if you use thread of the same or similar colour. Leave a small opening to fill it with cotton using the back of a pencil.



You may prefer not to fill the head, so skip step 3 and sew the head on a bag or T-shirt. You can use adhesive fabric or the pattern on page 51.

24








Gold and jet necklace

Golden wire 0.7 to 0.9 mm, black beads, rounded pliers, wire cutter, ruler, metal sheet.



Romans loved jewellery and access to trade routes across Europe, Egypt, Northern Africa and the Mediterranean allowed them to add emeralds, diamonds, rubies, sapphires, garnets, pearls and amber to precious metals. An amazing gold and jet necklace was found in the grave of a wealthy Roman lady in the necropolis of Puig des Molins.

-  Cut a 3cm wire segment for each of the beads (about 30 for a necklace and 16 for a bracelet). Using rounded pliers make a loop at one of the ends of each segment. Insert a bead and finish the other end with another loop to close the link.
-  Repeat these steps, don't forget to connect each link to the previous before closing it.
-  When the necklace is finished try to mimic the clasp of the original piece. To do so, carefully cut two 5cm-long pieces of golden wire.
-  The first part of the clasp is made with a loop on each end. Cut a 2cm-long piece of metal sheet of the same width as the gap between the loops and roll it between them.
-  For the other part of the clasp, make a hook-shaped loop. Repeat the step, join the ends of the chain and done!



Roman oil lamp

Clay, a bowl, two wooden slats, a rolling pin, a knife, cling film.



26

Roman oil lamps were made of terracotta or metal and were used to light homes. They were filled with olive oil and had one or several wicks. Some had handles for easy transport. They were made using moulds and decorated in relief with mythological scenes, flowers, symbols or even gladiators.



1 Make a sheet of clay: set the wooden slats and roll the clay with the rolling pin until you get a smooth, even sheet.



2 Line the bowl with cling film, put the clay sheet covering the inside of the bowl and trim the excess.



3 Cut a clay circle the size of the bowl and decorate using a seal or an awl. It must have a hole in the middle. Carefully place it on the base and remove the plastic to extract the piece. Carefully join the two pieces together.



4 Now you can add the other details, the peak where the wick will rest and a handle, for instance.

26



The Terni lapilli game

Felt, string, compass (or two plates of different sizes), pencil, ruler, scissors, needle, buttons, glass beads, wooden beads, pebbles.



27

Terni lapilli is a Roman board game, the origin of noughts and crosses. The round boards had eight crossing lines and beads were placed on the intersections. Engraved and decorated boards have been found throughout the entire empire.



Draw the board, mark a 20cm circle and a smaller one inside (about 12 cm in diameter).



Using a ruler, draw three or four lines crossing the centre at an equal distance. You should get at least seven or nine points, depending on the model you choose.



With a hole punch or a thick needle with cord make holes about two centimetres from the edge and pass the cord up and down until the circle is completed.



Place a bead at each end of the cord so you can open and close your bag with the board and counters inside.



Hand of Fatima

Air-drying clay, pattern on page 49, a knife, and awl.



28

The hamsa or hand of Fatima has been used as an amulet since the Punic period. In northern Africa it was associated with the goddess Tanit. Later, Jewish and Arab cultures adopted it as the hand of God, symbolizing protection, authority, strength and power.



1 Make a sheet of air-drying clay placing wooden slats and using a rolling pin to make an even and not too thin sheet.



2 Cut a copy of the picture on page 49 and trace it on the clay, then carefully cut out the hand. Smooth the edges with a damp finger.

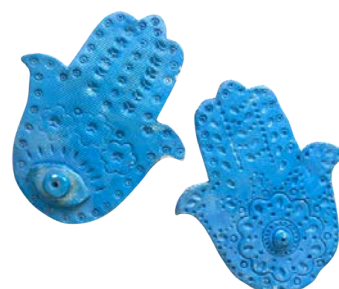


3 Decorate the hand using wooden sticks or texture tools; you can even insert small beads or ornaments. Remember to make a protrusion and a little hole for the incense stick.



4 Let the hand dry for at least 24 hours and add some colour with diluted acrylic paint to cover all the details. Remove the excess with a cloth and when the paint is dry apply some varnish.

28



The Duplum Molendinum Game

Air-drying clay, two wooden slats (preferably not over one centimetre thick), a knife, a ruler, a pencil, an awl or wooden stick, a rolling pin.



29

When the Catalan conquerors reached the islands they used many of the pre-existing Islamic structures. In Can Celleràs stone slabs from an old house were reused to carve board games such as this Duplum Molendinum.



Place a large piece of clay between the wooden slats and make a sheet using a rolling pin. With a knife, cut out a 20cm square.



Draw your board on a piece of paper using a ruler or print the pattern. It's simple: three squares nestled inside each other. The large square measures 18cm, the medium one 12cm and the small one 6cm.



Place the drawing on the clay and mark each intersection with an awl. This way you will easily connect the dots on the clay using a ruler and an awl. With the back of a pencil, mark the rounded hollow spaces.



Use your counters to play.



The rules of the game are explained on page 37.




Metallic looking bowls

Air-drying clay, a rolling pin, cling film, paintbrushes, acrylic paint, containers to use as moulds, a knife, sandpaper.



30

Golden or metallic ceramic was made applying metallic oxides to the glaze. Originating in Muslim Mesopotamia, this technique was considered, as in the case of Athenian potters in the fifth century B.C., a secret kept by Muslim and Moorish artisans which was later passed on to potters in the area of the Levant and Teruel.

-  Lightly knead the clay and use a rolling pin to spread it evenly. Don't make it too thin or it could break.
-  Cover the inside or the outside of a bowl with cling film and place the clay on it, pressing with your hands to shape the form of the bowl. You may add little flat handles. Trim off the excess clay.
-  Let it air dry for at least 24 hours. Remove the mould by carefully pulling the cling film. Gently smooth the surface with sandpaper.
-  Paint with acrylic colours following our patterns or your own inspiration. Varnish it to make it shine and to protect the paint.

30



An evil and terrifying dragon

A print of the picture on page 52, DIN A3 cardboard, tissue paper, crayons, a cardboard roll, scissors, two wooden sticks and tape.



Every 23 April, the wicked dragon returns along with brave knights and beautiful princesses. The streets are filled with books and millions of stories trapped within their pages waiting to be lived. Today is a good day (the best) to open the windows and let our imagination fly.

1

Paint and carefully cut out the various dragon pieces.

2

Cut a strip of green cardboard, the length you choose for the dragon's tail. Fold the green cardboard in a zigzag pattern to make the body of the dragon.

3

Cut a cardboard cylinder and attach strips of yellow, red and orange tissue paper. You can curl the paper with the blunt part of the scissors to resemble the flaming fire that your dragon breathes.

4

Finally, attach the head, body and tail with some tape. Use glue to stick the cylinder and wooden sticks.

31



Punic terracotta

A plastic bottle, cardboard, egg cartons, a cork ball, kitchen paper, scissors, white glue, acrylic paint, paintbrush, tape.



How could we forget one of the MAEF's star pieces? It is a coloured terracotta bust made in Sicily, quite far from Ibiza. It represents the Greek goddess Demeter, though in Ibiza she has always been known as Tanit. Would you like to make your own goddess?



1 Cut the top of a round-shaped bottle. The bottle neck will be the neck of your Tanit. Attach the cork ball to the top and secure with tape.



2 Mix white glue with some water (50-50) and tear strips of newspaper using your hands. Place two layers of strips with the glue mixture crisscrossing them over the entire piece. Let it dry for 24 hours.



3 Make paper paste following the recipe on page 101. Cover the figure with paper paste and add details to the face and the hair. Don't forget the bow!!



4 Let the paper paste dry and paint it. First, apply a layer of terracotta colour and when it has dried gently pat white and red paint to make it look worn.



Your own museum at home

Personal items, artworks, minerals, collectibles, cards with printed images from page 34, a camera.



What is a museum? A museum is a large exhibition hall open to the public that displays collections of cultural, art or natural objects. Its main purpose is to display, preserve, research and disseminate the heritage of a country or culture. There are many types of museums: archaeological, anthropological, art, history...



To start your own collection you need to decide what objects are particularly valuable for you to keep in future. Get a large box to keep everything and print as many catalogue cards as objects you want to preserve.



MUSEUM NAME:

Curator's name:

What is it?

How old is it?

What is it made of?:

Where does it come from?:

Museum's logo:



Catalogue card

What are its measurements?:

How did you get it:

Purchase

Donation

Gift

Found it by chance

Others:

What are your memories about this object?:

State of preservation:

Good

Medium

Bad

DESCRIPTION:

Photo or drawing of the item

INVENTORY NUMBER:

AVAILABLE FOR LOAN:

YES

NO

CURATOR'S SIGNATURE

:



RECIPES, GAME RULES AND TEMPLATES



BUTTER BISCUITS SUITABLE FOR VELOCIRAPTORS:

Ingredients:

250g butter, 200g sugar, 1 whole egg plus one yolk, 650g sifted flour, 1tbsp milk, a few drops of vanilla essence or your preferred flavouring.

Preparation:

Beat butter and sugar together until they are well blended.

Add egg and flavouring and continue mixing with a whisk. You can do this by hand or with an electric whisk (in this case you may need adult supervision).

Keep mixing and gradually add the flour to the mixture.

Add the milk. By now the mixture should have separated from the bowl and formed a ball.

The dough can be wrapped in film and kept in the fridge ready to bake.

ZIGGURAT CAKE RECIPE:

Ingredients:

175g butter, 225g sugar, 4 eggs, 175g sifted flour, 240ml milk with a few drops of lemon juice, 65g cocoa powder, 1tsp baking soda, 1/4tsp salt, a few drops of vanilla essence.

Preparation:

Preheat oven to 170°C and line a rectangular tray with baking paper or rub it with oil or butter. An adult should help you with the oven.

Sift the flour together with the salt, baking soda and cocoa powder.

In another bowl, beat the butter and sugar until they are blended together. Add the eggs one at a time plus the essence and the milk with a touch of lemon juice.

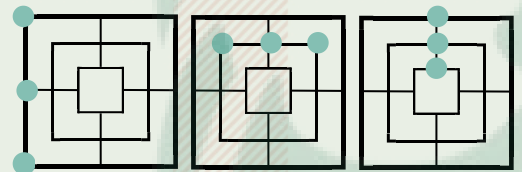
Mix the contents of the two bowls in three batches and bake for 40 minutes. Let it cool completely before shaping the cake.

“NINE MEN’S MORRIS” GAME INSTRUCTIONS

NINE MEN’S MORRIS” Game instructions

You will need a game board and nine counters of two different colours. The purpose is to place three in a row so you can remove pieces from your opponent until they have no pieces left on the board or cannot make any move.

In turns, each player places a counter at any of the intersections of the empty board. If a player places a counter so that three of their counters are aligned along one of the lines of the board, they can remove one of the opponent’s counters as long as the counter is not already aligned in a group of three. Removed counters cannot be used again. Once both players have placed all their counters they take turns to move a counter to an adjacent intersection following the lines of the board. If at any point a player cannot make any moves, they lose the game. If a player aligns three counters, they can remove one of the opponent’s pieces as long as it is not part of a group of three. When a player is left with only two counters, they also lose the game.



PAPIER MÂCHÉ RECIPE FOR PUNIC GODDESSES:

For the papier mâché you will need egg cartons, white glue, water and a blender (this step must be done by an adult). This mixture produces a soft and easy-to-handle paper paste that can be shaped using any structure. When dry, it hardens and can be painted or varnished. To get an idea of the approximate amounts, for our figure we used four large egg cartons, half a cup of white glue and two litres of water (for soaking).

First, cut the egg cartons by hand, not with scissors, into small pieces removing any stickers or extra bits. Cover with water and leave to soak for at least two hours, preferably overnight. Remove some of the water and use the blender to mix until you get an even paste which you then strain using a cloth. Squeeze out any remaining water using the cloth, the paste should be dry. Mix it with white glue and knead until the paste is smooth enough to shape. Store in a plastic bag ready to use.

TO FIND OUT MORE ABOUT THE SITES, MONUMENTS AND
ARCHAEOLOGICAL OBJECTS THAT YOU HAVE SEEN IN THIS GUIDE



A NECRÒPOLIS DEL PUIG DES MOLINS (EIVISSA/IBIZA)

It was the cemetery of the city of Ibiza throughout antiquity. Among other tombs, the Punic hypogea (about 3,000 in total) stand out as one of its defining features.

Spanning from the Phoenician period (seventh century B.C.) to late Antiquity (fifth century) it is considered the most significant Punic Phoenician funerary complex in the Western Mediterranean.



B CAN MARIANO GALLET (FORMENTERA)

Josep Escandell came across a series of bronze axes when he was working his land. The place was called can “Mariano Gallet” in Sant Francesc Xavier (Formentera). It consisted of a deposit of metal items that someone hid and were never recovered until Josep found them in the 1970’s.



C COVA DES FUM (FORMENTERA)

In the Cova des Fum the existence of prehistoric materials is evidence that it was inhabited during the Copper ages. It has been traditionally associated with the incursion of the Normans in the year 1108 when they defeated the local Arab community by setting a fire at the entrance of the cave.



D MEGALITHIC TOMB OF CA NA COSTA (FORMENTERA)

The megalithic tomb of Ca na Costa is located at the highest point of the western side of the island of Formentera over a spectacular panoramic view. It was used as a burial ground from 2040 to 1600 B.C. and it is one of the oldest megaliths in the Balearic islands. No other megalith combines so many architectural elements: chamber, perforated slab, radial walls and external platform.



SA CALETA (IBIZA)

The Phoenician settlement of Sa Caleta, located in the peninsula of sa Mola in sa Caleta—a perfect haven—was one of the first to be created on the island. Dating from the last third of the seventh century B.C. it was home to hundreds of settlers. Besides marine activities (fishing, manufacture of salted fish, extraction of purple dye) metallurgical work and other productions such as textiles have been documented.



COVA DES CULLERAM (IBIZA)

The Cova des Culleram was inhabited in prehistoric times but the Punic turned it into a place of worship from the fifth to the second centuries B.C. People from all over the island would come to make offerings to the goddess Tanit, to whom it was dedicated for some time. The temple was perfectly organized and had a body of priests, musicians and assistants who would gather there during times of ritual celebrations.



CASTELLUM OF CAN BLAI (FORMENTERA)

The Roman Castellum of Can Blai constitutes remarkable evidence of the Roman presence in Formentera around the third century A.D. It consists of a fortified structure of the quadriburgium type linked to coastal surveillance with a quadrangular layout and five watchtowers, one at each corner and one protecting an access gate. The most accepted theory, considering the general state of preservation of the construction which only retains a height of 1 meter in some sections, suggests an unfinished work, erected to defend the island.



CAN CELLERÀS (FORMENTERA)

Thanks to archaeological monitoring work carried out during the works in Can Celleràs (area of Monestir, la Mola), a medieval site was documented. It may have been a farming settlement from the 13th century, between the Andalusí period and the arrival of Catalan conquerors to the islands. Among the remains unearthed in this archaeological excavation, a set of three stone boards, two gaming counters and a die stand out and bring us closer to daily life in those days.



CRYPT OF THE CHAPEL OF EL SALVADOR (ARCHAEOLOGICAL MUSEUM OF IBIZA AND FORMENTERA, IBIZA)

The chapel of El Salvador, built by a fraternity of sailors, is a small gothic-style building possibly erected during the first half of the 14th century.

The building was renovated in 1907 and became the Archaeological Museum of Ibiza. During the works a crypt was found beneath the chapel containing numerous religious figures such as two coloured wooden carvings of Jesus, an image of Saint Lucia and numerous bowls with metallic reflections.

THE HISTORY OF IBIZA AND FORMENTERA THROUGH THEIR MOST EMBLEMATIC PIECES



1

A small collection of hedgehog-shaped askoi from the necropolis of Puig des Molins is displayed in Room II of the Monographic Museum of Puig des Molins. They feature painted eyes and spines and a spout for pouring liquid (400-300 B.C.).



2

Axes and ingots from the Late Bronze Age (800-600 B.C.) were found in caches and deposits. This was found in Can Mariano Gallet along with seven others, all of them made by casting. Archaeometallurgical research indicates that the copper used in their manufacture originates from Linares (Jaén).



3

This piece is a small handmade ceramic bowl from the Chalcolithic Period (c. 2200-2000 B.C.) from the cave des Fum (Formentera). It has a globular shape, without a base, and polished finish, probably used for drinking.



4

The buttons and necklace beads made of bone, shell and tusk found in the megalithic tomb of Ca na Costa are four-thousand years old and are also one of the few instances of personal ornament from that period found on the islands. They are a sign of ownership, status or even a symbolic element.



5

Scarab representing the sacred scarab (*Scarabeus sacer*). On the reverse side, a hieroglyphic inscription reads “May Psamtik be healthy”. It was made in Naucratis (Egypt), between the 7th and 6th centuries B.C. and could have had great symbolic and protective value to its owner.



6

This double amulet-plate made of faience represents the eye of Horus and the Hathor cow, a representation of Isis and her son. It is an Egyptian amulet that became widespread in the western Mediterranean in the fourth and third centuries B.C. linked to health, indestructability and rebirth. Some instances can be seen in Room II of the Monographic Museum of Puig des Molins.



That is the Egyptian god of wisdom, writing, art, science and the dead. He can be portrayed with an ibis' head and a man's body or, as in this case, as a baboon. Thot was depicted as a baboon because the cries of these monkeys at dawn were perceived as prayers to Ra, the Sun god.



Saint Valentine's kantharoi are decorated using the technique of Athenian red-figure pottery and consist of small drinking vessels adorned on both sides with decorated bands featuring a limited range of motifs: reeds, checkerboards, feathers, laurel leaves and ivy. They date from the mid-5th to 4th century B.C. You can see them in Room II of the Monographic Museum of Puig des Molins.



Scarab depicting a naked warrior found in the necropolis of Puig des Molins. Ares was the Greek god of war. Romans called him Mars and represented him wearing armour and a helmet, ready for battle, with a spear, a sword and a shield. You can see him in Room II of the Monographic Museum of Puig des Molins.



Regarding textile work, materials recovered at Sa Caleta include loom weights made with reused amphora handles to tighten the warp fibres on the looms, and ceramic spindle whorls pierced in the middle to insert them into the spindle to tighten the fibre and turn it into thread using rotating movements.



Decorated ostrich shells have been interpreted as a form of vital concept. They were placed in tombs to convey the idea of resurrection, the beginning of life or survival beyond death. They mostly feature vegetal elements in reddish ochre colour which are also symbols of life, fertility and rebirth.



12

Necklace beads are one of the earliest forms of ornamentation created by mankind. Durable and easy to transport, they became a valuable commodity. Beads made of exotic materials like these coloured glass paste items are found in Punic tombs and serve different purposes: personal ornament, a sign of social status and as amulets or religious symbols.



13

Almost 1,000 bell-shaped female figurines in a winged cloak and tall kalathos, unknown outside of Ibiza, were found in the sanctuary cave of the goddess Tanit at Es Culleram. These Punic figures incorporate classical, oriental and Egyptian elements with lotus flowers, astral symbols, caducei and others. Some of them can be seen in Room V of the Monographic Museum of Puig des Molins.



14

The glass pendants shaped like bearded heads were made of glass paste using the “core-formed” technique to which coils of coloured molten glass could be added. They could represent male deities, though features such as the eyes represent magical, religious, superstitious symbols to protect against the evil eye. You can see a couple of instances in Room II of the Monographic Museum of Puig des Molins.



15

This choker made of carefully carved circular jet beads, strung together with a double chain of gold links and dated to the 2nd-3rd centuries A.D, was found in the tomb of a thirty-year-old woman in the necropolis of Puig des Molins. This is a top-quality piece as jet was one of the most remarkable raw materials used in jewellery to which medicinal, healing and protective properties were attached. It is usually, though not exclusively, linked to women's and children's funerary offerings.



16

Oil lamps were used in the Roman period and were mould-produced. They have a reservoir to hold the fuel or oil, a spout with a hole for the wick and a hole in the reservoir to ease combustion. The disc was decorated with mythological and vegetal motifs, and sometimes with gladiator fights. You can see some instances in Room IV of the Monographic Museum of Puig des Molins.



17

In the Formentera site of Can Selleràs three gaming boards made of engraved sandstone slabs have recently been recovered. They actually feature two different games: Duplum Molendinum or "Nine Men's Morris" on one side and the "Twelve Men's Morris" or "Fox and Geese" game on the other.



18

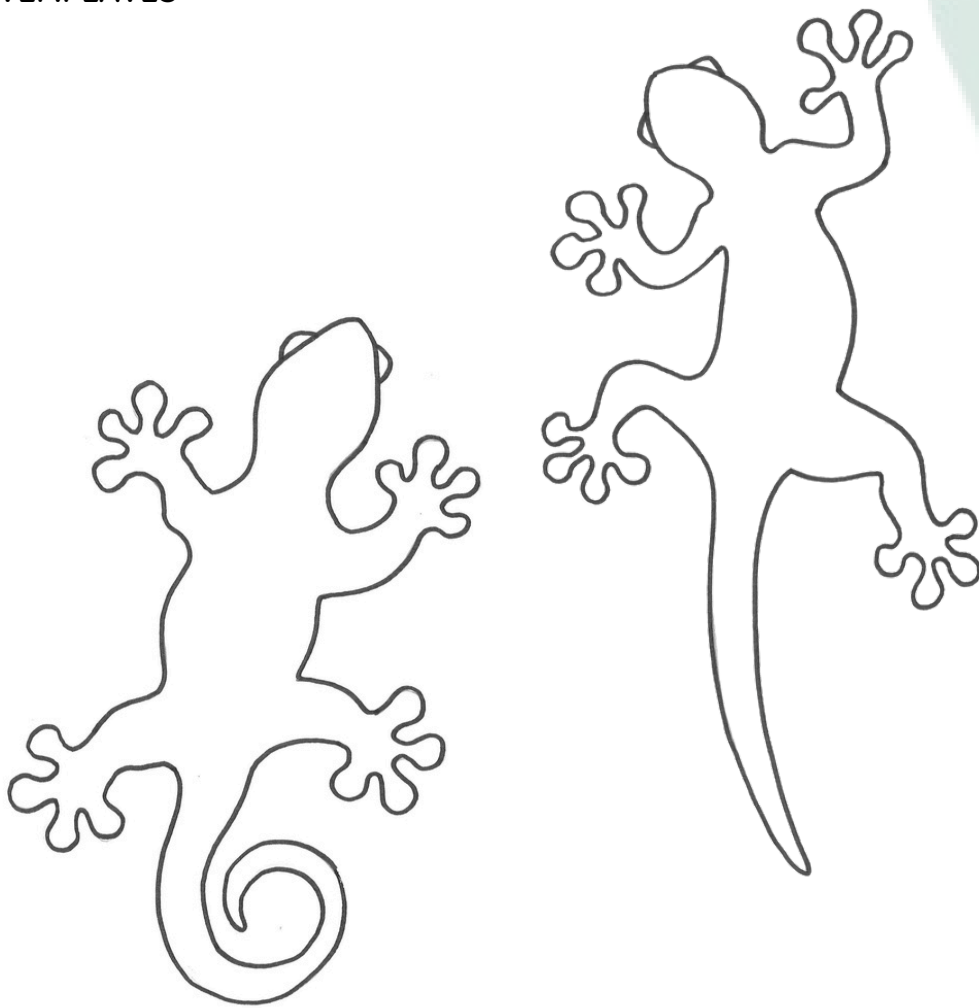
These pieces are made using the technique of metallic glazing invented in the 9th century and introduced into the Nasrid Kingdom of Granada in the 13th century by Persian artisans who were familiar with it. The items are believed to have been brought by potters arriving in Manises due to a crisis in Muslim trade. They are referred to as "nun's pieces" because of the Christian religious motif of the angel.



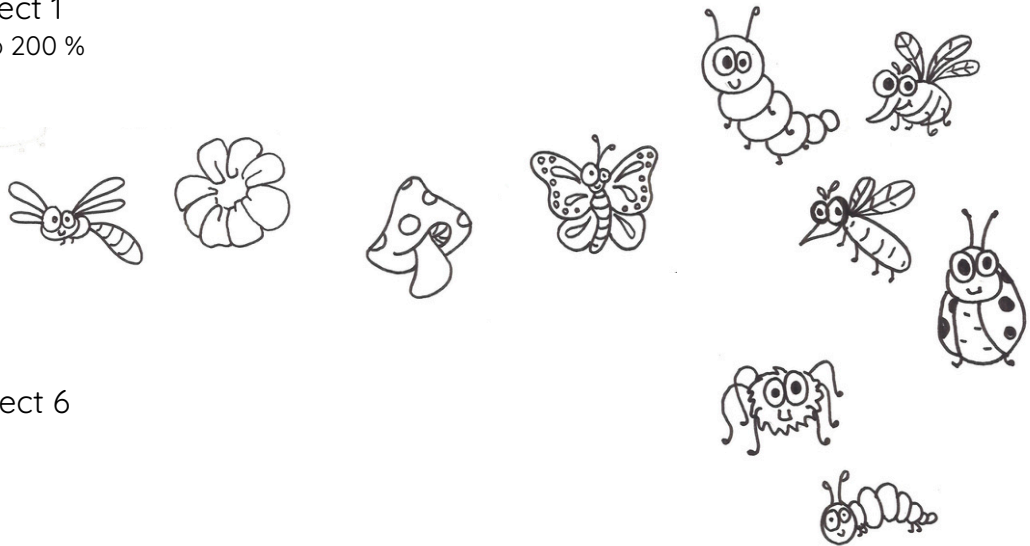
19

Mould-shaped female bust imported from Sicily (400-300 B.C.) and found in 1913 in the necropolis of Puig des Molins. Some traces of white and red polychromy can still be noticed. It has traditionally been associated with the goddess Tanit, although it originally represented the Greek goddess Demeter.

TEMPLATES

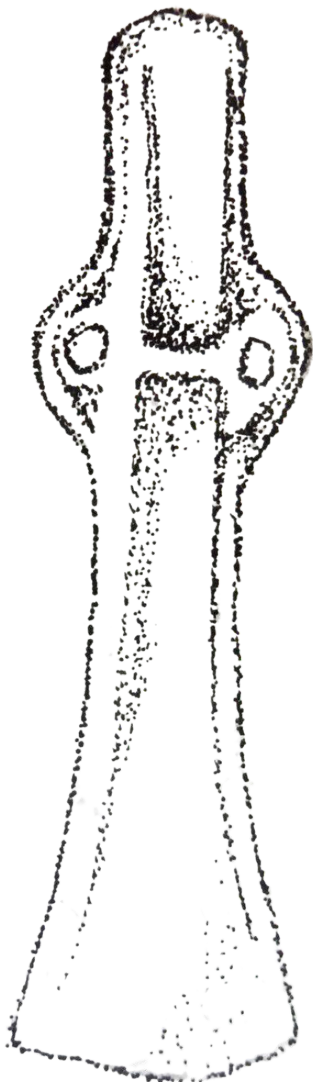


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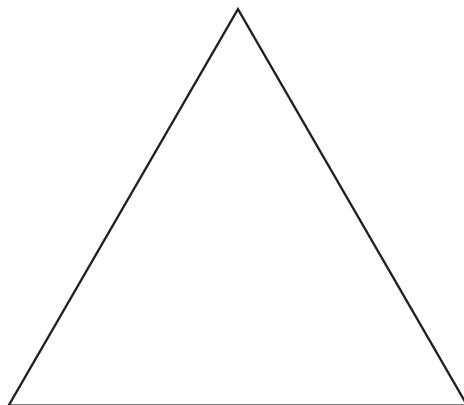


Project 6

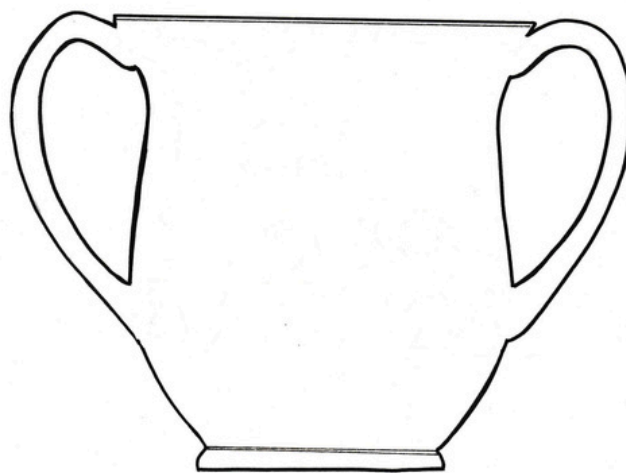
TEMPLATES



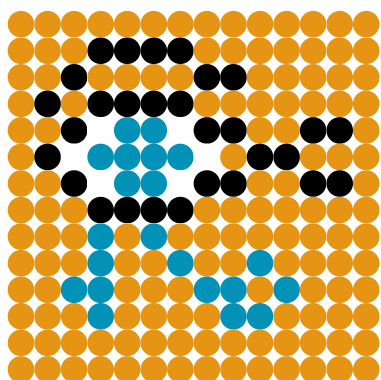
Project 7



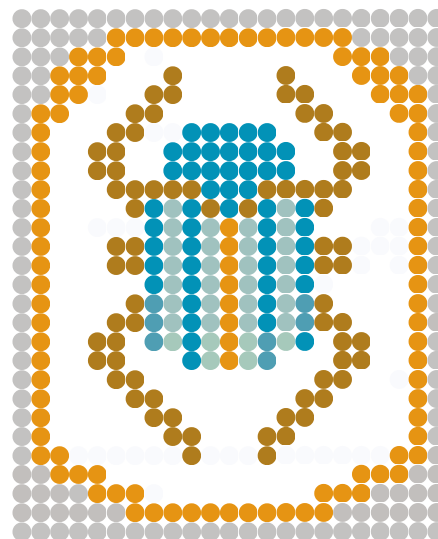
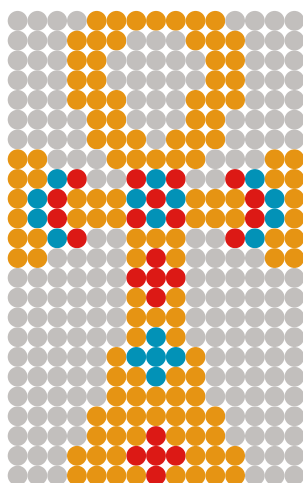
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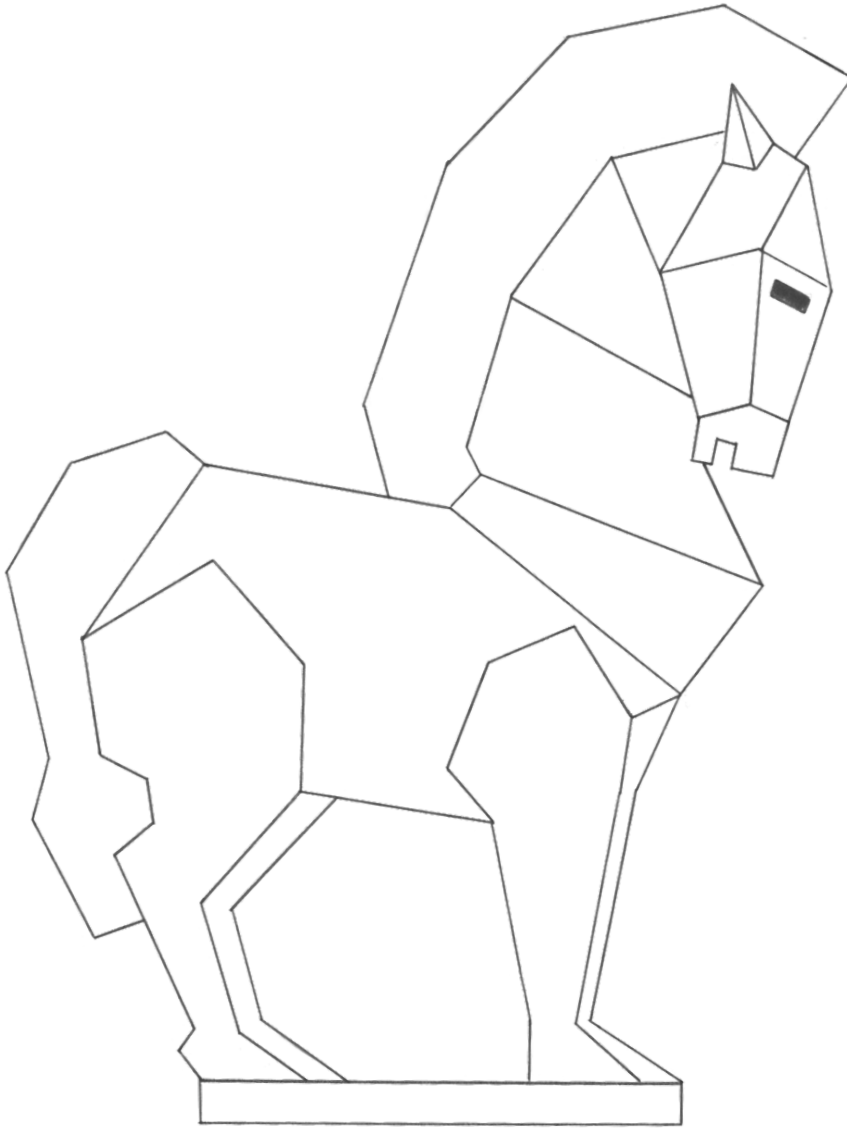
Project 17
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Project 14



TEMPLATES



Project 18
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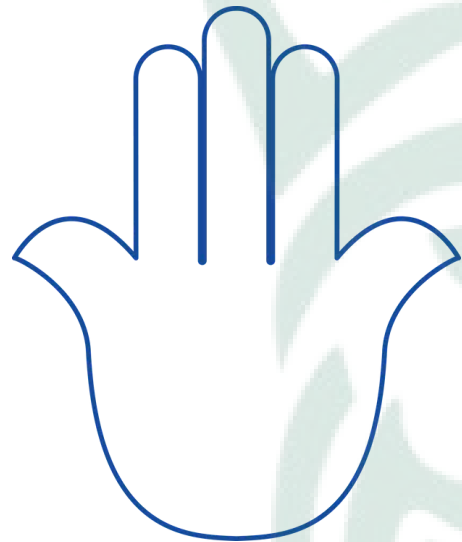


Project 19
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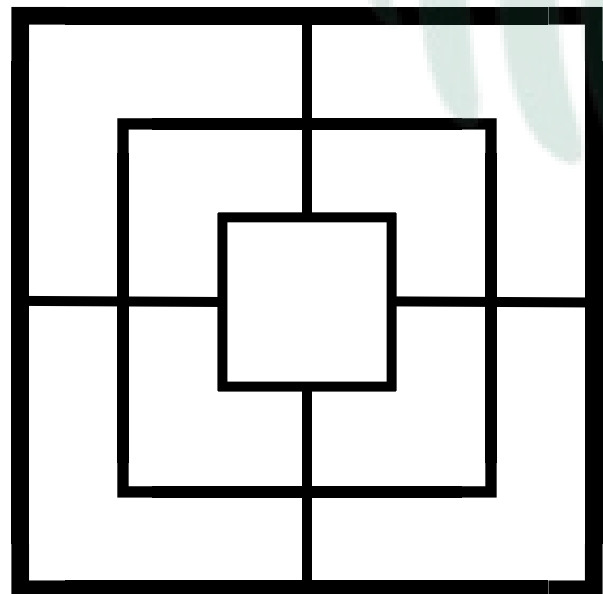
TEMPLATES



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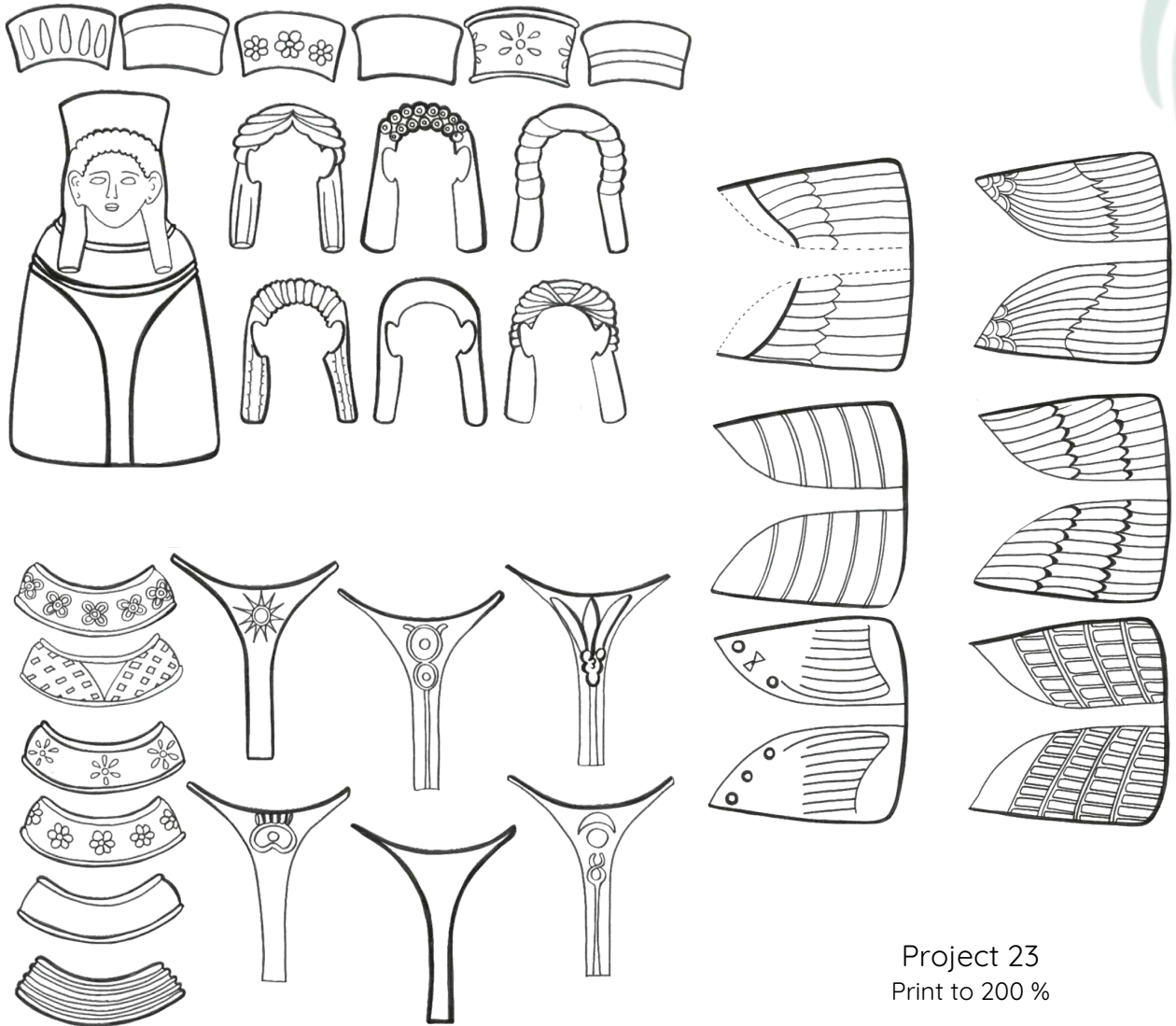


Project 28



Project 29

TEMPLATES



Project 23
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Project 24
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Finally...

We would like to express our deepest gratitude to all those who were by our side during the adventure of creating this guidebook. We would like to extend our heartfelt thanks for their unwavering commitment and essential support to the Association of Friends of the Archaeological Museum of Ibiza and Formentera.

We are also particularly indebted to all our colleagues at the Monographic Museum of Puig des Molins. Without their support, encouragement, creativity and patience—tons of patience, we must admit—none of this would have been possible.

And what can we say about our young archaeologists? Together we have explored fantastic worlds, shared emotions and learned incredible lessons. Their collaboration and eagerness were fundamental in producing this guidebook. They are the spark that brought each step of the project to life.

We would like to thank Eva, Marisa, Ana and María for their painstaking work and tireless commitment.

And above all, our eternal love and gratitude to those who served as involuntary guinea pigs for over 20 years, tasting inedible mixtures, patiently enduring experiments, workshops and projects.

Teo, Zoe, Noah and Luna, much of this work was possible only because of you.

Thanks for making it come true!