

This activity book  
belongs to:

Fox needs your  
help! Receive a  
certificate for  
completing the  
adventure.

# Fox's Waste Adventure

Learning about a circular economy



# START

## REDUCE

- A circular economy .... Page 4-5
- Waste action plan ..... Page 6-7
- Sustainable swaps ..... Page 8-9

## REUSE

- Refill bingo ..... Page 10
- DIY activities ..... Page 11
- Design challenge ..... Page 12-13

# WELCOME TO YOUR WASTE ADVENTURE!

Fox is always hungry and looking for food, but wherever Fox looks there is waste...and lots of it!

I like fruit, especially berries! However, I don't like crisp packets or plastic bottles.



Follow Fox on their adventure to reduce waste and find their dinner. Each section is filled with activities. The goal is to make less waste to keep our planet clean!

## SYMBOLS TO LOOK OUT FOR:



The stars show how easy or difficult each activity is. One star is the easiest, three-star activities are more challenging or might require adult support.



This symbol means you can use the images or pages to create something new. Keep a look out! There are lots of ideas.



Once you've got to the end of the booklet, show an adult your work. You can then apply for your **waste adventure certificate!**

## RECYCLE

- Recycle right ..... Page 14-15
- Problems with waste. Page 16
- Create a poster..... Page 17

Need to make a birthday card? Cut out the houses and trees to decorate your hand-made card.

# FROM A LINE...

Humans have created a TAKE-MAKE-WASTE system and this is really bad for our planet. The way humans make and use items like clothes or crisp packets creates lots of waste!



Items like crisp packets are often made from a mix of materials including plastic. It is difficult to take a crisp packet apart to be reused and it cannot easily break down into the soil. It is now waste.

If we keep making new products that can't be reused, the amount of materials that our planet can offer, (like trees, oil and metals) becomes smaller and the pile of waste grows bigger.



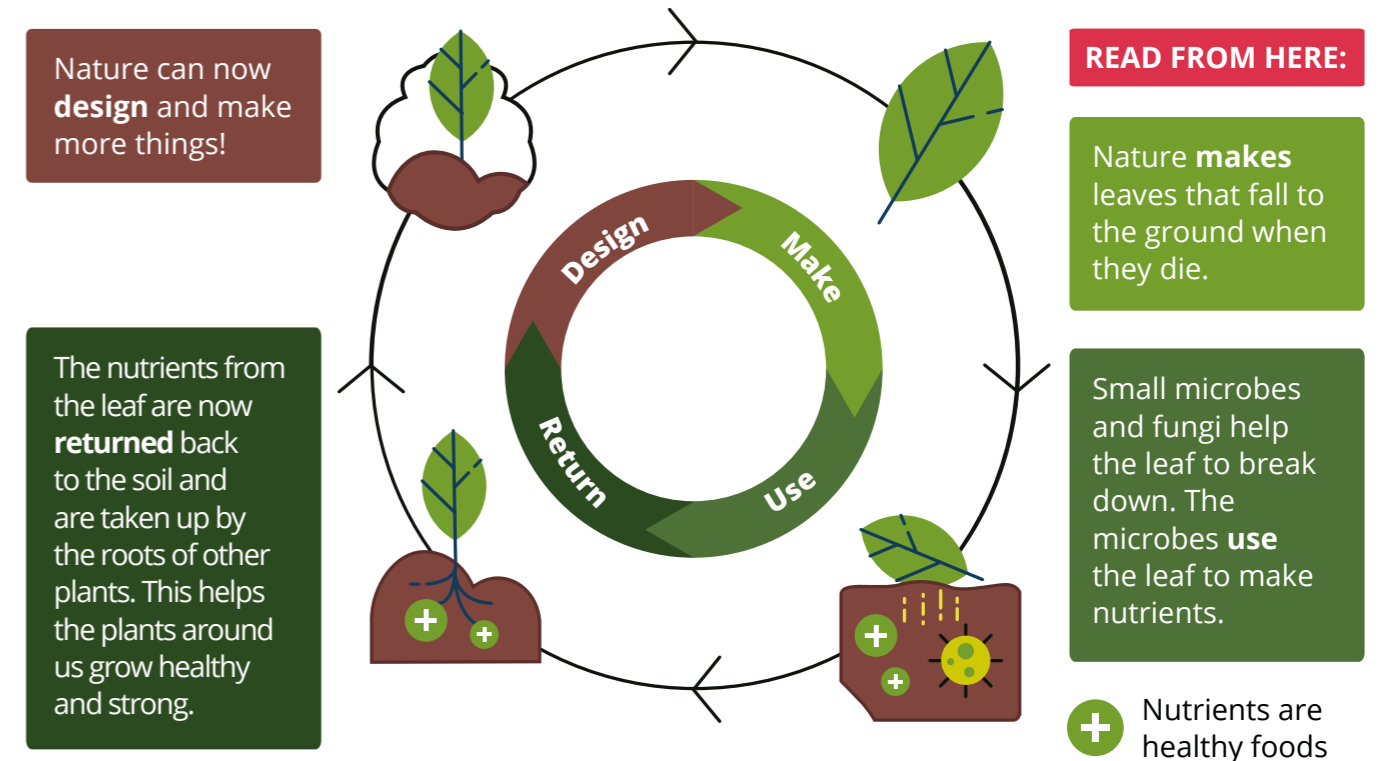
This is called a **linear** system because it makes a line.



Waste causes lots of problems like deforestation and water pollution. Find out what these are and research why they cause problems for our planet.

# ...TO A CIRCLE!

Good news! There is a way to create less waste. Let's take some inspiration from nature...

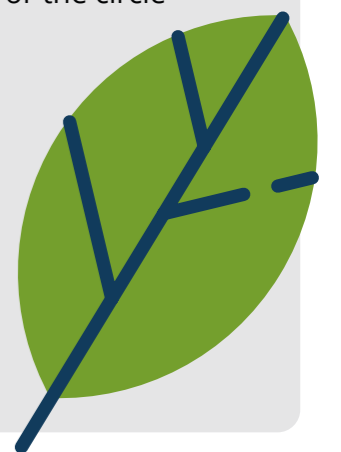


It's called a **circular** system because it makes a circle.



In a circular economy, materials are reused again and again. We can take them apart, return them, and remake them into something new. We see similar circles in nature, like the water cycle or the circle of life.

We make less waste because we use the same materials that we started with. This means we can stop taking precious materials from our planet too.



Can you find out about another circular system found in nature?

# REDUCE

Fox has been walking for a little while now and is getting thirsty.



I have a reusable water bottle somewhere in my rucksack. I don't need all of these plastic ones!

Before we buy and use new things, we should think about if we can buy less or if we need it at all.



# YOUR WASTE ACTION PLAN



## STEP ONE: YOUR WASTE JOURNAL

An action plan helps us work towards a goal or solve a problem. Reducing our waste is a good way to help protect our environment from too much rubbish.

How much waste do you create? Count and note down everything you throw away today in the table below. Then, let's create a plan to help reduce it!

Room	Waste Item
Kitchen	
Bathroom	
Bedroom	
Total number of items:	



Use the camera on your smartphone or tablet and hover over the QR code to watch the video or visit [tinyurl.com/2p84y6tf](https://tinyurl.com/2p84y6tf).

# YOUR WASTE ACTION PLAN



## STEP TWO: WHAT CAN WE CHANGE?

Now you have completed your waste journal, which items did you throw away the most? Plastic bags? Crisp packets? Juice cartons? Write or draw them in the bubbles below.

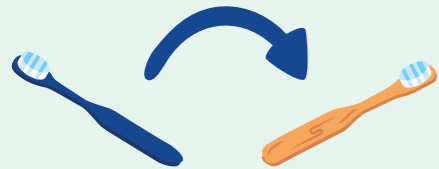


Cut me out and stick me on a lollipop stick to make Fox puppets! Can you create a puppet play with them?

**STEP THREE: SUSTAINABLE SWAPS**

**What swaps can we make at home to reduce our waste?**

Let's use a toothbrush made from natural materials, like bamboo, that can be composted and returned to the earth after we have used it.



**!** If everyone in the UK used a plastic toothbrush and lined them all up, they could reach **to the moon and back 5 times!**

Play the sustainable swaps card game with a friend. Cut out the images and stick them on pieces of card. Shuffle them and turn them face down on the table. Turn them over one by one and find the sustainable swap!



Why are natural materials better for our environment than plastics?



**MATCH THE ITEM WITH ITS SUSTAINABLE SWAP**



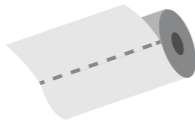
Plastic toothbrush



Single-use plastic straws



Plastic carrier bags



Paper towels



Plastic soap bottle



Cling film



Buying new clothes



Reusable cloths



Bamboo toothbrush



Buying second-hand clothes



Beeswax wraps



Metal straws



Soap bar



Reusable cotton bags

**STEP FOUR: MAKE A PLEDGE**



Based on the items we throw away the most in STEP TWO, what sustainable swaps can **YOU** make? In the box below, write or draw the swap you will make this month.

Ask your grown-ups to help you make your swaps!



As a class, cut out your pledges and collect them in a reused jam jar. Take it in turns to take a pledge to complete together.



Create a TV advert to persuade your family and friends to make a sustainable swap. Tell them why the swap is good for the environment and how easy it is to use!

# REUSE

Fox is getting a bit chilly and puts on a jumper.



I've made myself a jumper out of some old clothes. Reusing things that we already own is a fun way to reduce waste and save energy needed to make new things.

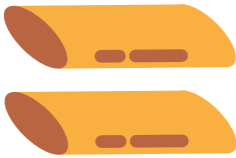

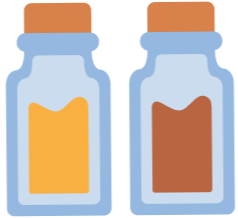



Reusing containers like glass jars, tins and plastic tubs is a great way to replace throwaway packaging like plastic bags and cling film. We can use our containers to refill them with food and household products.

Watch Fox go to a Refill shop! Scan the QR code using a smartphone or tablet or visit [tinyurl.com/mr3t7pvz](https://tinyurl.com/mr3t7pvz) to watch the video.



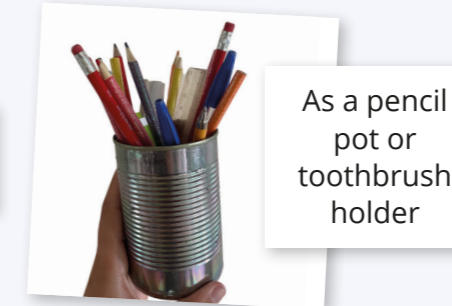
## PLAY REFILL BINGO

Visit a refill shop. How many items have you refilled with your reused jars and tubs? Circle each item until you get a **full house** (this a phrase we shout in bingo when all items are circled!)

 <b>Pasta</b>	 <b>Shampoo</b>	 <b>Herbs and spices</b>
 <b>Washing up liquid</b>	 <b>Rice</b>	 <b>Plain flour</b>

## GIVE YOUR WASTE A NEW LIFE!

Reusing containers like glass jars, tins and plastic tubs are a good way to replace throwaway packaging, like plastic bags and cling film. We can use them in lots of different ways:



## DO IT YOURSELF!

### GLASS JARS



**Lanterns** – decorate the outside of a glass jar or tin can, and ask an adult to pop a light or candle inside.



**Terrarium** – use a glass jar to create your own mini environment by adding gravel, soil, and plants.



### CANS & BOTTLES



**Tin can targets** – decorate and stack 10 old tin cans for a fun family game in or outside.



**Plastic bottle bowling** – fill your empty plastic bottles with water and different food colourings. Then simply line up and play!



### CLOTHING



**Sock puppets** – rather than throwing them away, turn those odd socks into waste-reducing champions!



**DIY bean bags** – use old clothes to create bean bags using a needle and thread and some rice.



# DESIGN CHALLENGE

Lots of people and businesses turn old items into new things instead of throwing them away. This is called **upcycling**.



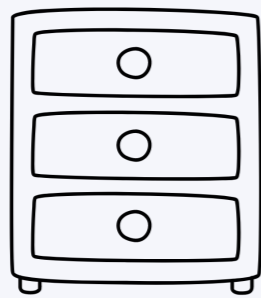
Look what **Up the Garden Bath** can do with old baths in Peterborough!

We have seen lots of examples of reusing and upcycling old items into new things on [page 11](#). Now it's your turn to design a new product from reused items.

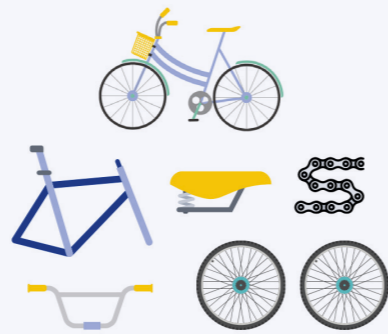
Choose from the ideas below or come up with your own. Think of fun ways they can be reused.



Glass jar



Old chest of drawers



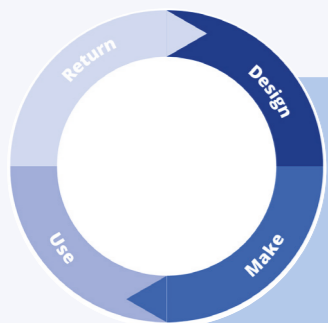
Bicycle



Cut these images out and use for your design.

**HINTS:**

Can you take it apart and use each piece in another way? Check out [page 19](#) for upcycling ideas!



A circular economy ([page 5](#)) encourages us to design out waste from the start of a product's life. Can you design a product that doesn't create any waste? Think about how the materials can be repaired, reused, or recycled after we have stopped using the product.

**DESIGN**



Draw your design below and present it to your class.



Now it's time to present your designs to the class! What have you created? What is it made from? How can it be remade after use?

# RECYCLE

Fox's bag is feeling lighter without all of those single-use plastic bottles. There are only a few items left in Fox's rucksack. Let's recycle!



Recycling is the process of turning our rubbish into new materials and objects. Look at this activity book. It is made from recycled paper!

These items are made from materials that can be recycled at home in your kerbside bins. Do you recycle them?



## TOP TIPS



Fox has some advice about recycling! Use the camera on your smartphone or tablet and hover over the QR code to play the recycling game. Or visit [tinyurl.com/26twz6w3](https://tinyurl.com/26twz6w3).



## DESIGN A POSTER



Cut out images for your poster or recycling bin!

Unfortunately, not all materials are made to be recycled. Visit your local council website and research what you can and cannot put into your recycling container at home. Design a poster to display at school and spread the word!



## MAKE YOUR OWN RECYCLING BIN



It's easier to recycle when we have lots of recycling bins! Remake an old cardboard box into a recycling bin for your bedroom or classroom. Follow these instructions.

### YOU WILL NEED:



A cardboard box from a delivery



Scissors and glue



Scrap paper (use this booklet when you have finished)

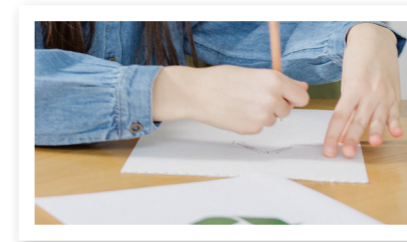


Colouring pencils

### METHOD:



Cut the outside flaps of your cardboard box



Design a bin sticker and attach it to your bin



Place into position and remind your friends to recycle!

These items can be recycled or reused, but not in your recycling containers at home. Where should we take them? Draw a line from the item to the correct collection point.



Batteries



Toys



Clothes



Food waste



Furniture



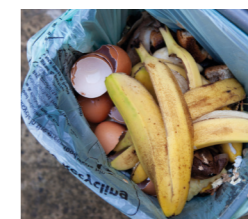
Soft plastics



General waste bin



Charity shop



Food waste bin



Supermarket



Recycling centre

# RECYCLE

Let's look at the problems waste can cause.

## MATCH THE PICTURES TO THE PROBLEM DESCRIPTIONS.



As waste breaks down (decomposes), it can create gases and liquids which harm our natural environment and contribute to climate change.



Some waste plastics found on beaches have travelled miles and miles and end up on the other side of the world!



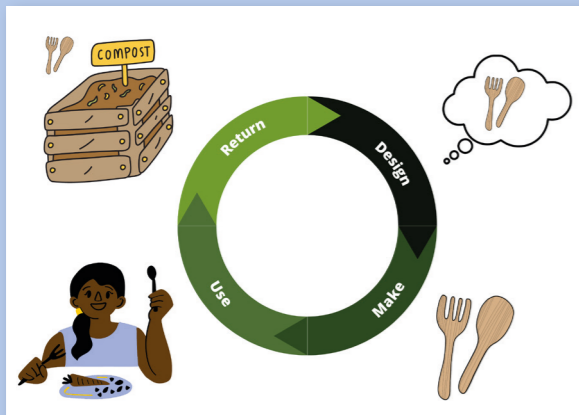
Birds and sea creatures like fish and turtles can eat plastic and it gets caught in their stomachs.



**Beware! Recycling on its own won't reduce waste.** Recycling reduces the quality of the materials and eventually, they can no longer be recycled. This is called **downcycling**.

The **circular economy** focuses on returning and remaking things to avoid creating waste at all. Different materials can be returned in different ways depending on what they are made of.

### Biological cycle



Items made from natural materials, like paper, cotton, cork, and bamboo (that don't contain toxic paint and glue) can break down and return to the soil as healthy food for something else.

### Technical cycle



Items such as TVs and mobile phones are made of materials like metals and plastics that can't decompose. We need to create products that can be taken apart, returned, and remade into something else.

# TELL A FRIEND ONE THING...

What an adventure we have had! What have you learned about the **circular economy** along the way? Share one fact or sustainable swap with a friend. Write, draw, cut and stick here.



“

”



Cut me out and give me to your teacher!



## TEACHER TOKEN: Has your class received free copies yet?

**Fox's Waste Adventure** video series and activity book are designed to support educators embed sustainable waste practices into children's daily habits. They're fun, free, and engaging! Request your free copies at: [pect.org.uk/projects/blueprint/](http://pect.org.uk/projects/blueprint/)



# CONGRATULATIONS!



We did it! We reduced, reused, and recycled all of that waste. Now my rucksack is empty, I can fill it up with lots of snacks. Look! I found some wild blackberries with no plastic packaging in sight.

**It's now time to receive your very own waste adventure certificate.** To download, scan the QR code, or visit: [tinyurl.com/ye22wsju](https://tinyurl.com/ye22wsju). If you're unsure, ask a teacher or adult for help.



## Don't stop there! Remember you can reuse your booklet in lots of ways.



1. Make an origami fox like on the back page!
2. Use it as scrap paper for DIY activities or collages.
3. Use it as wrapping paper for gifts for your family and friends.
4. You can use scrap paper and other materials from nature for other activities. Visit [pect.org.uk/projects/natures-school/](https://pect.org.uk/projects/natures-school/) for more ideas!

**Want to wave goodbye to single-use plastics in your school?** The BLUEPRINT to a Circular Economy Project has teamed up with Commons Seas and Kids Against Plastic as part of their Plastic Clever Schools award. Register your school to equip and empower young people to take on plastic waste. Head to [plasticcleverschools.co.uk](https://plasticcleverschools.co.uk) for more information.



## IDEAS TO SUPPORT LEARNING IN THE CLASSROOM AND AT HOME:

Page	Activity	Notes
4-5	Describing the circular economy	Use this video to support the explanation of the circular economy: <a href="https://youtube.com/watch?v=zCRKvDyyHml&amp;t=74s">youtube.com/watch?v=zCRKvDyyHml&amp;t=74s</a> . Link to natural systems, such as the water cycle: <a href="https://youtube.com/watch?v=1fkWLBzFbJM">youtube.com/watch?v=1fkWLBzFbJM</a> .
6-9	Waste action plan	To accompany Fox, conduct a waste audit as a class, by following BLUEPRINT's Recycled Resources, "Measuring your waste using graphs" activity, available at <a href="https://pect.org.uk/projects/blueprint/">pect.org.uk/projects/blueprint/</a>  Subscribe to Plastic Clever Schools to conduct a plastic specific audit: <a href="https://plasticcleverschools.co.uk">plasticcleverschools.co.uk</a>
12-13	Design challenge	For upcycling ideas, visit: <a href="https://wonderfuldiy.com/upcycling-old-drawers/">wonderfuldiy.com/upcycling-old-drawers/</a> and <a href="https://recyclenation.com/2015/04/11-cool-ways-to-upcycle-bicycle/">recyclenation.com/2015/04/11-cool-ways-to-upcycle-bicycle/</a>  You can also follow PECT's Nature's School activities to design and remake old items into new, including plastic bottles into bird feeders and old T-shirts into bags: <a href="https://pect.org.uk/projects/natures-school/">pect.org.uk/projects/natures-school/</a> .
14-17	Recycling	Using BLUEPRINT's Recycled Resources "Design a Poster" activity, research your local council's recycling advice and create a poster. Display your posters around school to educate others. Find instructions here: <a href="https://pect.org.uk/projects/blueprint/">pect.org.uk/projects/blueprint/</a>

The BLUEPRINT to a Circular Economy Project is funded by the European Regional Development Fund via the Interreg France (Channel) England programme. It will help local authorities move towards a circular economy; the principle of designing out waste and pollution by reusing, repairing, refurbishing and recycling existing resources. There are ten project partners across England and France.

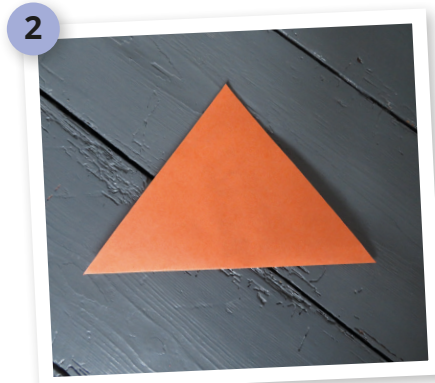
Working with local authorities, social enterprises, schools and households, the project will unlock growth opportunities within the France (Channel) England region. For more information, please visit our website: [projectblueprint.eu](https://projectblueprint.eu)



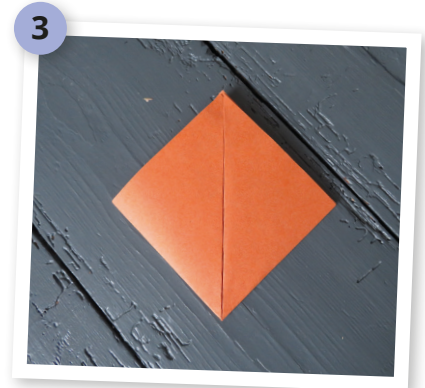
# LET'S MAKE FOX OUT OF THE PAGES OF THIS ACTIVITY BOOK!



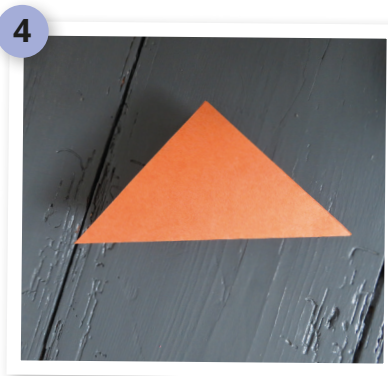
1 Cut out a square piece of paper



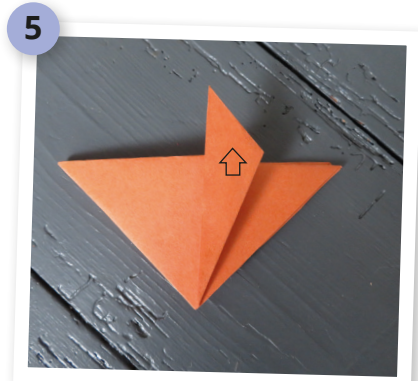
2 Fold in half



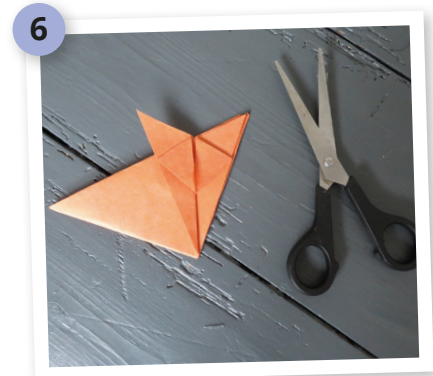
3 Fold to meet the centre line



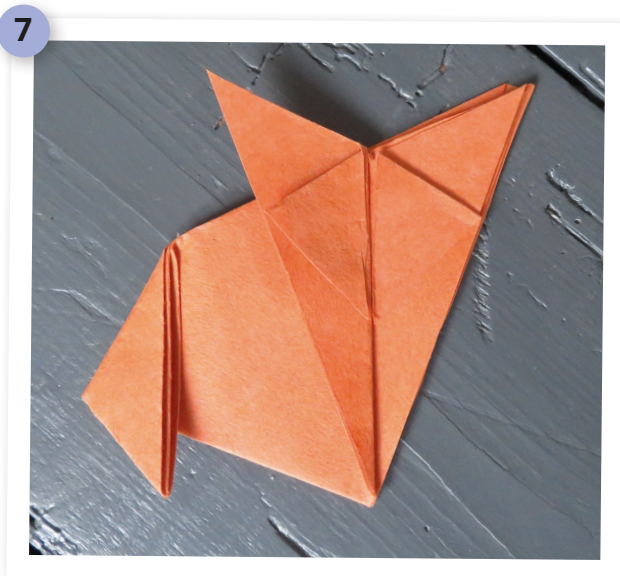
4 Fold in half again



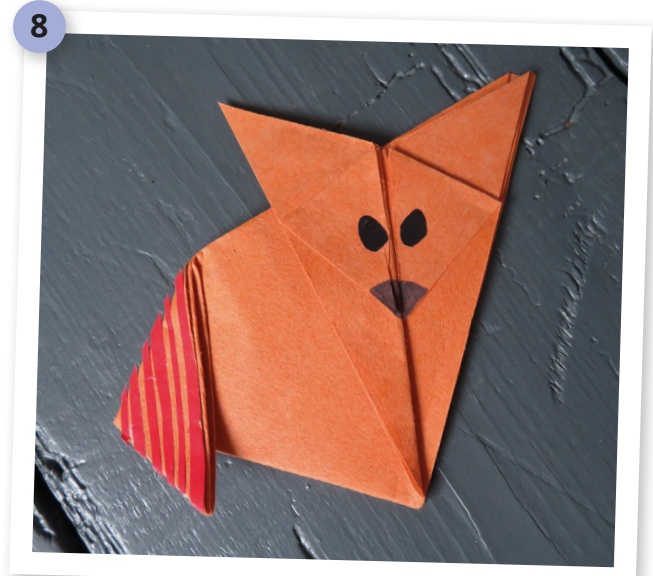
5 Open the ↑ part and flatten



6 Turn around



7 Fold the tail inwards and decorate



## A FOX

\*Inspired by Fumiaki Shingu.

Visit [projectblueprint.eu/campaigns/](https://projectblueprint.eu/campaigns/) to learn more about the BLUEPRINT campaigns.