

Creative ideas for year 6

<div data-bbox="128 126 321 224" data-label="Image"> </div> <div data-bbox="407 162 663 194" data-label="Section-Header"> <h3><u>VE Day Celebrations</u></h3> </div> <div data-bbox="119 240 682 311" data-label="Text"> <p>Celebrate VE day on the 8th of May by having a family garden party.</p> </div> <div data-bbox="119 318 716 386" data-label="Text"> <p>Decorate your garden in red, white and blue flags and bunting and make hats to wear.</p> </div> <div data-bbox="119 396 588 428" data-label="Text"> <p>Use the templates or design your own.</p> </div> <div data-bbox="119 435 728 539" data-label="Text"> <p>Research war time recipes and have a go at baking some of the other culinary delights that people enjoyed during that era.</p> </div> <div data-bbox="119 547 672 615" data-label="Text"> <p>Design your own commemorative teacup, or celebratory plate or bowl.</p> </div> <div data-bbox="140 613 338 764" data-label="Image"> </div> <div data-bbox="357 664 730 768" data-label="Text"> <p>Have a go at making your own wool or strips of cut up carrier bag tassels.</p> </div>	<div data-bbox="766 126 907 246" data-label="Image"> </div> <div data-bbox="961 162 1119 194" data-label="Section-Header"> <h3><u>PAPER FUN!</u></h3> </div> <div data-bbox="1173 126 1346 246" data-label="Image"> </div> <div data-bbox="919 241 1079 276" data-label="Section-Header"> <h4><u>Origami Fun</u></h4> </div> <div data-bbox="749 282 1308 352" data-label="Text"> <p>Use the instructions attached, or research and create your own fabulous paper sculptures!</p> </div> <div data-bbox="749 401 890 433" data-label="Section-Header"> <h4><u>Desk tidies</u></h4> </div> <div data-bbox="953 380 1136 477" data-label="Image"> </div> <div data-bbox="749 480 1318 621" data-label="Text"> <p>Enjoy recycling old boxes and tubes by making them into desk tidies. Or have a go at creating some of the woodland paper tidies attached to this plan.</p> </div> <div data-bbox="1127 609 1358 725" data-label="Image"> </div>	<div data-bbox="1457 162 1925 227" data-label="Section-Header"> <h3><u>SHOW YOUR APPRECIATION TO THE KEYWORKERS</u></h3> </div> <div data-bbox="1694 237 1814 311" data-label="Image"> </div> <div data-bbox="1820 253 1995 375" data-label="Image"> </div> <div data-bbox="1373 277 1667 311" data-label="Text"> <p>Decorate your window.</p> </div> <div data-bbox="1373 318 1764 352" data-label="Text"> <p>Make rainbow bunting or flags.</p> </div> <div data-bbox="1373 399 1974 469" data-label="Text"> <p>Use some of the templates or go on-line and be inspired to find or create your own.</p> </div> <div data-bbox="1373 514 2007 618" data-label="Text"> <p>Make really noisy instruments to play on Thursday evenings. Research Stem design and technology online to find out more ideas.</p> </div> <div data-bbox="1373 667 1988 738" data-label="Text"> <p>Create rainbow coloured windmills to stick in the garden or in sheltered pots.</p> </div>
<div data-bbox="170 779 684 812" data-label="Section-Header"> <h3><u>RESEARCH INVENTORS AND INVENTIONS.</u></h3> </div> <div data-bbox="147 873 277 1003" data-label="Image"> </div> <div data-bbox="291 859 728 893" data-label="Section-Header"> <h4><u>Design and make your own catapult</u></h4> </div> <div data-bbox="291 899 724 1002" data-label="Text"> <p>Did you know that the first catapult was created approximately around 399 B.C.?</p> </div> <div data-bbox="119 1013 457 1045" data-label="Section-Header"> <h4><u>Who designed the first car?</u></h4> </div> <div data-bbox="136 1060 254 1177" data-label="Image"> </div> <div data-bbox="266 1052 732 1118" data-label="Text"> <p>Research and enjoy creating your own model car.</p> </div> <div data-bbox="266 1170 653 1203" data-label="Section-Header"> <h4><u>Who were the wright brothers?</u></h4> </div> <div data-bbox="499 1219 705 1336" data-label="Image"> </div> <div data-bbox="119 1250 451 1320" data-label="Section-Header"> <h4><u>Design and make your own Rube Goldberg machine.</u></h4> </div>	<div data-bbox="802 779 1312 844" data-label="Section-Header"> <h3><u>ENCOURAGE MORE WILDLIFE INTO YOUR GARDEN</u></h3> </div> <div data-bbox="749 894 1098 961" data-label="Text"> <p>Make mini beast houses and hotels.</p> </div> <div data-bbox="749 971 1142 1039" data-label="Text"> <p>Use the instructions included or design and create your own.</p> </div> <div data-bbox="1163 899 1346 1073" data-label="Image"> </div> <div data-bbox="762 1063 957 1203" data-label="Image"> </div> <div data-bbox="974 1089 1213 1122" data-label="Section-Header"> <h4><u>Create bird feeders</u></h4> </div> <div data-bbox="974 1128 1127 1230" data-label="Text"> <p>Follow the instructions enclosed or</p> </div> <div data-bbox="749 1235 1138 1302" data-label="Text"> <p>research, design and make your own.</p> </div> <div data-bbox="749 1312 1358 1382" data-label="Text"> <p>REMEMBER they can be as simple or sophisticated as you like.</p> </div> <div data-bbox="1169 1136 1346 1287" data-label="Image"> </div>	<div data-bbox="1549 779 1824 812" data-label="Section-Header"> <h3><u>GARDEN CREATIONS</u></h3> </div> <div data-bbox="1373 818 1543 849" data-label="Section-Header"> <h4><u>Mud portraits</u></h4> </div> <div data-bbox="1373 854 1824 950" data-label="Text"> <p>A great idea to make at home, or whilst out on a walk in the woods with your family.</p> </div> <div data-bbox="1873 815 1988 963" data-label="Image"> </div> <div data-bbox="1373 954 1543 1101" data-label="Image"> </div> <div data-bbox="1558 958 1738 989" data-label="Section-Header"> <h4><u>Stone Pictures</u></h4> </div> <div data-bbox="1558 993 2001 1185" data-label="Text"> <p>Alternatively, have a go at this super stone picture. This composition has been created by arranging stones of different sizes in varying ways. I bet your family would love to see your stone family version of them.</p> </div> <div data-bbox="1373 1193 1631 1226" data-label="Section-Header"> <h4><u>Pebble/stone painting</u></h4> </div> <div data-bbox="1373 1230 1812 1294" data-label="Text"> <p>These would make lovely gifts for your family.</p> </div> <div data-bbox="1841 1190 1988 1294" data-label="Image"> </div> <div data-bbox="1373 1300 2001 1446" data-label="Text"> <p>Remember to write down the name of the artists you have researched, so that you can add them to your art book when you return to school. Research other fun activities online- try typing in "Forest schools", to find lots of other fun outdoor activities you and your family can enjoy.</p> </div>

VE Day Teacup Design

Victory in Europe (VE) Day took place on 8th May 1945. It marked the end of the Second World War in Europe.

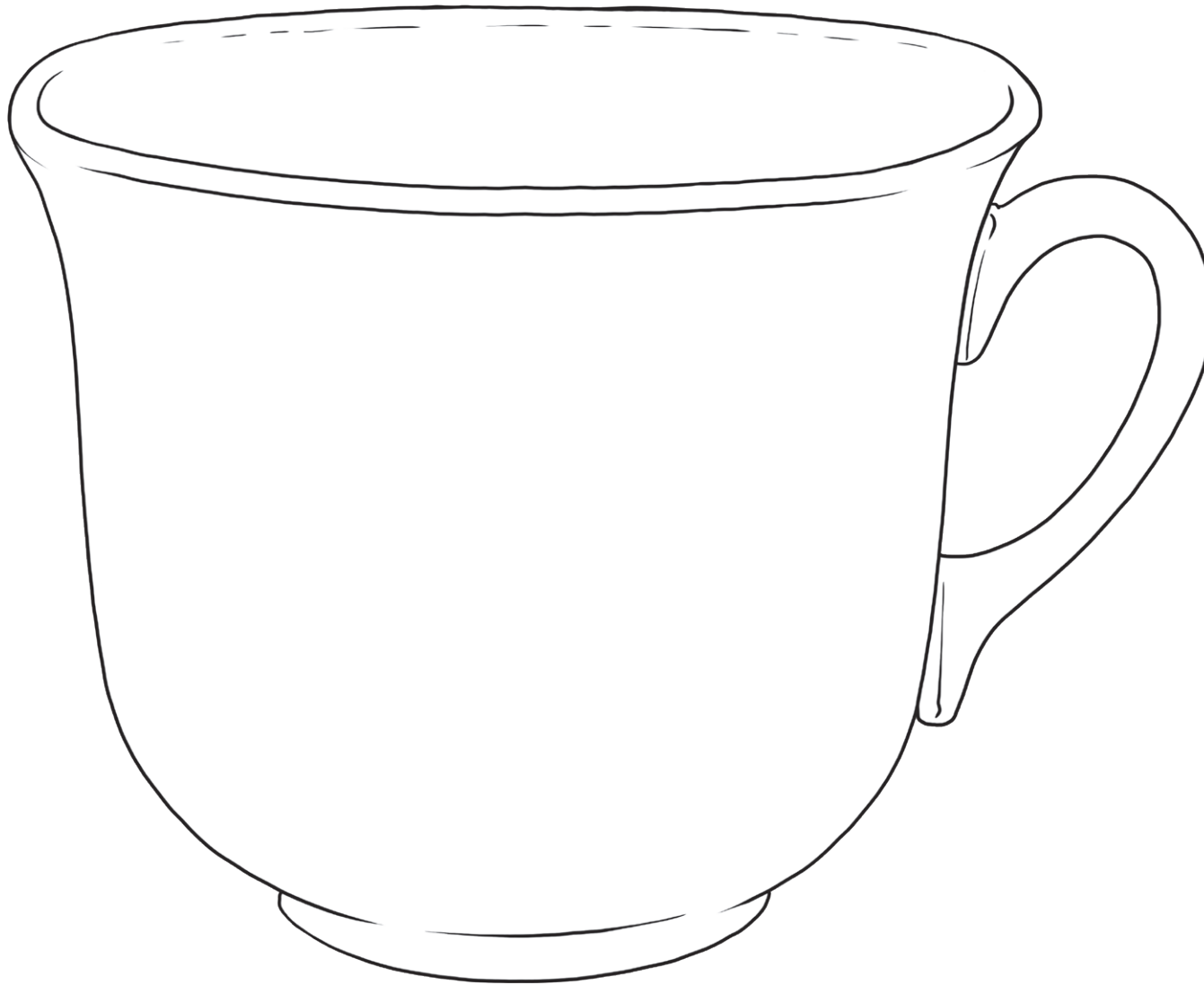
VE Day was commemorated in many ways, including the production of special cups.



- Do you recognise the people on the cup? Who are they?
- Why is there a flag on the cup?
- What do you think the slogan on the cup means?
- Why do you think commemorative cups like this were made?

VE Day Teacup Design

Design your own VE Day cup. Think about your design and make sure it is bright and eye-catching. You could include flags, important buildings or people who were involved in the Second World War.





Make Your Own Minibeast Hotel

Outdoor Activity

You will need:

A suitable container or area in your outdoor area, preferably wooden

Compost

Fertile soil

Pieces of wood (various sizes)

Different sized/shaped stones

Bricks

Old roof tiles

Clay drainage tubes

Fir cones

Dry leaves

Bark

Straw, hay

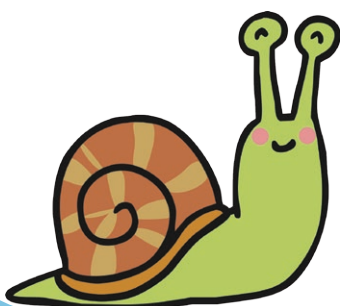
Dead wood/sticks

Plants that will attract insects



Method

1. Choose either an area in your outdoor area or a wooden container and place it on the ground.
2. If the container hasn't already got holes in, make some holes in the bottom. That will create drainage and let minibeasts crawl in.
3. Fill the container with compost and fertile soil.
4. Use your resources to build various places for minibeasts to live.
5. Woodlice and beetles will like wood/sticks and if stacked, the minibeasts can crawl through them.
6. Plants will attract the crawling bugs like caterpillars, snails and spiders.
7. Butterflies and bees will like nectar-rich flowering plants.
8. It's up to you how much you put in your bug hotel.
9. Observe the hotel over time and see which minibeasts it attracts.
10. Can you find out which areas each kind of minibeast like best?



Adult Guidance

Watch the video to see how **Dennis makes a toy car**: <https://vimeo.com/34563622>

Please check the content in this link, including any comments, is suitable for your educational environment before showing. Please do not let the next video automatically play at the end of the clip. Twinkl accepts no responsibility for the content of third party websites.



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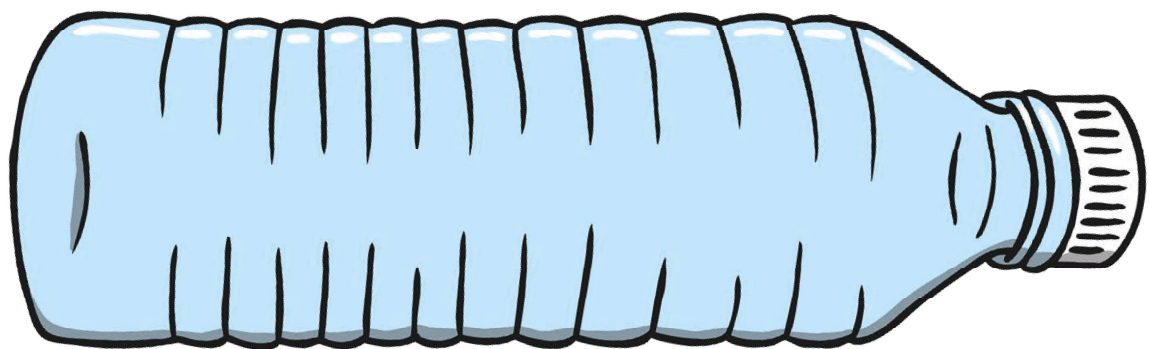
Make a Recycled Plastic Bottle Car

An Activity Linked to Unicef's Playground Challenge

Article 31 of United Nations, 'Rights of the Child' states that **all children have the right to play**. The Playground Challenge helps to support this right, fundraising so that children can play safely.

Unicef supports centres, in countries in Africa, helping communities to provide safe places to play. Children sometimes make toys from recycled materials. Watch the video to see how **Dennis makes a toy car**.

Could you recycle a plastic bottle to make a plastic bottle car?



Make a Recycled Plastic Bottle Car

You will need:

A plastic bottle with its top

4 bottle tops (same size)

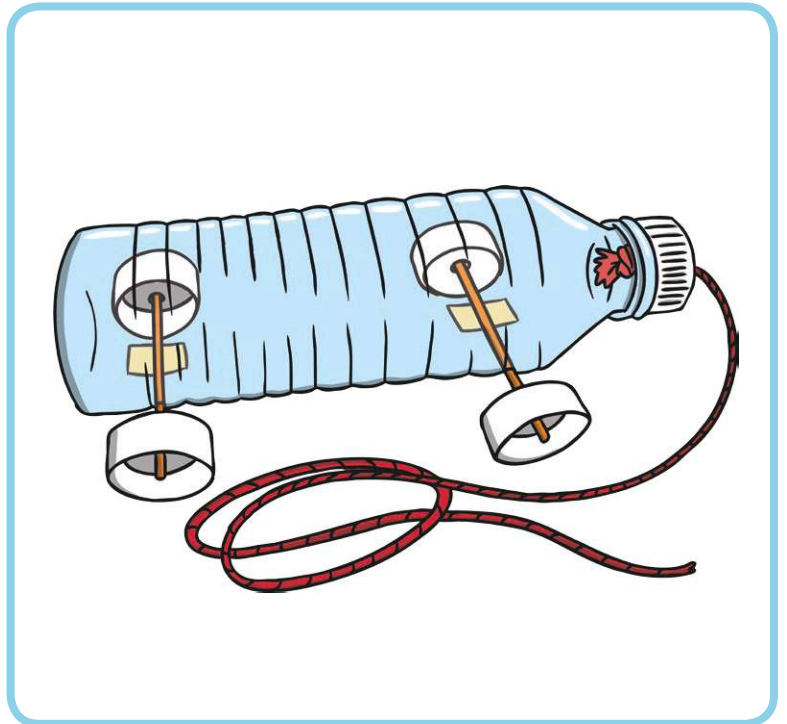
String

2 straws

Tape or masking tape

Something sharp to pierce the bottle tops, such as a pin.

Like Dennis, try to use recycled materials where you can.



Instructions

1. Pierce a hole through the centre of each bottle top. You might need help from an adult to do this.
2. Using tape, attach a straw to the underside of the bottle (one at the front and one at the back). Trim the straw so it doesn't stick out too much. These will become the axles of the car.
3. Thread a piece of string through the hole in one bottle top. Tie a knot in the end on the inside of the lid, then screw it in place on the bottle.
4. Place a bottle top onto the end of each straw.
Having the top of the bottle lids facing the 'car' will make it more stable.
5. Pull the string to move the car.



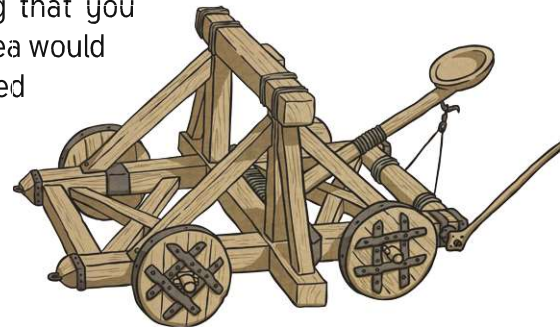


Take It Outside STEM KS2

Crazy Catapults!

Introduction

When you think of a catapult, what is the first thing that you imagine? Medieval siege weapon? A slingshot? Each idea would be correct. Neolithic man used them to hunt, David used his to triumph over Goliath and mighty fortresses have been reduced to rubble using them. Simple catapults can make an object travel or can be used to hit a target. How will you use yours?



You will need:

1 cup, 1 plastic spoon, 6 sticks or wooden lolly sticks, 4 elastic bands, tape, string.
Objects for target practice, objects for catapulting.

Key Questions

- What equipment will you choose and why?
- How will you join the equipment to make your catapult strong?
- How can you alter or improve your design to solve the problem?

What to do:

1. Set the scene by sharing images of catapults and slingshots. Discuss their uses.
2. You could present a scenario. **Can you help the bird to fly? Who can catapult the conker the furthest? Who can hit the target?**
3. Your outdoor session could fit with topic work:
 - Stone Age topic (hitting a woolly mammoth outline on a hunting trip)
 - Castles topic (build a catapult to storm the castle walls)
 - Seasonal theme (conker catapults, flight)
 - Pure enjoyment of creating a catapult (problem solving – soldier or object launcher)
4. Once the scene has been set, present the resources and allow time for the children to select the materials they would like to use. They don't have to use them all but should use at least two. Try drawing some plans.



5. Allow plenty of time for discussion. There should be lots of opportunities for communication and trial and error.
6. Test your catapults against the success criteria for the session. (Refer back to the scenario question.) **Ensure that the children are testing their designs safely and follow your school's risk assessment policy.**
7. Evaluate, improve and test again.
8. Can the children explain their design to the group? Which design worked best? Why? What improvements could be made?

If you liked this catapult idea, you could try this fantastic [Catapult Paper Toy](#) resource next time.

Ways to Support

Try mixed-ability groups so that children can support each other. Provide instructions for children to follow as a first stage, then ask them to make slight changes to the design.

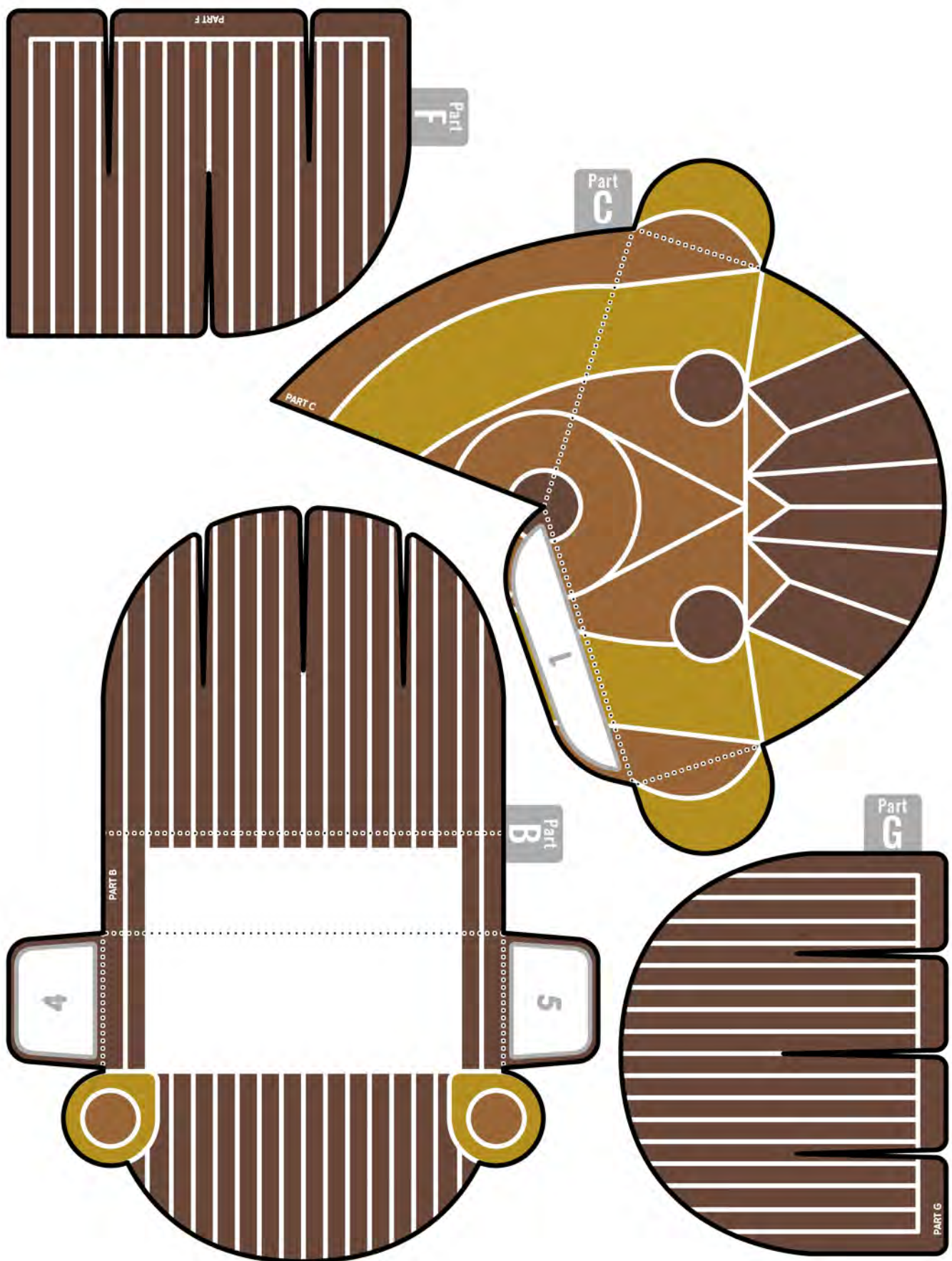
Ways to Extend

Limit the resources further (e.g. 1m of string). Ask the children to explain how their catapult works and present it to the class. Can they suggest improvements?

Curriculum Links

English: Maintain attention & participate actively in collaborative conversations, staying on topic & initiating & responding to comments.

DT: Select from & use a wider range of tools & equipment to perform practical tasks accurately.

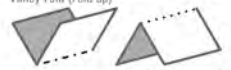


Recommended

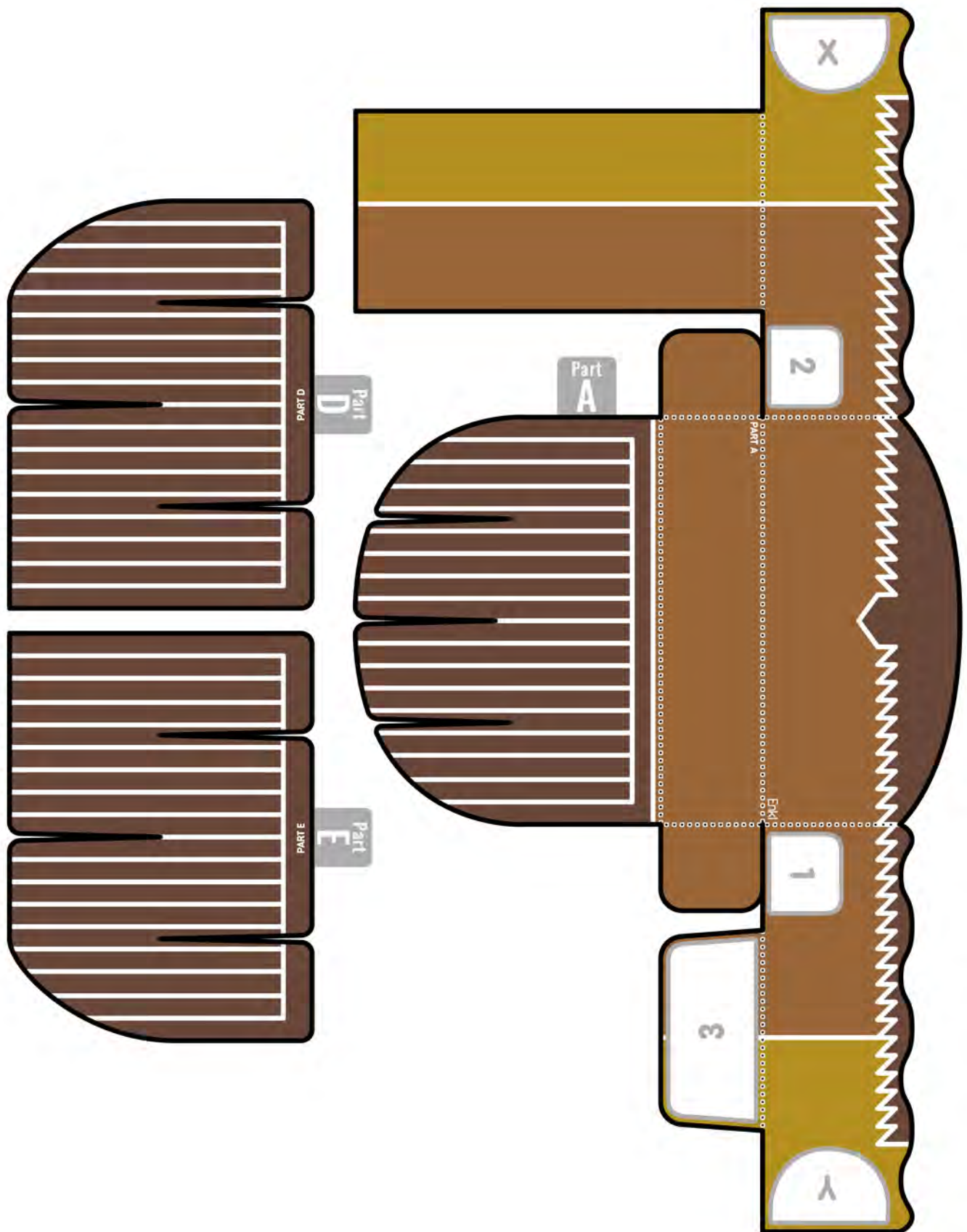
Print onto 250gsm or heavier cardstock for best results.
Score fold lines first using a craft knife or empty ball point pen.
Check for instructions before building.

- 1) Cut
- 2) Hill Fold
- 3) Valley Fold
- 4) Glue

Valley Fold (Fold up)



Hill Fold (Fold down)

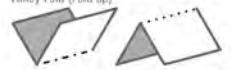


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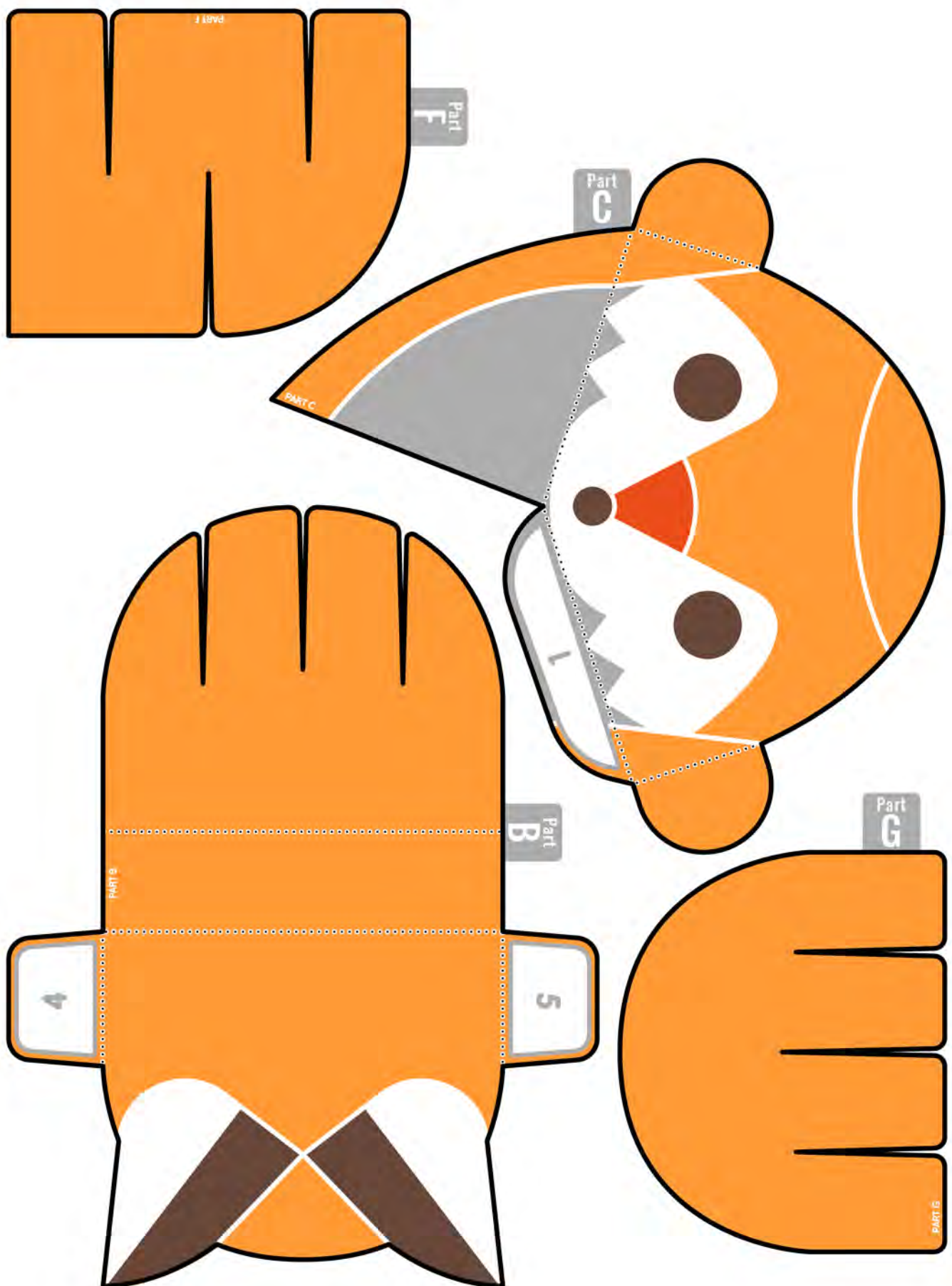
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Valley Fold (Fold up)



Hill Fold (Fold down)



Recommended

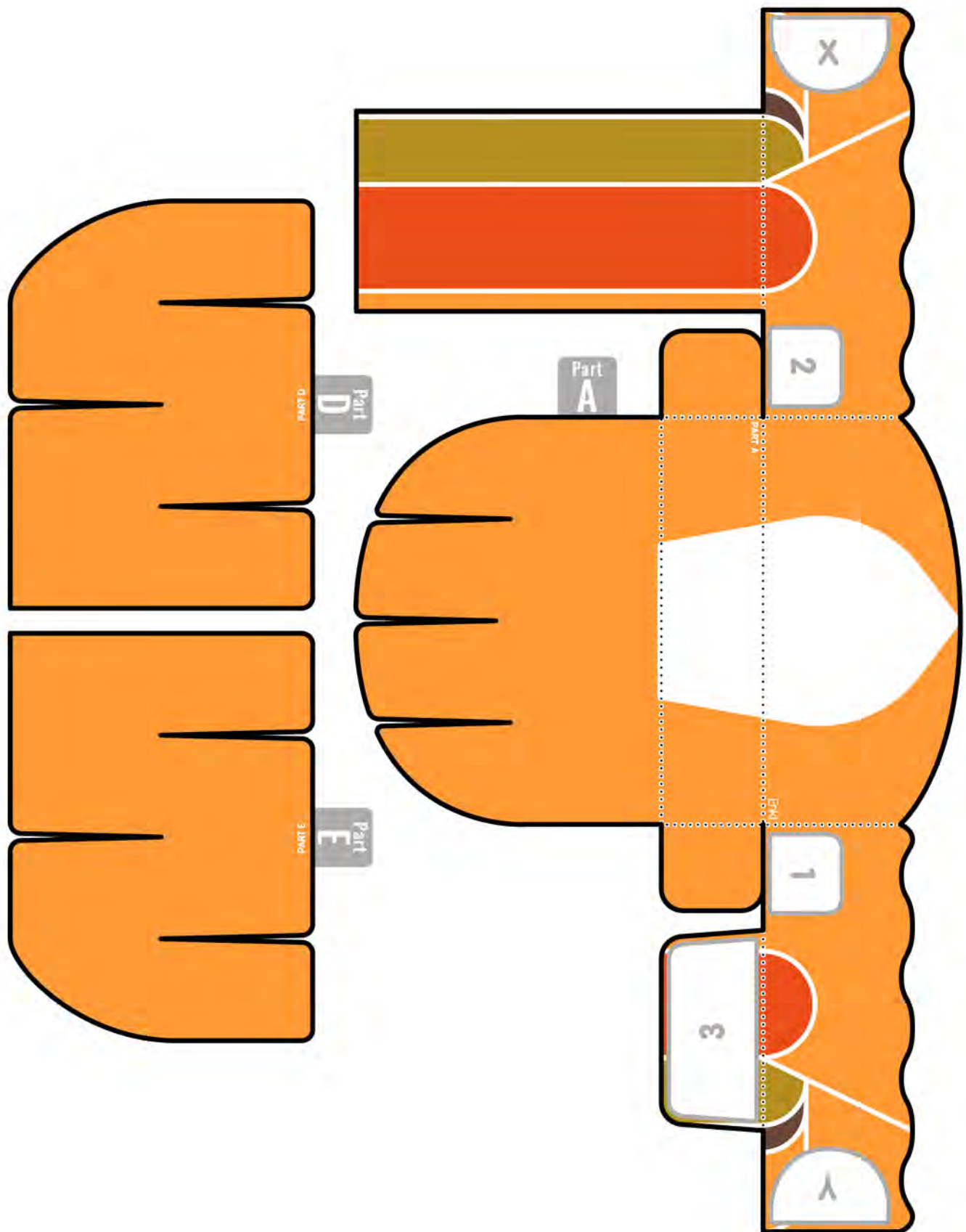
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Valley Fold (Fold up)



Hill Fold (Fold down)



Recommended

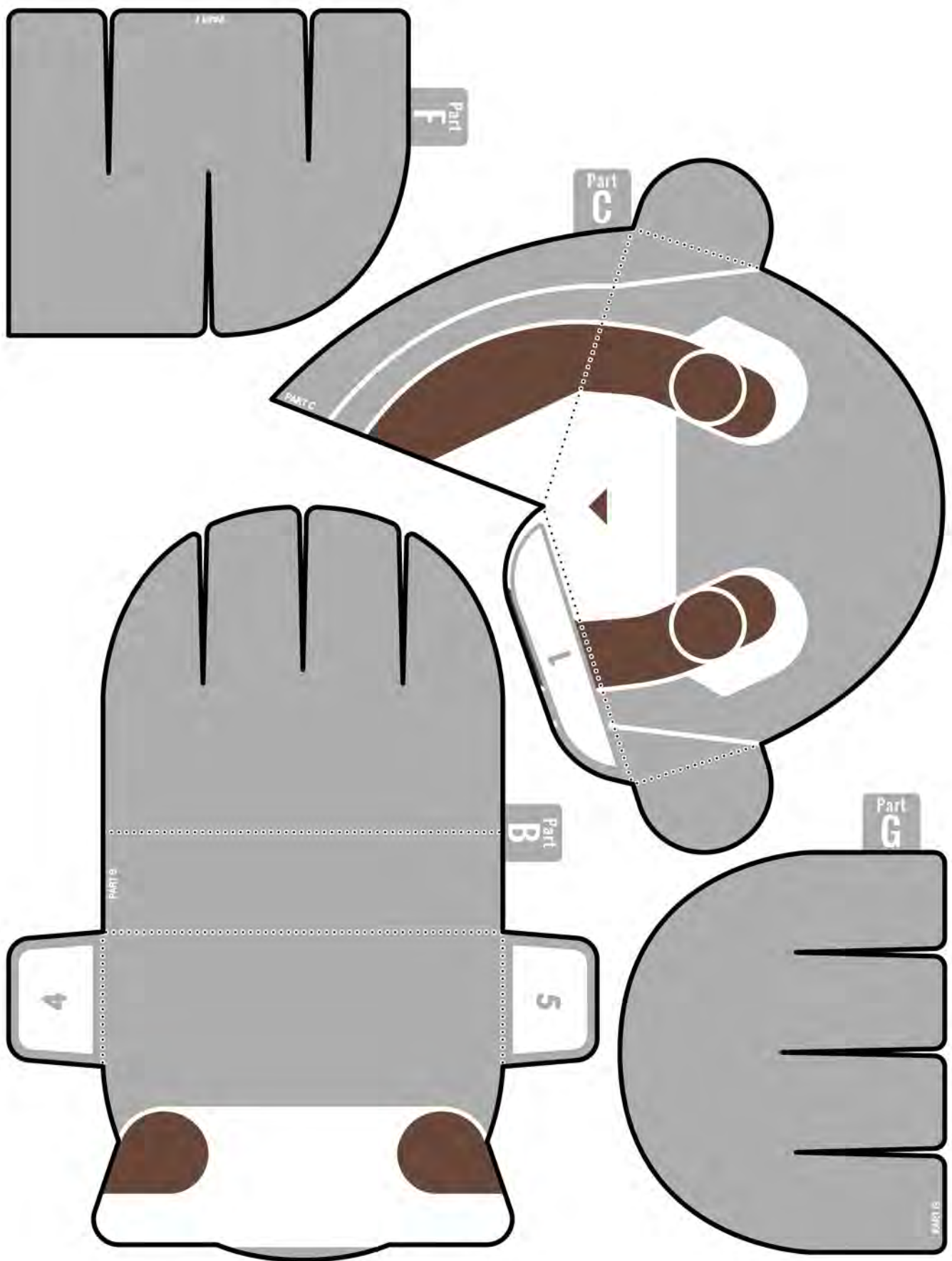
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Valley Fold (Fold up)



Hill Fold (Fold down)



Recommended

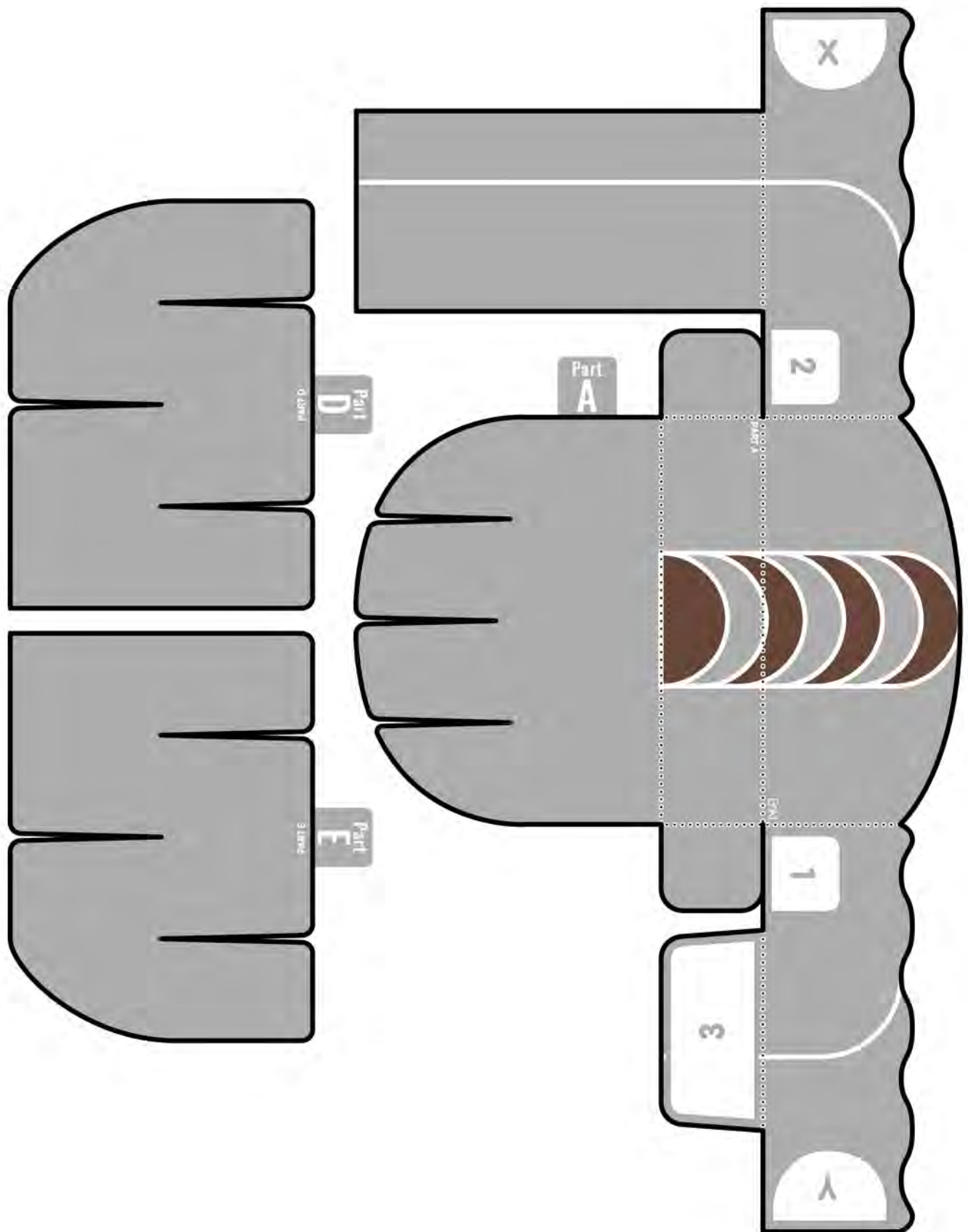
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Check for instructions before building.

- 1) Cut
- 2) Hill Fold
- 3) Valley Fold
- 4) Glue

Valley Fold (Fold up)



Hill Fold (Fold down)

**Recommended**

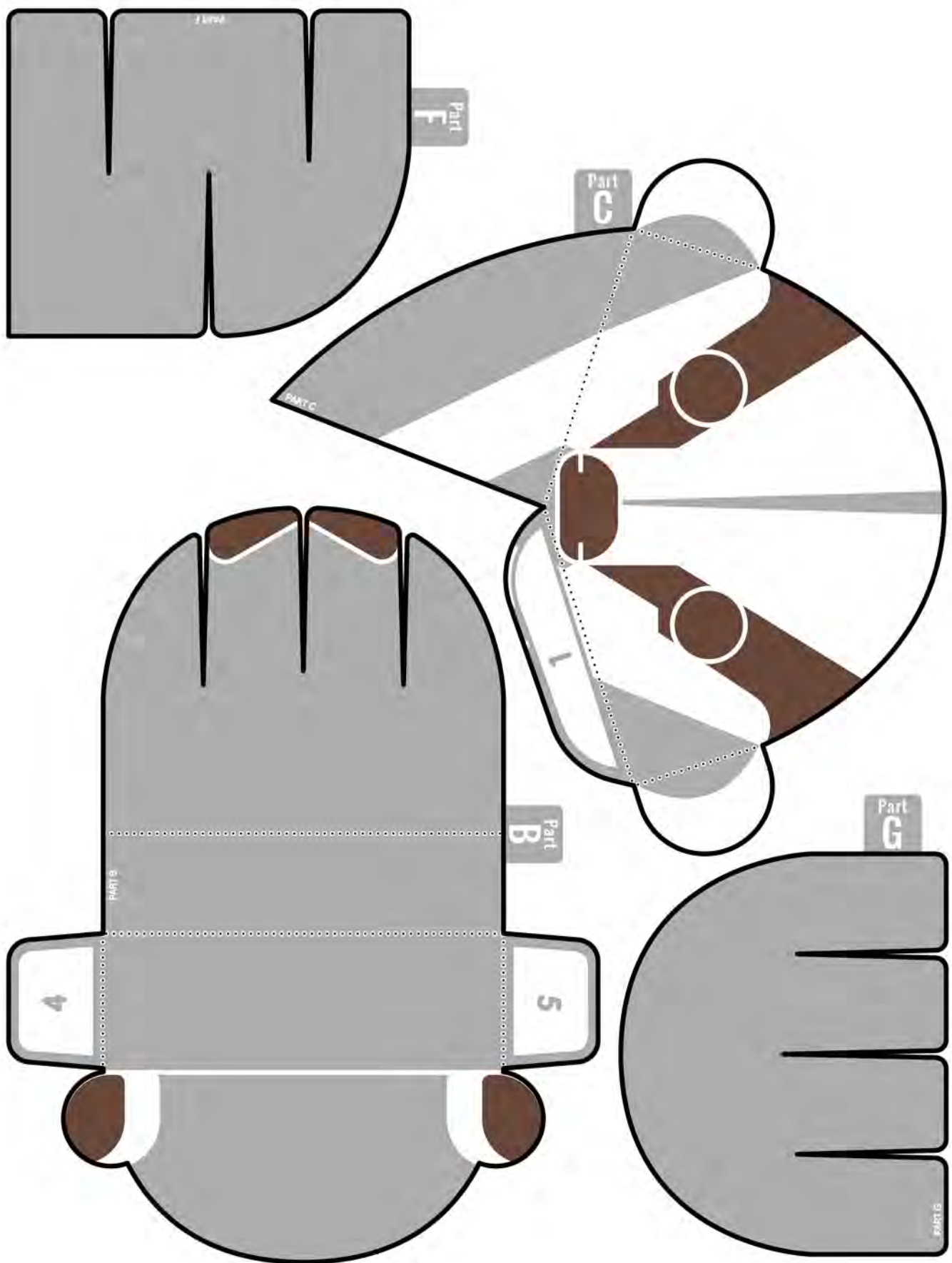
Print onto 250gsm or heavier cardstock for best results.
Score fold lines first using a craft knife or empty ball point pen.
Check for instructions before building.

- 1) Cut
- 2) Hill Fold
- 3) Valley Fold
- 4) Glue

Valley Fold (Fold up)



Hill Fold (Fold down)



Recommended

Print onto 250gsm or heavier cardstock for best results.
Score fold lines first using a craft knife or empty ball point pen.
Check for instructions before building.

- 1) Cut
- 2) Hill Fold
- 3) Valley Fold
- 4) Glue

Valley Fold (Fold up)



Hill Fold (Fold down)



Print onto 250gsm or heavier cardstock for best results.
Score fold lines first using a craft knife or empty ball point pen.
Check for instructions before building.

- 1) Cut _____
2) Hill Fold _____
3) Valley Fold _____
4) Glue _____

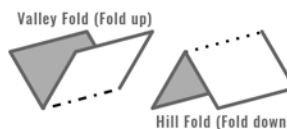
(iii) Fold (Fold down)

Hill Fold (Fold down)

Basic Instructions

- Printing** You can print all ENKL products on conventional printer paper but end results may be less stable than those printed onto card. We recommend printing these ENKL products on 250gsm cardstock for best results. Printing onto thicker card may make the models more difficult to build.
- Cutting** Cut along the solid black outlines. You can use either scissors or a craft knife to cut out the model. ENKL recommends using scissors for curved areas and a craft knife for more intricate outlines. Designs can mostly be built without a craft knife unless requiring one is explicitly mentioned.
- Folding** Fold along the dotted lines, following the key below to fold up, or down. For best results we recommend scoring along the lines before folding by lightly pressing on them with either a craft knife or empty ballpoint pen.

- 1) Cut _____
 2) Valley Fold - - - - -
 3) Hill Fold



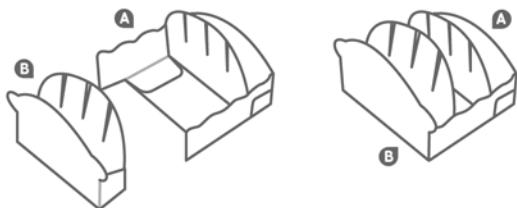
- Gluing** Glue the tabs in the order that they're numbered. Every tab consists of white space with a number or letter inside like the example below. For best results use a non-liquid glue that dries quickly and apply it evenly to the entire tab.

Glue **2**

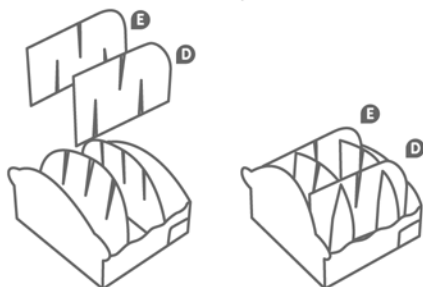
- Parts** For models with numerous parts you will find labels on the page to help with the construction. Each part has a label on the page marked "Part X" as well as a smaller label on the parts themselves. When parts need to be glued together the tabs connecting the two parts will be labelled with the corresponding part letter.

Desk Todie Instructions

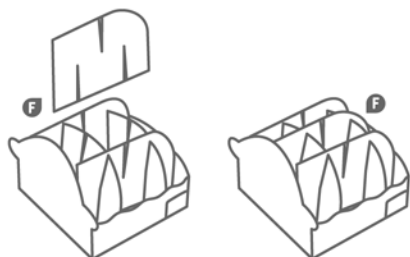
- 1) Cut out the model's parts using the solid black outline.
- 2) Following the key at the bottom of the page, fold and glue together parts A, B and C.
- 3) Glue down tabs 1 and 2 on part A folding the exposed flap upwards before gluing tab 3. Glue parts A and B together using tabs 4 and 5 on part B.



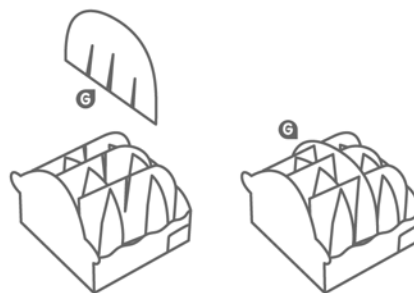
- 4) Slide parts D and E into the now joint parts A and B as shown.



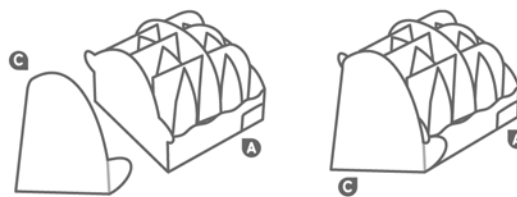
- 5) Slide part F into the now joint parts A and B as shown.



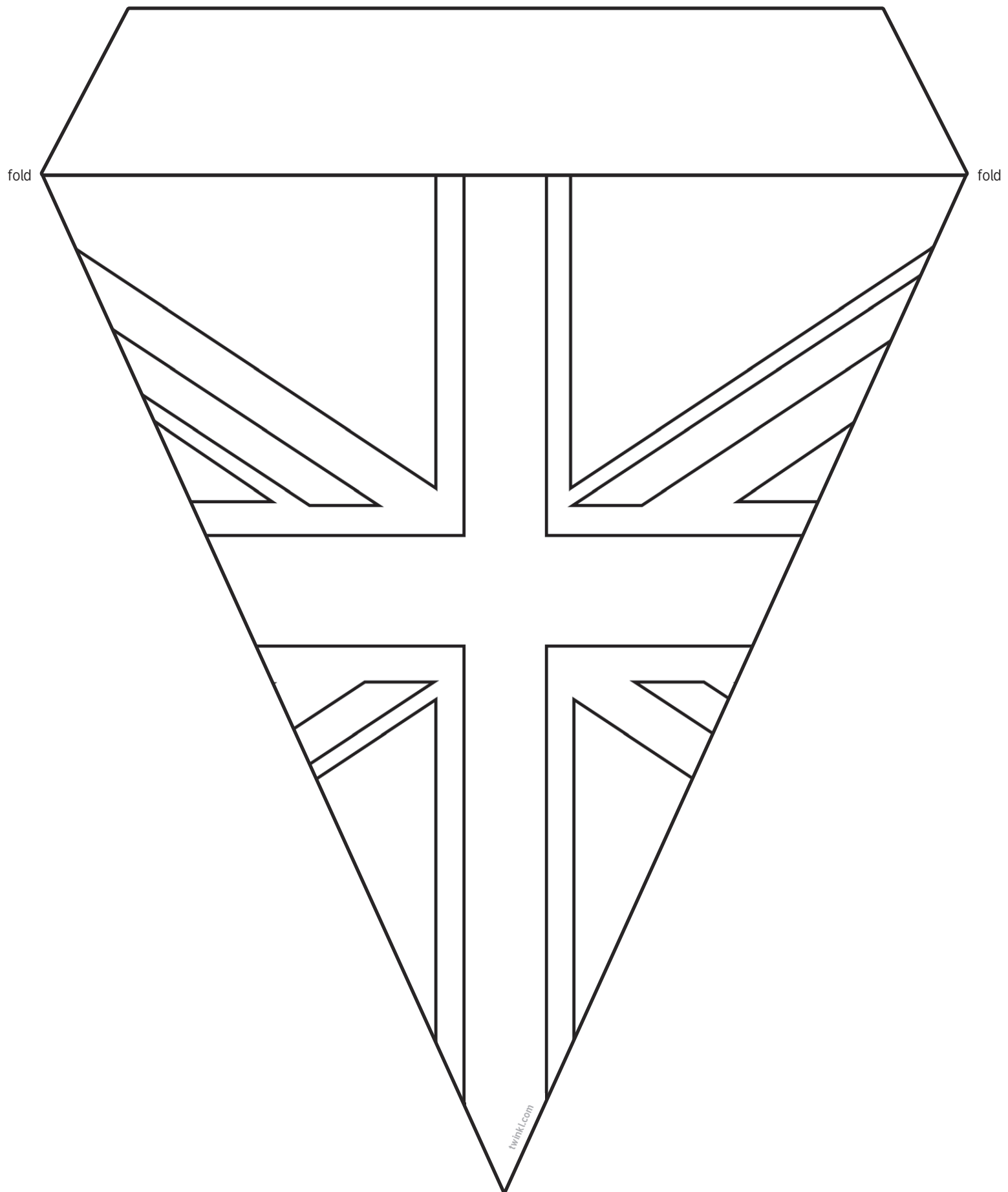
- 6) Slide part G into the now joint parts A and B as shown.



- 7) Curve around part C and Glue down tab 1. Attach part C to the rest of the model using tabs X and Y as shown.



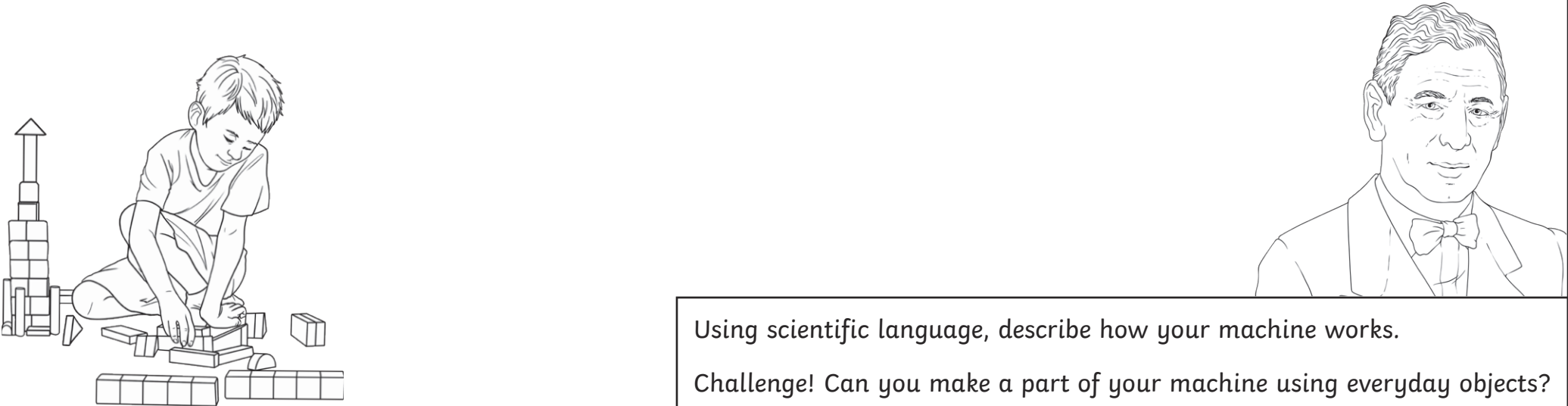
- 8) Put crayons or pens into the holes in the hedgehogs back.



Design Your Own Rube Goldberg Machine

Rube Goldberg was a cartoonist and inventor. He was well known for designing incredibly complex machines that did very simple jobs. His name was turned into an entry in a dictionary which meant 'accomplishing by complex means what seemingly could be done simply'. Today, people have fun creating Rube Goldberg machines that do a very simple, short task in a complicated long way. Design your own Rube Goldberg machine that has lots of different parts to it. It could be a dog feeding machine, a machine to turn on a TV or change channel, a machine to put on socks and shoes or a machine to make a cup of tea.

Use your imagination and have fun designing your machine.



Using scientific language, describe how your machine works.

Challenge! Can you make a part of your machine using everyday objects?

The illustration shows a child on the left, kneeling and building with various blocks and a tall tower. On the right is a line drawing of Rube Goldberg, wearing a suit and bow tie. Below these images is a text box with two prompts for the student's design.



SCAVENGER HUNT

Children have a natural urge to explore. A scavenger hunt is a fun, structured way of focusing this curiosity on all the shapes, sounds, plants, animals and other elements of their surroundings, opening the door to identification and deepening their bond with the landscape around them. This activity creates a sense of knowing, of familiarity, which in turn leads to a feeling of belonging, of being at home in the natural world.

By making connections between what is sought and what is found, children learn how one thing relates to another and hone the use of their senses. This can lay the building blocks for recognizing themes in other areas, such as reading and mathematics, helping children to sort, process and use information in a variety of settings. They also learn to make connections between their inner experiences and the external world. And all this through play!







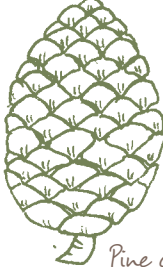

Get ready

Coming up with ideas for a scavenger hunt is easy: just think of outdoor objects that are common in your chosen area. (Obviously, avoid anything rare or poisonous!) You can also include experiences – for example, hearing a specific sound or feeling the wind on your face. Before you play, design a clue card with 9–16 things to find (adjust the number according to the age of the children and time available). Your clues could be pictures or just words or both pictures and words – see the example, which you can use if it works for your area. You could cut pictures from a magazine or download them from the Internet and print them out, then mount the pieces of paper onto sturdy cards. Alternatively, draw and write your clues straight onto the cards. To protect the clue cards, especially if you suspect it might be rainy, slot them into plastic sleeves. To allow the hunters to keep their hands free, string thread (enough to loop around the head and shoulders and allow the clues to be easily viewed) through holes in the card or through the protective sleeve.

Get set

Check in with all the hunters to make sure they understand the clues. You can make the hunt more challenging for older kids by adding a time limit, but keep any targets achievable so the children stay interested and don't get frustrated. Bigger groups can, if they wish, be divided into teams but bear in mind that some kids may prefer to hunt alone.



 Squirrel	 Bird	Something GREEN 
 Fallen log	Something ROUND 	 Oak leaf
SOUND of the WIND	 Pine cone	 Prickly leaf

LOCATION

Any woodland or other natural area (such as a beach) that offers a good selection of animals, birds, plants and trees is ideal. However, with some planning you can make this game work in any environment.

AGE GROUP

3 years +

LEARNING ABOUT ...

Using the senses • being active • focus • recognizing themes • connecting with nature • ecology

KIT

- A scavenger clue card for each child/team
- Clear plastic sleeves to protect clue cards (optional – depends on weather/terrain)
- String for wearing the cards around the neck (optional)
- Pencils



Go!

Off the hunters go! Get them to put crosses through the clues as they find them. Don't be afraid to join in as a helper to liven things up and provide encouragement and hints. For example, you could ask, 'Was that a squirrel up there?' or 'Where do you think you might find an acorn?'. But always let the kids take the initiative and do the hunting themselves!

Endings

When you have finished, talk through the hunt with the children. What was the hardest thing to find? What was each child's favourite? Was there anything they couldn't track down and why? How did hunting and finding the items make them feel? You can provide some interesting facts about the clues to add to the enthusiasm and enhance the children's connection with nature.

Here are a few to get you started:

- English oaks live on average for 500 years, but there's an oak in Bulgaria that's 1,700 years old.
- Grey squirrels can jump 3m (10ft) from one tree to the next.
- Prickly leaves can protect plants from some grazing animals.
- A decaying log is a home for many insects, mosses, lichens and fungi, which in turn can provide food for other species such as birds, who love to eat insects.

Allow the children to fully express their thoughts and continue the discussion until it runs its natural course.



MUD FACES

There is such joy in squeezing and squelching mud through the fingers! Shaping a face from mud is blissful messy play. With a little imagination, this activity populates the trees with strange inhabitants and brings the forest alive in a whole new way.

Mixing together the elements of earth and water to create a mud face taps into every child's instinct to investigate natural things, and explore what these do and how they react. This activity combines art, science and sensory development, encourages communication and confidence through creativity, and also gives children permission to get really mucky! Studies show that being able to get dirty is an important part of a child's cognitive development. There are health benefits, too: safe exposure to natural organisms in soil helps to develop children's immune systems, making them more able to fight disease.

This may be the first time a child has been given the freedom to get really muddy. Some may relish this, while others may for a time feel it's a challenge. Repeatedly giving permission and encouragement can ease this worry to joy. Ask any adults involved in the activity to be enthusiastic, to let go any of their concerns over muddy play – the children will wash their hands afterwards.

This activity allows the children to explore and connect with their environment, whether they are looking for grass or ferns for hair, stones for teeth or nuts for eyes. Mixing, concocting and creating takes everyone back to the realm of invention and magic: the entire activity is full of possibilities for imaginative expression.

A wonderfully creative, liberating activity!

LOCATION	Any natural area with soil and trees. For atmosphere, woodland is ideal.
AGE GROUP	2 years +
LEARNING ABOUT ...	Imagination ✿ using the senses ✿ fine motor skills ✿ science ✿ art ✿ being creative ✿ communicating ✿ empathy ✿ connecting with nature ✿ confidence
KIT	→ Waterproofs and/or clothing for messy play → Suitable footwear → A trowel or small spade per player → A small bucket or other watertight container per player → Water (for mixing mud) → Soap and clean water (for washing hands afterwards) or lots of wet wipes until you can get to a tap!



Get ready
Encourage the children to talk about their ideas. Will it be a mud face for a tree, an animal or an insect? Will it be the face of someone they know, or the face of a character in a story or a magical being they've invented? Will it have big or small eyes? Perhaps there will be more than two eyes! What about ears? And hair – will it be fuzzy or straight or will there be none at all? Maybe the face will turn into a creature with arms, hands, legs and toes!



Get set
When everyone has had a turn talking about what their mud creation will be, head off to gather the materials. Perhaps they'll pick up acorns or horse chestnuts for eyes, leaves for ears, or sticks for mouths. Tiny feathers may be perfect for hair. Or perhaps they'll choose something completely unexpected. The makers decide! (Just avoid any rare or poisonous plants!)

Once they have gathered all they need, the children can use a trowel or small spade to dig a hole past the topsoil, down to the mulch-free soil (roughly 5-20cm/2-8in deep). Each child digs out enough soil to quarter-fill their bucket, then slowly adds water until they have sticky mud, the consistency of workable clay. Stickiness can be tested on a tree trunk – if the mud sticks, it's just right. (More soil and water can always be added if needed.)

Go!
All the makers find a tree where their creation will live, then take a good handful of mud from their bucket and shape it into a ball. Smaller children, with their little hands, may need help getting a ball that's big enough for shaping. Now the ball of mud gets splatted firmly onto the tree trunk. Press down the edges of the mud, so that it holds firmly onto the tree.
Once the ball is stuck, the creative magic begins! Let each child work on their face or creature as they wish. Watch as aliens, fairies, robots, animals and other weird and wonderful creatures emerge, each with their own lively expression and strange features.

Endings
If the children feel like talking about their creations, encourage them to do so, each taking a turn while others listen, following the story wherever it leads. Ask the children to describe and name the natural items. Where did they find them? Why were they chosen? Remember to say goodbye to all the faces before you leave. If the weather is dry, mud faces can last for several days, so consider coming back to visit them!

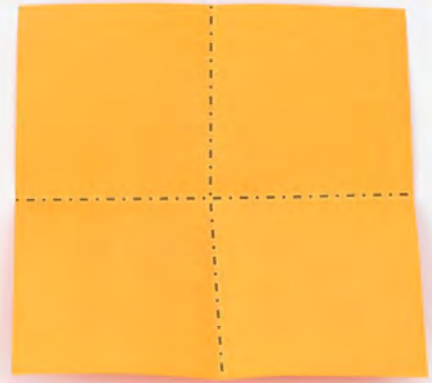




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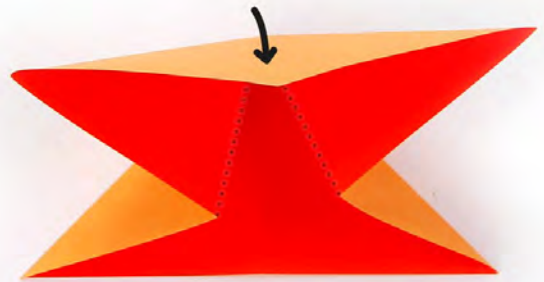
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Flip over

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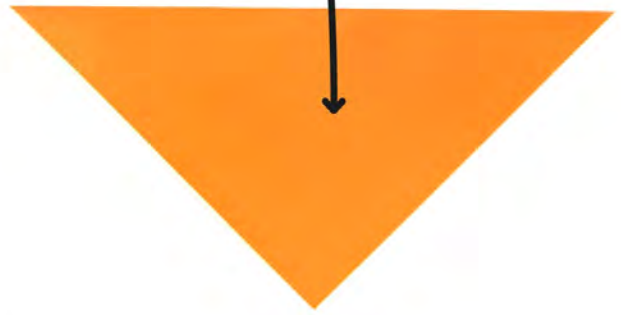


Origami Cat

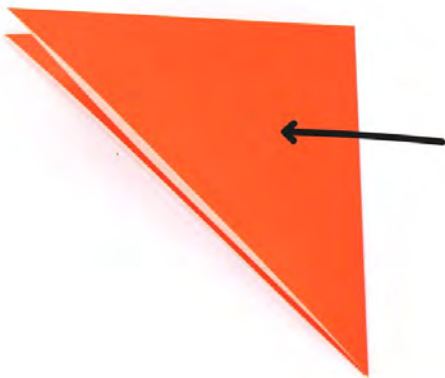
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Origami-Crane-Activity-Instructions

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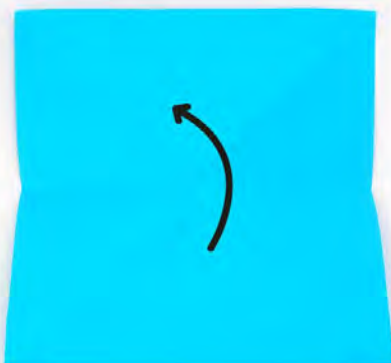
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Origami-Crane-Activity-Instructions

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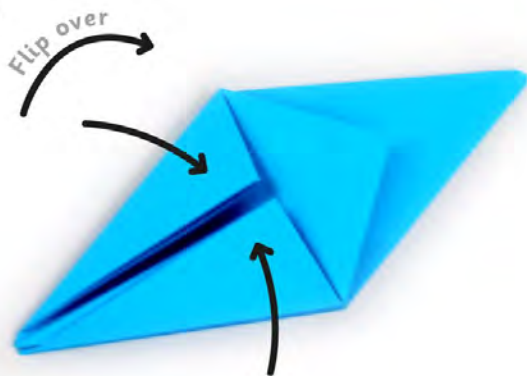
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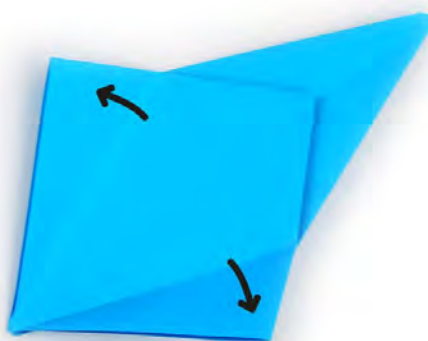
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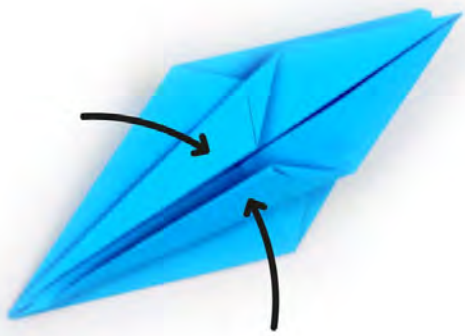


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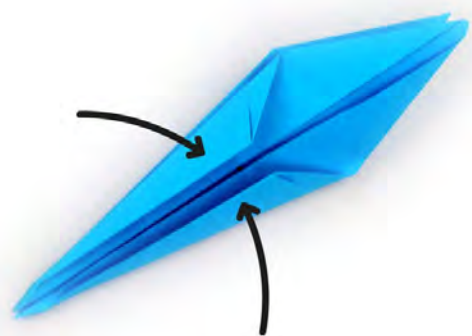
Origami-Crane-Activity-Instructions

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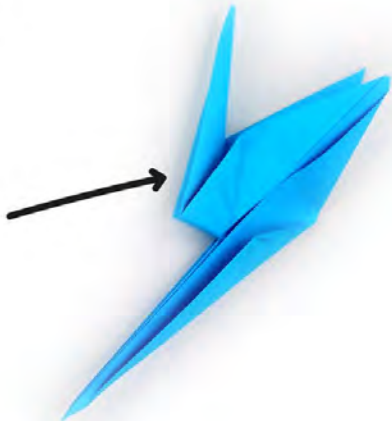


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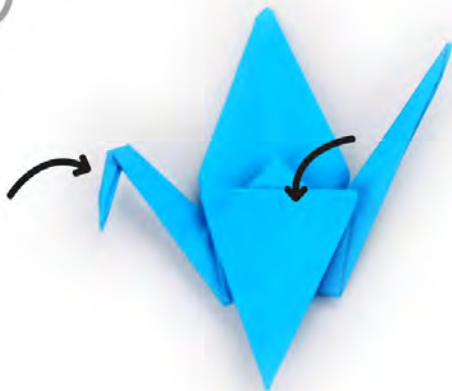
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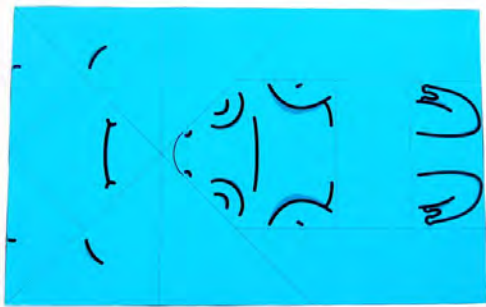
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Flip over



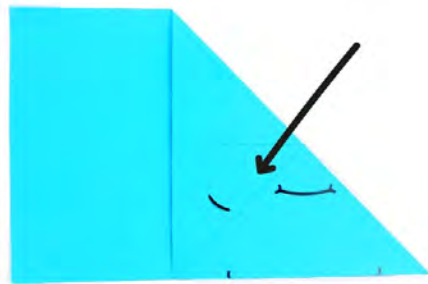
Origami Frog Hopper Instructions

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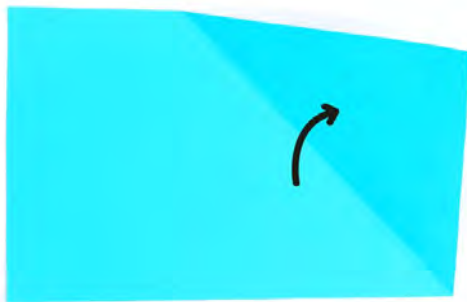


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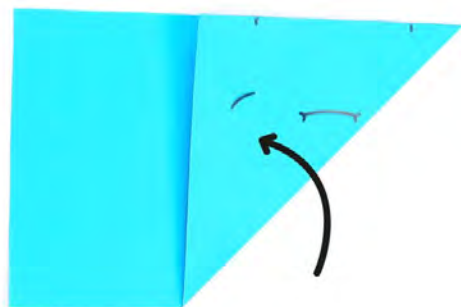
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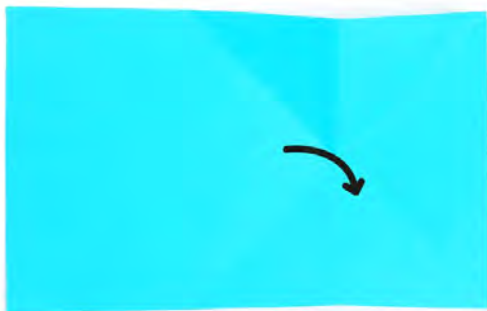
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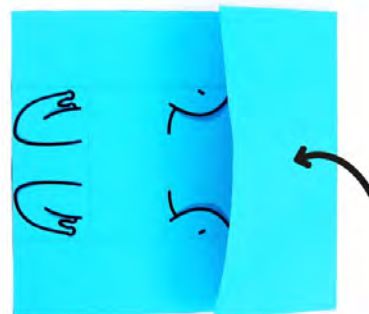


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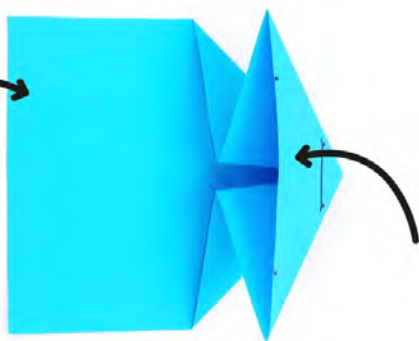
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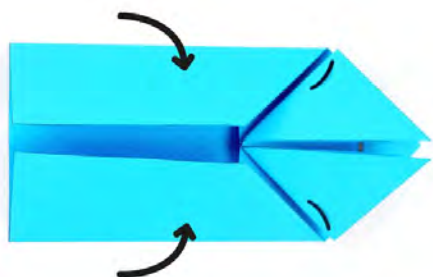


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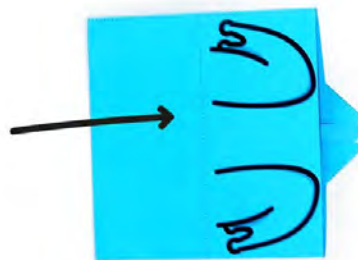


Origami Frog Hopper Instructions

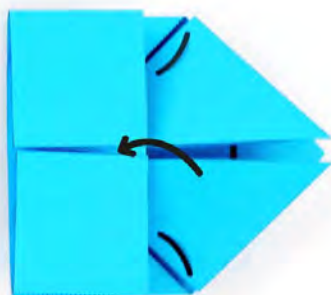
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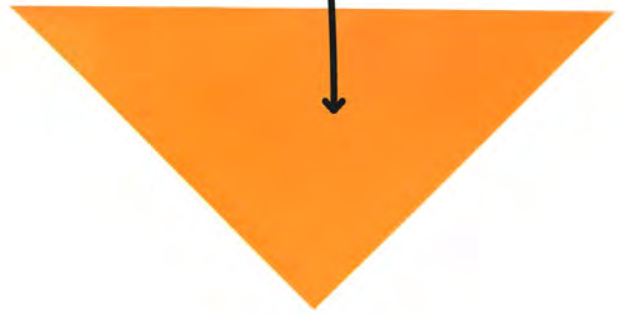


Origami Rabbit

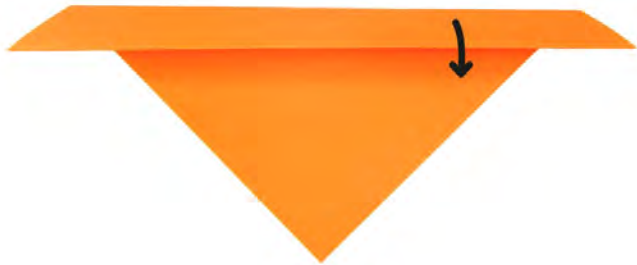
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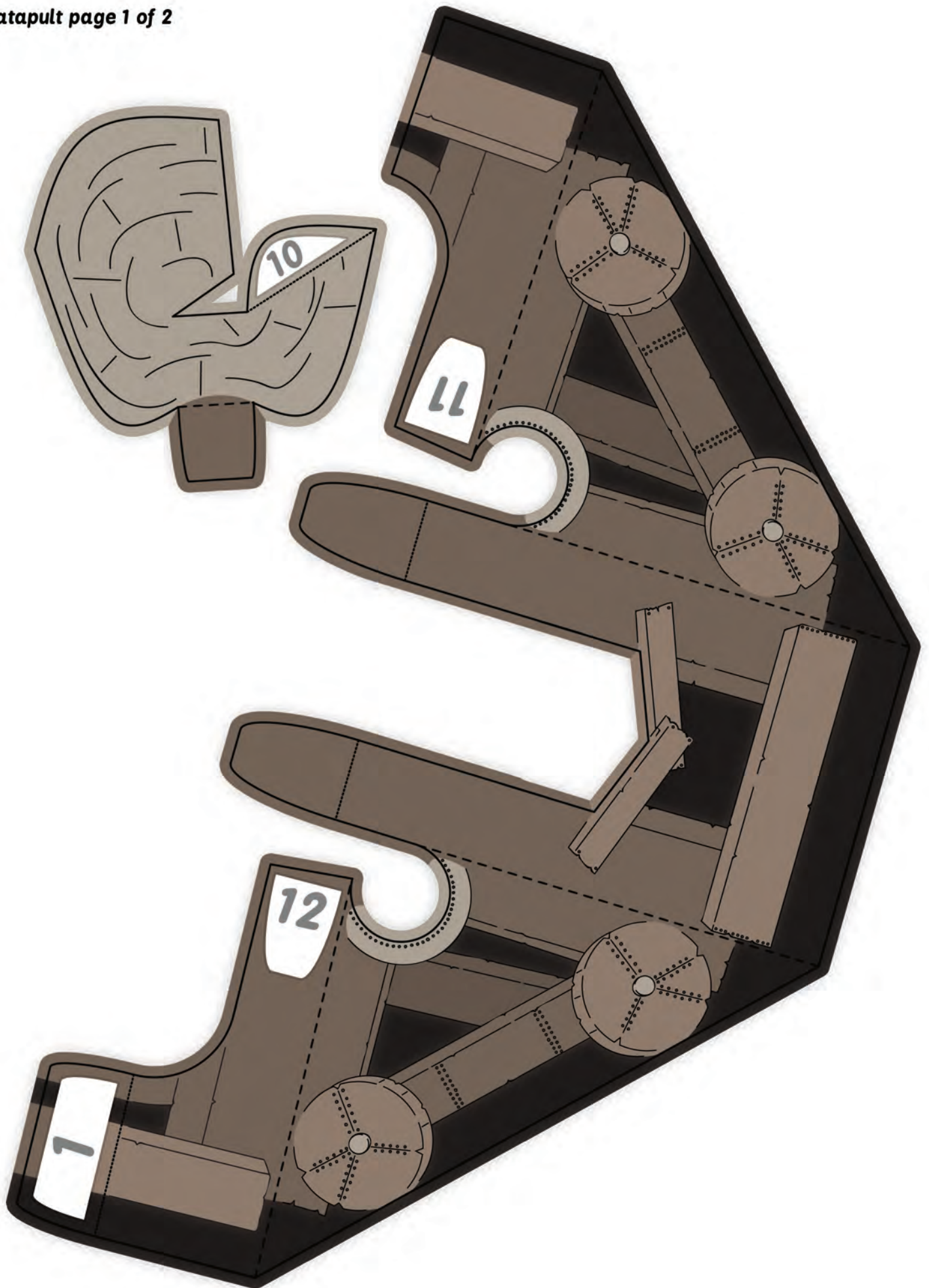


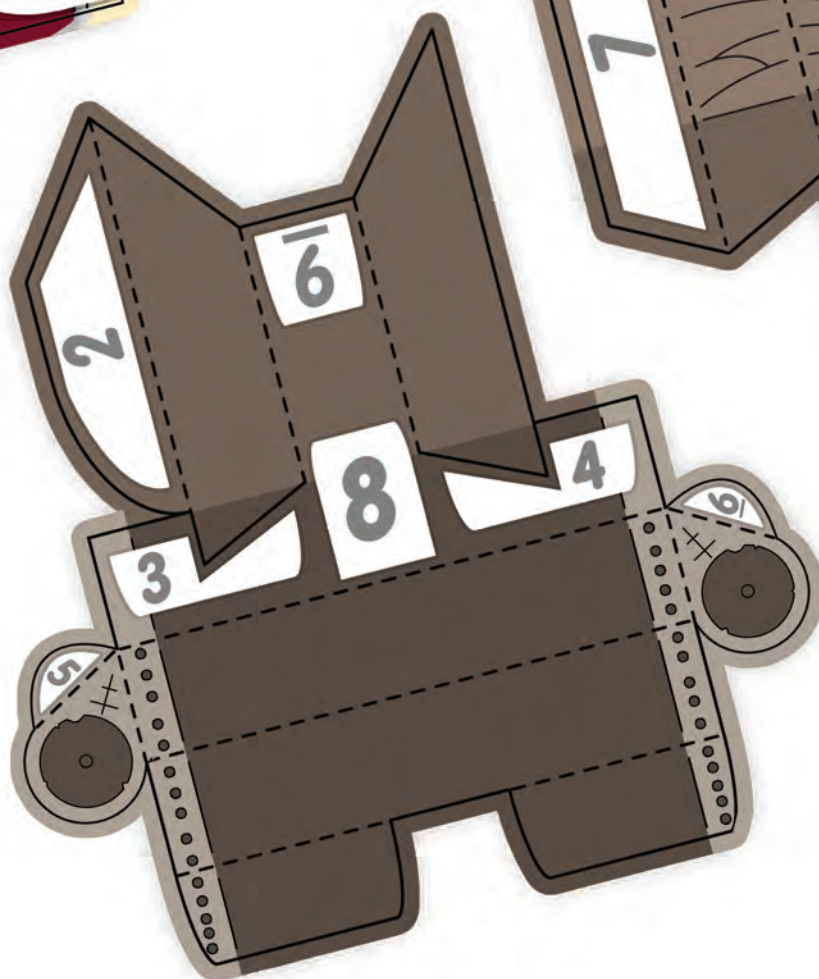
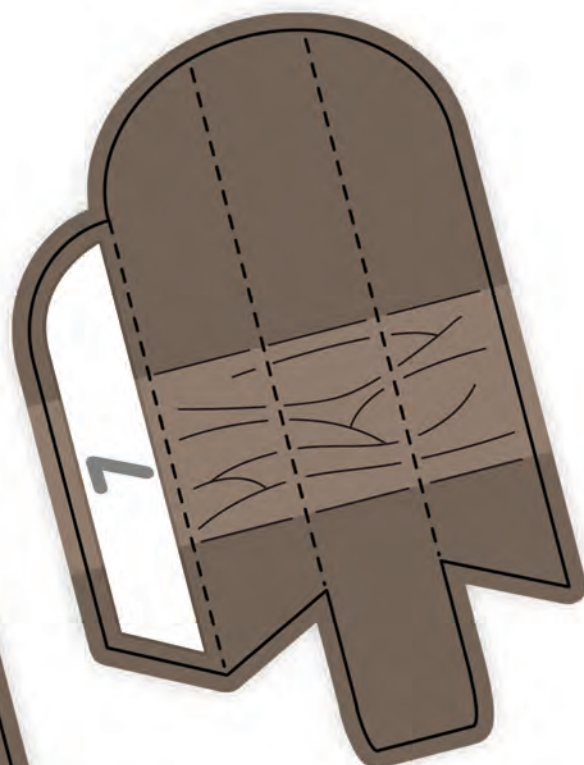
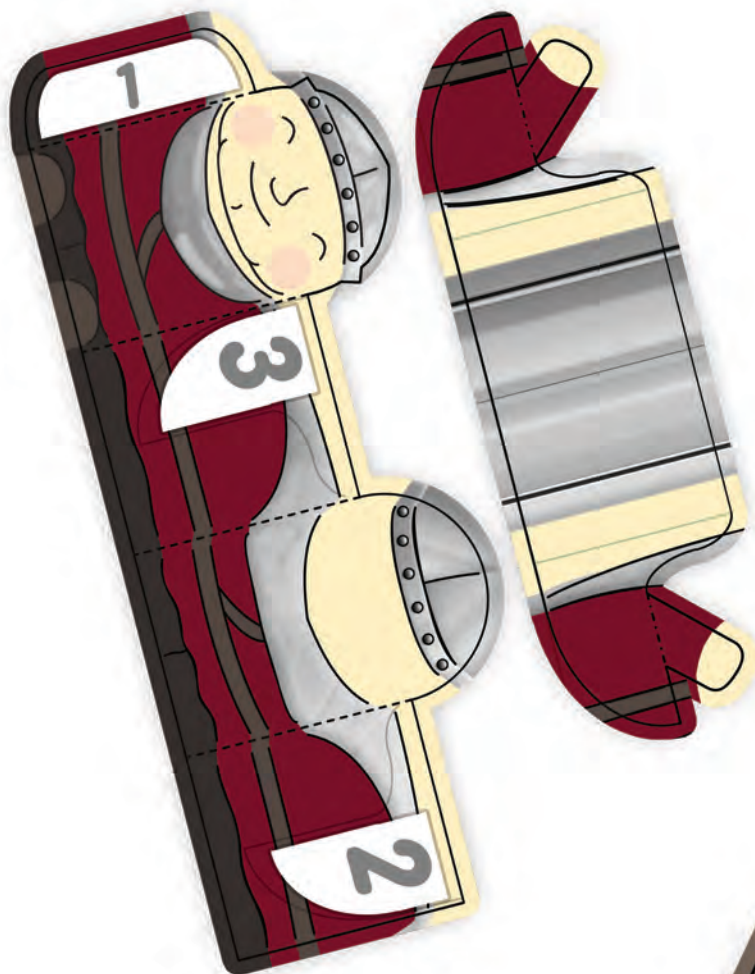
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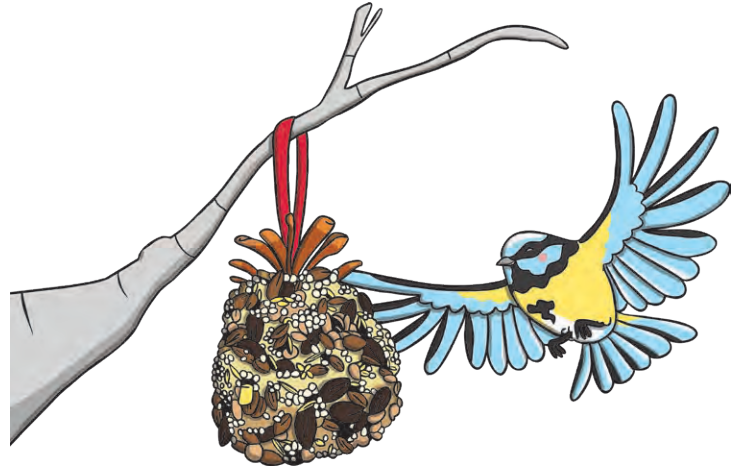




Pine Cone Bird Feeder

You will need:

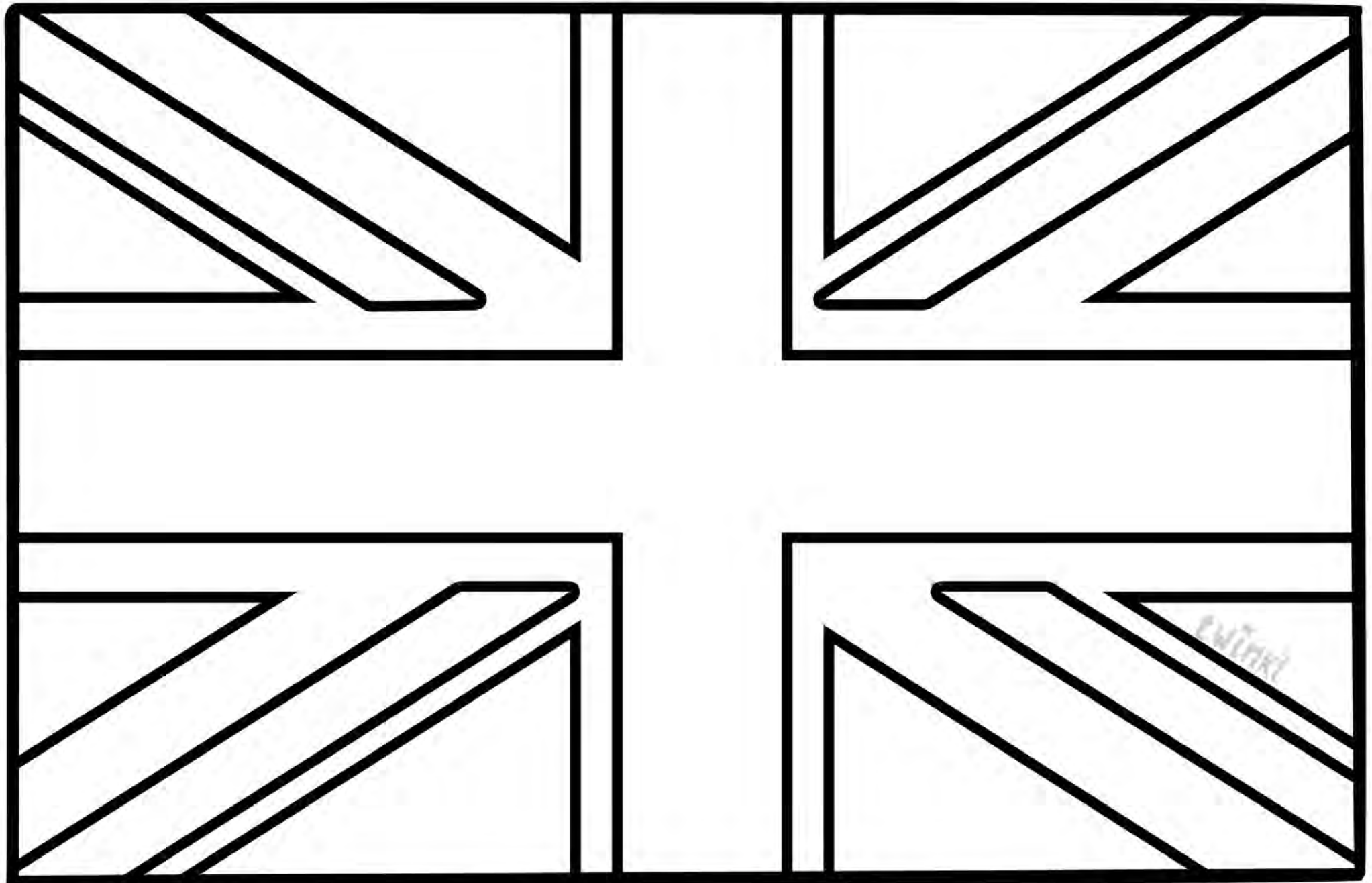
Pine cone
Vegetable shortening
Birdseed
String
Scissors



Instructions

1. Find a pine cone from your outdoor area. Prepare a bowl with a teaspoon of vegetable shortening and smother your pine cone with it. This will be messy!
2. Put your pine cone in the refrigerator to let the vegetable shortening get nice and sticky. While you're waiting, put some of your birdseed onto a plate. After 30 minutes, remove your pine cone from the refrigerator and roll it in the birdseed to cover it.
3. Cut a piece of string about 8 inches long. Ask an adult to help. Tie the string around your cone and hang it on a tree or bush outside. Now watch for the birds!







JOSEPH'S
MACHINES

**Nuffield Design & Technology
working in the curriculum**



Will your party hat be funny or fantastic?

seven and a half hours work

SECTION ONE
learning context

1

SECTION TWO
tasks for learning

2

SECTION THREE
children's decisions

3

SECTION FOUR
teaching the unit

4

SECTION FIVE
resources and links

14

design context

Most children enjoy a party and the fun of wearing party hats. This enjoyment is enhanced if the children have some responsibility for the party's success. So in this task the children are responsible for the party hats. The party can be held to celebrate a particular calendar event such as Christmas or Easter, the end of term, the beginning of summer, or to celebrate some aspect of learning such as "What we have learned about animals". The children will attend the party and wear the hats as part of the celebration.

learning purposes

In this unit children will learn:

- ◆ to consider reasons for parties;
(Session 1)
- ◆ to construct a basic headpiece from paper strip using a stapler, scissors and a "best fit" approach;
(Session 2)
- ◆ to develop their ideas through observation and simple sketching;
(Session 3)
- ◆ to carry out two simple 'on to paper' decoration techniques – potato printing and appliqué;
(Sessions 4 and 5)
- ◆ to use simple templates;
(Sessions 3 and 6)
- ◆ to use scissors, staples, adhesive tape and PVA glue to construct simple 3D forms from sheets of paper.
(Sessions 6 and 7)

SECTION 2

tasks for learning

the small tasks

the focused practical tasks

- 1 Thinking about parties 30 minutes
- 2 Making a simple headpiece 60 minutes
- 3 Finding shapes for hats 60 minutes
- 4 Learning potato printing 60 minutes
- 5 Learning simple appliqué 60 minutes

the big task

the design and make task

The big task is to design and make a decorated paper party hat that they will wear at a party they have helped to organise.

up to 2 hours in 30-minute or 60-minute lessons

The evaluation 30 minutes

Unit review 30 minutes



effective stapling is the key to this fantastic party hat. A simple supporting structure made from a single sheet of white card has been attached to the headpiece using staples. It is kept in a shape by a card "tie" also attached by staples. Several lines of corrugated card feathers are attached across the front of the white card using staples. The comb of the cockerel is given 3D form by careful stapling



design decisions

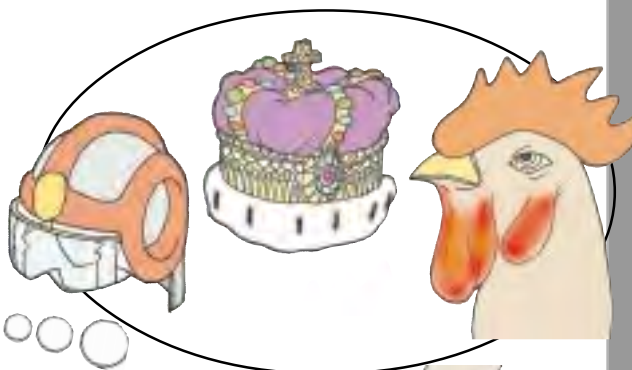
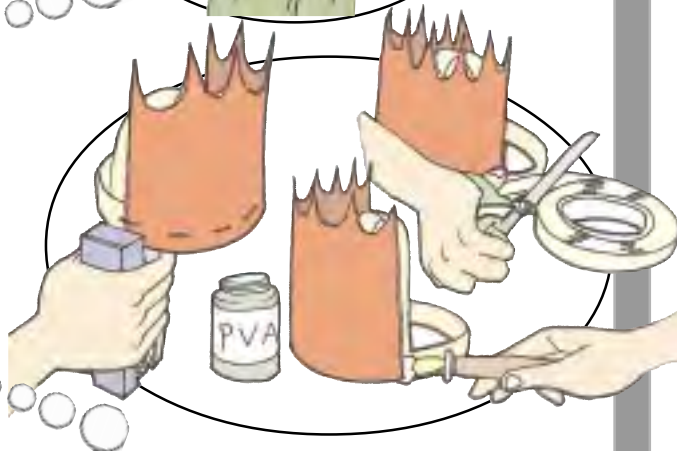
The children can decide on the following:

- ◆ who the hat is for:
either themselves or a friend
required learning in Session 1,
design decision made in Session 6;

- ◆ how the hat will be constructed
although the underlying headpiece is given, there is ample opportunity for children to develop different means of attaching the hat to the headpiece
required learning in Session 2,
design decision made in Sessions 6 and 7;

- ◆ the appearance
the overall nature of the hat – the type of head wear worn by a particular occupation e.g. crown for a king or queen, helmet for a fireman or policewoman, an animal head e.g. a cockerel, a giraffe, a cat
required learning in Session 3,
design decision made in Sessions 6 and 7;

- ◆ the decoration required to make the hat look realistic and attractive
required learning in Sessions 4 and 5,
design decision made in Sessions 6 and 7.



SECTION 4

teaching the unit

session
one

thinking about parties

suggested timing
30 mins



Teacher input

Tell the class that they could have a party if they can think of a good reason. You can ask the class to think about the following questions.

- ◆ Could it be a birthday party?
- ◆ Could it be a "thank you" party?
- ◆ Could it be a "farewell" party?
- ◆ Could it be a time of year party?
- ◆ Could it be a faith celebration party?
- ◆ Could it be fun party?
- ◆ Could it be a theme party?

Write a list of possible reasons on the board.

Ask the class if they can think of any other reasons to have a party.

Put any suggestions on the board.

Pupil activity

Tell the children to sit in groups of four to six and talk about possible reasons to have a party. Explain that at the end of ten minutes you will be asking the class to vote on

reasons to have a party. Note that there might be more than one reason for a class party.

Teacher input

Now ask for a show of hands for each type of party. For each type of party write down the number of votes. Use the votes to decide on the reason for the class party.

Homework

For homework the children can talk to members of their families about parties and party games. Each child should bring in the name of a party game with short notes on how it is played.



Resources

None required.

Health and safety check

Discuss the hazards and risks involved in working as a group and how these can be controlled by the way the children behave and treat one another.

SECTION 4 teaching the unit

session
two

making a simple headpiece

suggested timing
60 mins



Teacher input

Explain to the class that each one of them is going to design and make a paper party hat either for themselves or for a friend and that it will be important for the hat to match the reason for the party. Tell the class that the best way to get an interesting looking hat is to make a simple headpiece which fits on the head so that they can add the parts that make up the hat. Show them a simple headpiece like this:



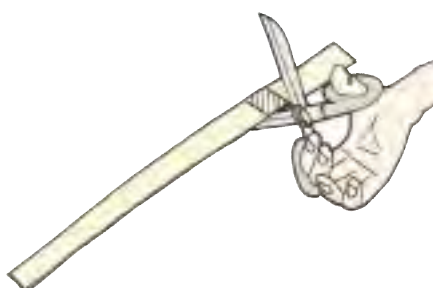
Pupil activity

Show the children how to mark the paper strip for each part to the right length for their own or a friend's head allowing for a short length of overlap. Demonstrate how to cut the paper strip to the right length using scissors. Show the children how to use the stapler to join the paper strips to form the headpiece.

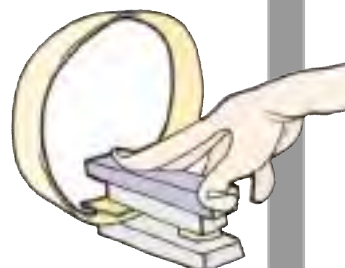
When the children have finished they should get into groups of four and look at the completed headpieces to see if they fit, are well made and could be improved. Some of the finished pieces can be put on display to illustrate difficulties and successes.



*finding the length needed
for the head band*



*cutting to length with an
allowance for joining*



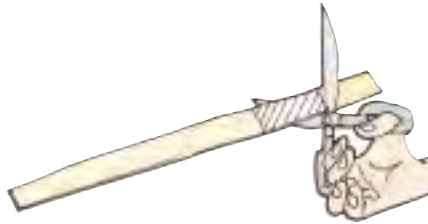
*joining the ends with
the stapler*

session
two

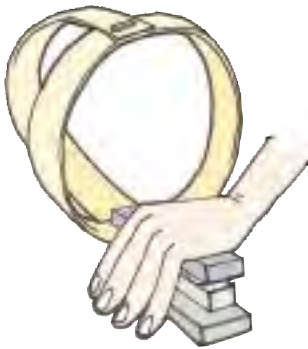
making a simple headpiece (continued)



finding the length of the crown band



cutting to length with an allowance for joining



joining to the head band with the stapler



a good fit

Resources

Consumables: paper or thin card strip in lengths of about 1 m, staples;

Tools: pencils, scissors, stapler.

Health and safety check

Discuss the hazards and risks involved in using scissors and staplers and how these can be controlled by being careful and using the correct procedures.

SECTION 4

teaching the unit

session
three

finding shapes for hats

suggested timing
60 mins



Teacher input

Tell the class that the shape of their hats will be very important, but imagining shapes without anything to help is difficult so you have provided them with lots of pictures. Explain that on each table is a collection of pictures of animals, plants and people wearing hats.

headpiece. When the drawings are the right shape and size, the children should write their names on them, cut them out ready for the class display of hat shapes. Tell them that they will be able to use these as templates for the party hats.

Pupil activity

Ask the children to choose a picture that will help them with their hats – it could be a picture of a crown because you want a royal party, it could be a picture of a cat because you want an animal party hat, etc. Every child should cut out the picture for the hat and stick it onto a piece of A4 paper. Then using the pictures to help, they should draw on a large sheet of paper (A2 or newspaper) an outline side view (or silhouette) of the hat life-size. Each child should check that the bottom of the hat is the right length to fit onto the



Resources

- Stimulus:** collection of pictures of animals, plants and people wearing hats;
Consumables: quantity of A2 paper or old newspapers, A4 paper;
Tools: pencils, scissors.

Health and safety check

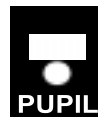
Revisit the discussion about controlling risks when using scissors. Discuss the hazards and risks involved in using glue and how these can be controlled by taking care and using the correct procedures.

SECTION 4 teaching the unit

session
four

learning potato printing

suggested timing
60 mins



Teacher input

Tell the class that they will need to decorate the party hats to make them look attractive. One way of decorating is to produce a pattern using a printing block and it is easy to make a printing block from a potato.

Show the class how to cut a potato in half and produce a simple printing block. Geometric shapes are easy to produce.

Show the class how to paint the end of the potato with some poster (or similar) paint and make a print.

Pupil activity

Show the class how to produce different sorts of repeat patterns.

Tell the class that they should each try to produce a pattern that could be used to make their hats look more attractive. In the case of an animal hats the pattern could make the hat look like the animal's fur.

The patterns should be printed on pieces of paper cut into the shape of the hat.

The finished patterns can be put on display to illustrate difficulties and successes.



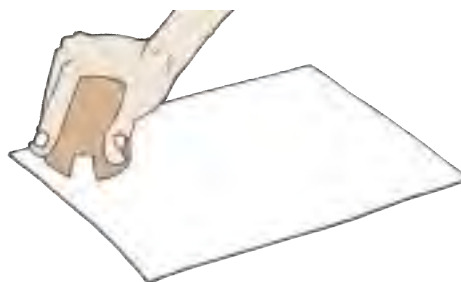
cut the potato in half



shape the end of the potato



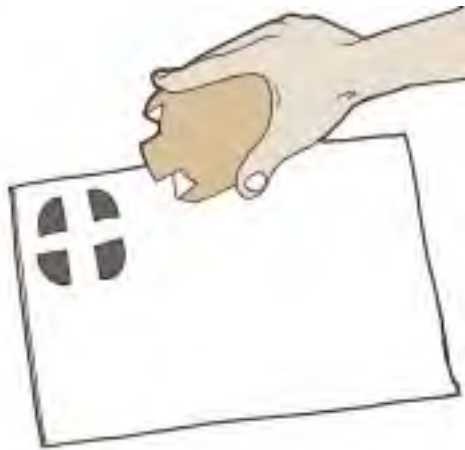
paint thick paint onto the end of the potato



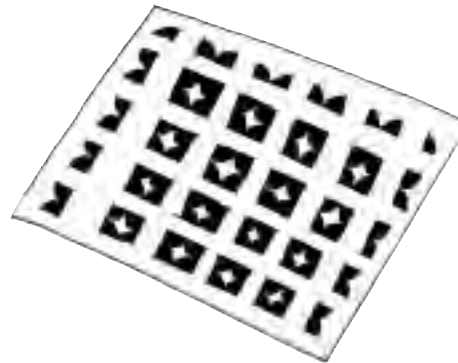
press onto paper

session
four

learning potato printing (continued)



lift off to reveal the print. Repeat the process



the resulting pattern

Resources

Consumables: potatoes, paint (poster or powder), old newspapers to work on;

Tools: school canteen dinner knives, dishes for mixing paint, brushes.

Health and safety check

Discuss the hazards and risks involved in using knives and paint and how these can be controlled by being careful and using the correct procedures.

SECTION 4

teaching the unit

session
five

learning simple appliqué

suggested timing
60 mins



Teacher input

Tell the class that you are going to show them another way to decorate their party hats. It is called appliqué and involves cutting out coloured shapes and sticking them onto paper to make a picture or a pattern.



Pupil activity

Show the class how to cut out shapes from coloured gummed paper. Show the class how to wet the paper using a damp sponge. Show the class how to build up a picture or pattern by sticking down the shapes.

Tell the class that they should each try to produce a pattern or picture that could be used to make their hats look more attractive. In the case of a crown they might produce shapes that look like jewels.

The patterns or pictures should be produced on pieces of paper cut into the shape of the hat.

The finished pieces can be put on display to illustrate difficulties and successes.



Resources

Consumables: plain paper, coloured gummed paper;

Tools: scissors, wet sponge.

Health and safety check

Discuss the hazards and risks involved in using scissors and gummed paper and how these can be controlled by being careful.

SECTION 4 teaching the unit

sessions
6 + 7

the big task: designing and making a party hat

suggested timing
up to 2 hr
as 30- or
60-min
lessons



Teacher input

Explain to the class that now each one of them is going to use all that they have learned to design and make a paper party hat for the class party, either for themselves or a friend in the class. Remind them that they thought about this at the beginning in terms of:

- ◆ the reason for the party;
 - ◆ a hat that matches the reason for the party.
- And that now they have to make firm decisions.

Pupil activity

Each child should produce a specification. You may wish to use the ready-to-copy 'Party hat specification' sheet for some children.

Teacher input

Remind the class of the following points.

- ◆ They should start by making the simple headpiece.
- ◆ They can use the display from Session 2 to remind them how to do this.
- ◆ They use the template from Session 3 to draw out the shape they need for the hat. If they use folded paper they need mark out and cut only once.

- ◆ They will need to decorate these shapes BEFORE they attach them to the headpiece. They can use the displays from Sessions 4 and 5 for inspiration.
- ◆ They will need to work out how to attach the shapes to the headpiece so that they form a hat.

Pupil activity

Each child should try to make a party hat that meets this specification.

When they have completed the party hats each child should ask another child to look at the hat to see if it meets the specification.

Each child should then make a record of this evaluation. You may wish to use the ready-to-copy 'Party hat evaluation' sheet for some children.



Resources

Stimulus:

templates from Session 3;

Consumables:

'Party hat specification', 'Party hat evaluation', potatoes, paint (poster or powder) paper, old newspapers to work on, coloured gummed paper, adhesive tape, PVA glue, staples;

Tools:

pencils, scissors, school canteen dinner knives, dishes for mixing paint, brushes, stapler, glue-sticks, wet sponge.

Health and safety check

Revisit the discussion about controlling risks when using scissors, staplers, knives, paint and gummed paper.

SECTION 4

teaching the unit

session
eight

evaluating the final product

suggested timing
30 mins



Teacher input

Tell the class that now is the time to think more carefully about the evaluation of the party hats. Use the following questions to stimulate comments.

- ◆ Who produced a party hat that met the specification?
- ◆ How did you ensure that it met the specification?
- ◆ How did you know that it met the specification?
- ◆ Who produced a party hat that didn't meet the specification?
- ◆ Where did it go wrong?
- ◆ What could you have done to prevent this happening?

Pupil activity

Try to ensure that everyone has a turn to add to the discussion.

Ask every child to write a short sentence saying what they like best about designing and making a party hat.



Resources

Stimulus: party hats designed and made by the class, 'Party hat specification' and 'Party hat evaluation' sheets from previous session;

Consumables: plain paper;

Tools: pencils.

Health and safety check

Discuss the hazards and risks involved in using the party hats and how the risks can be controlled.

SECTION 4 teaching the unit

session
nine

unit review

suggested timing
30 mins

Teacher input

Explain to the class that it is important to think about how to get better at design & technology and that they can do this by discussing the following questions.

- ◆ What did you enjoy most?
- ◆ What did you find easy?
- ◆ What did you find difficult?
- ◆ What did you get better at?
- ◆ Did you help each other?
- ◆ What could have been done better?
- ◆ How could these be done better?

Pupil activity

The children should discuss the questions in groups and when they have finished you should ask each group to make a short report to the class. The class should agree a statement based on these reports for improvement for their next design & technology unit.



Resources

Stimulus: party hats designed and made by the class;

Consumables: paper;

Tools: pencils.

Health and safety check

Discuss whether the class used hazard recognition, risk identification and risk control to design and make safely.

SECTION 5 resources and links

vocabulary

Session 1	Session 2	Session 3	Sessions 4-8
party, birthday, celebration	headpiece, stapler, scissors, strip, join, best fit	shape, size, template	printing, pattern, appliqué, specification, evaluation

resources summary

	Stimulus materials	Consumable materials	Tools
Session 1	none required		
Session 2		paper or thin card strip in lengths of about 1 m, staples	pencils, scissors, stapler
Session 3	collection of pictures of animals, plants and people wearing hats	quantity of A2 paper or old newspapers, A4 paper	pencils, scissors
Session 4		paint (poster or powder) or old newspapers to work on, potatoes	school canteen dinner knives, dishes for mixing paint, brushes
Session 5		plain paper, coloured gummed paper	scissors, wet sponges
Sessions 6 and 7	templates from Session 3	'Party hat specification', 'Party hat evaluation', potatoes, paint (poster or powder), paper, old newspapers to work on, coloured gummed paper, adhesive tape, PVA glue, staples	pencils, scissors, school canteen dinner knives, dishes for mixing paint, brushes, stapler, glue-sticks, wet sponges
Session 8	'Party hat specification' and 'Party hat evaluation' sheets from previous session, party hats designed and made by the class	plain paper	pencils
Session 9	party hats designed and made by the class	paper	pencils

links to other subjects

Literacy

This work supports the objectives in Year three from the National Literacy Strategy regarding note making. The children are required to make notes about the purpose and features of hats, which could then lead into a short non-chronological piece of writing about hats.

Speaking and listening

There are plenty of opportunities in this module for the children to practise speaking and listening in small group situations, making contributions and taking it in turns to discuss in the group.

Role play could be developed by children wearing the different hats and putting themselves in the situations the wearers might find themselves in.

Numeracy

The children will be able to practise measuring skills in a range of contexts, e.g. to get the correct length of strip of paper to put around someone's head and to make the decoration the correct size to fit onto the hat.

Art and design

With the print making and appliqué the children will have the experience of using a range of materials and processes. This work links well with the QCA scheme of work 3B 'Investigating pattern' where the children explore ways of making and creating their own patterns, experiment with block printing and printing with more than one colour.

Party hat specification

Name

Date

My party hat is for	The type of party it is for is	My party hat will be decorated with <div><div></div> printing</div> <div><div></div> appliqué</div>
My party hat will fit well and be comfortable.	My party hat will be held together with	My party hat will not come apart easily.

Party hat evaluation

Name _____ Class _____

Do I like my party hat?

☐ Yes/No ☐

Did my friend like the party hat?

☐ Yes/No ☐

My party hat was meant to look like a
Did it?

☐ Yes/No ☐

My party hat was meant to fit well and be comfortable.
Did it?

☐ Yes/No ☐

My party hat was meant to be strong.
Was it?

☐ Yes/No ☐

To make my party hat even better I could

Acknowledgements

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Evaluation

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Health and Safety guidance

Anna Wojtowicz and Caroline Reynolds from the Health and Safety Executive

Illustration and 2D/3D model making

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Proof reading

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The Project appreciates the efforts of all those teachers who taught trial units of work and provided valuable feedback. The Project is grateful for all the support it has received from the Advisory Services.