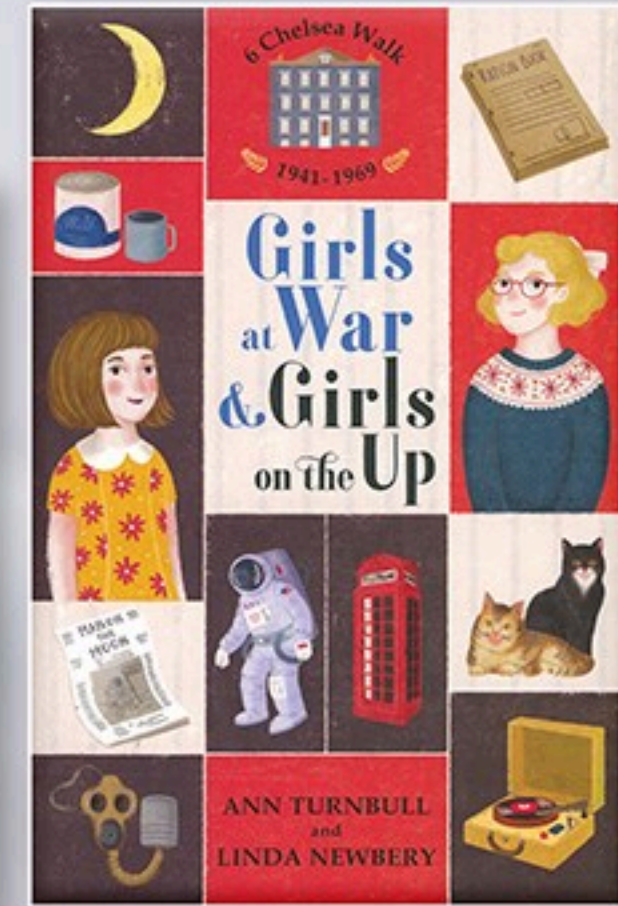
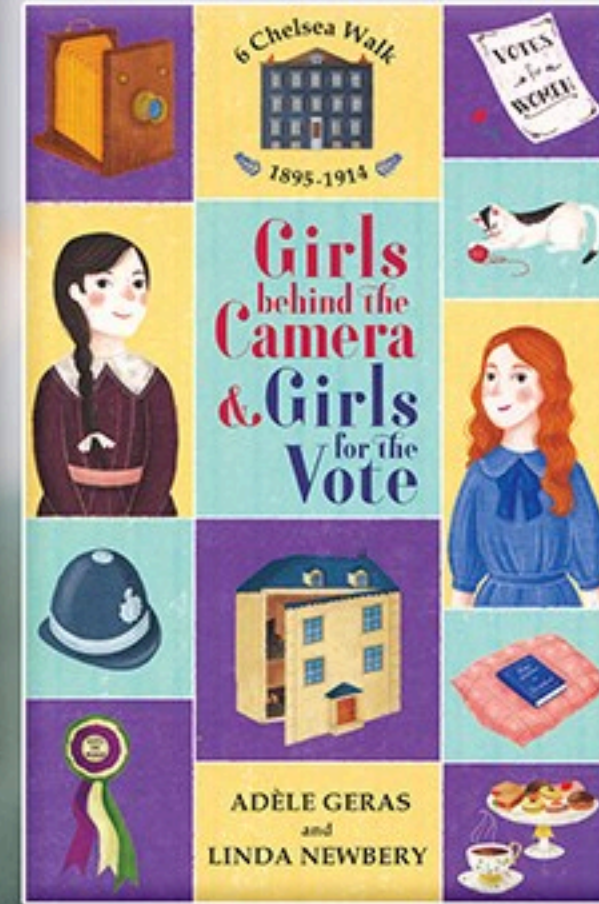


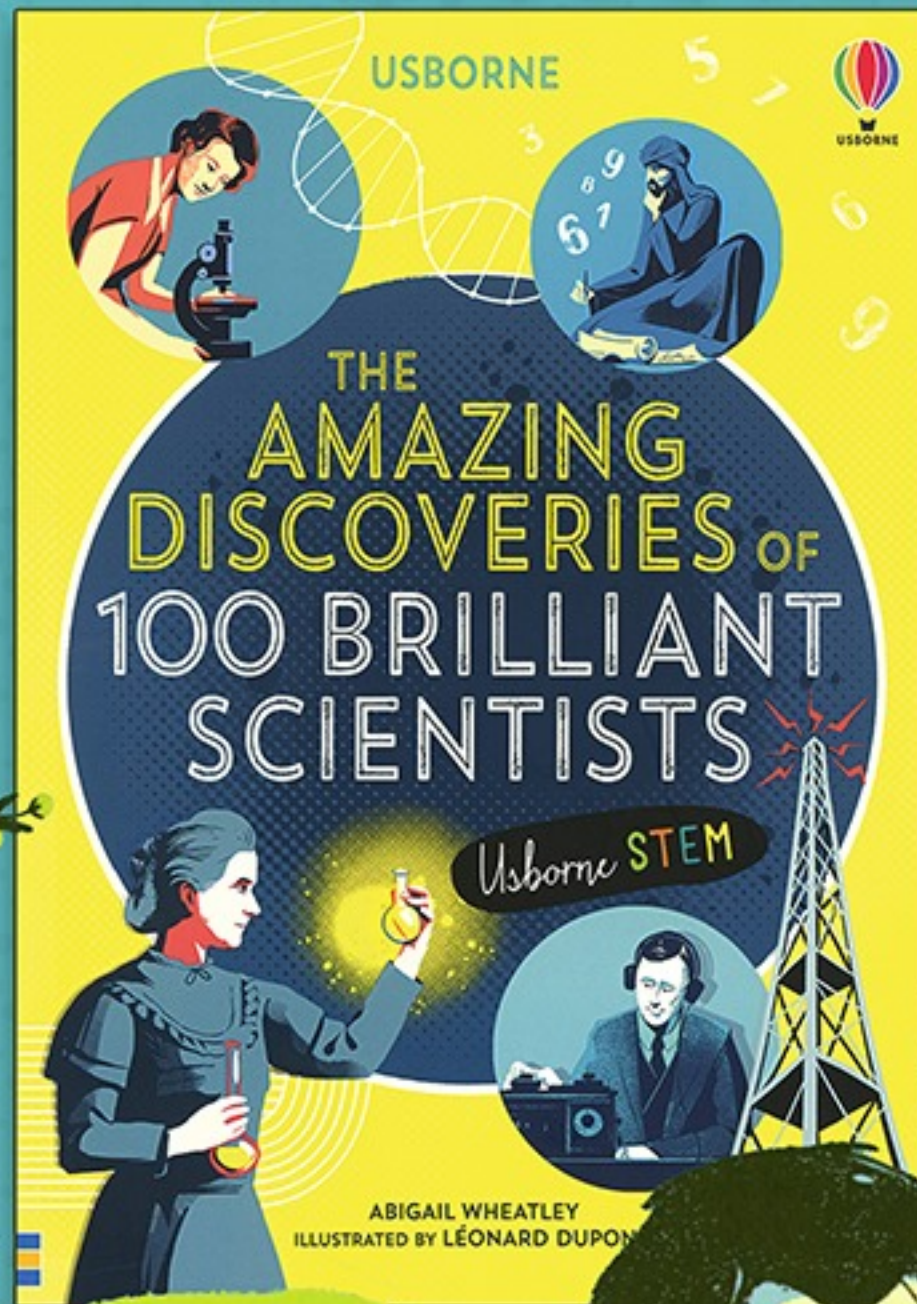
*An orphan in exile.
A band of rebel girls.
A prince whose
throne has been stolen.*

*Come on a journey
full of danger,
intrigue, adventure
and incredible secrets.*



A thought-provoking series that explores feminist history in Britain through the lives of fictional characters living in one real-life house – 6, Chelsea Walk, London.

DISCOVER A BRILLIANT TITLE!



Every scientist dreams of doing something that can help the world.



HOW SECRET WARTIME CODES REVEALED A COMPUTING GENIUS

During the Second World War, different **code-breaking machines** were created by several remarkable scientists. One of these scientists was **Alan Turing**, a British mathematician so far ahead of his time that he wrote about **computers** before they even existed. His code-breaking machine brought computers one step closer.

BEGINNINGS

Turing first published his ideas about computers in 1936, calling them **Turing machines** – though at that time they existed only in his imagination. When the Second World War broke out in 1939, Turing went to work for the British military, cracking **codes** used by their enemies, the Germans.

These codes had been created using devices called **Enigma machines**. Inspired by a Polish code-breaking machine, Turing designed the **Bombe** – a machine with hundreds of rotating cylinders powered by **electricity**.

BRILLIANT BOMBE

The Bombe **decoded** Enigma messages quickly. Historians believe this may have **shortened the war** by two years and **saved as many as 14 million lives**.

More than this, Turing's **ideas** about computers have gone on to influence generations of **computer scientists**.

A COLOSSAL EFFORT BUILT THE VERY FIRST COMPUTER

The first ever **programmable electronic computer** was nicknamed **Colossus**, and cracked the most difficult codes invented during the Second World War. It was designed and built by a British engineer named **Tommy Flowers**.

SETTING TO WORK

In 1943, Flowers was asked to design a machine to crack a very complex German code – the **Lorenz cipher**. Alan Turing and other code-breakers had found a slow, long-hand method for breaking the cipher, but needed a machine to speed things up.

Flowers worked on a machine that used **electrical circuits** made from glass **vacuum tubes**. These weren't always dependable, but Flowers believed he could build a more powerful, reliable machine using thousands of vacuum tubes.

JUST IN TIME

The code-breakers dismissed Flowers' idea, but he continued, designing and building a **vast machine** named **Colossus**. It worked. Then, in 1944 an upgraded version of it broke codes relating to the D-Day landings – operations that **changed the course of the war**.

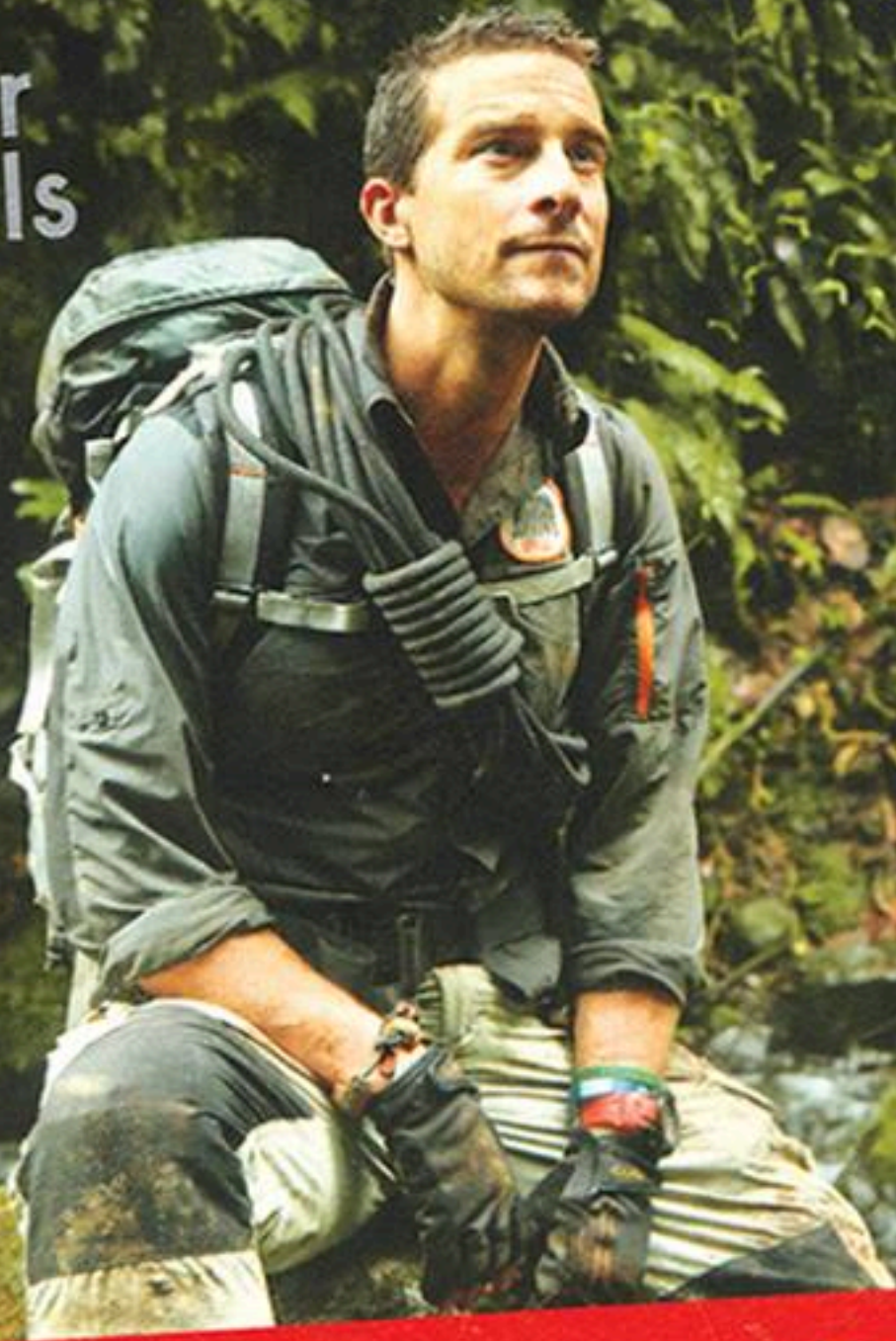
Colossus was the **world's first** programmable, electronic, digital computer. At the end of the war, Flowers was ordered to **destroy** it, to protect national security. So, his contribution to computing went unrecognized for many years.



USBORNE
BOOKS & MORE

EMBARK ON AN EXCITING ADVENTURE IN THE GREAT OUTDOORS WITH BEAR GRYLLS!

Bear Grylls



SURVIVAL SKILLS HANDBOOK

VOLUME 1

CAMPING • MAPS & NAVIGATION
KNOTS • DANGERS & EMERGENCIES

FIRE MAKING

Humans have been making and cooking on campfires for a few hundred thousand years. Making fire is still an important skill to learn so that you can keep warm and cook when camping.

Fire triangle

There are three elements that must be present for a fire to exist: oxygen, fuel, and heat. You'll need them in the right combination to get your fire started. Removing one or more of these elements will put out the fire.



Tinder

Tinder is a fine flammable material that easily catches a spark.



Bark
Look for dry inner bark from dead logs.



Fungus
Inner flesh from wet fungus is flammable.



Moss
Dead, dry moss makes an excellent fire starter.



Cotton ball and petroleum jelly
A highly flammable mix.

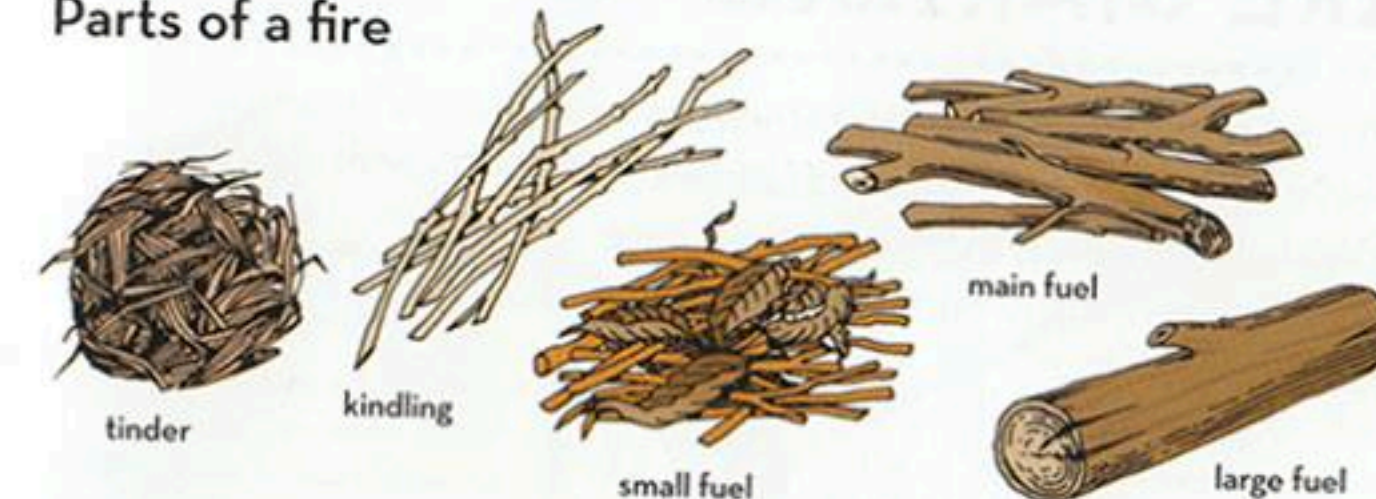


Grass
Break down stalks of dry grass into fine fibers.



Leaves
Dry dead leaves are often easy to find.

Parts of a fire



Build it up

A good fire is built up gradually. Start with tinder, then once the tinder has begun to burn, add kindling—dry twigs and sticks no thicker than your little finger. As coals are created, slowly add larger pieces of fuel.

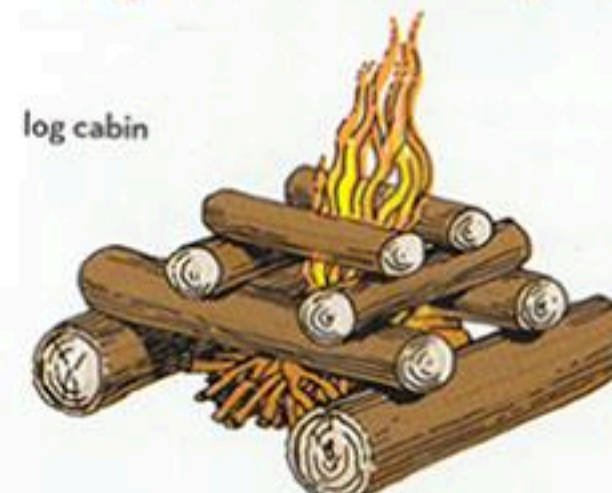
Starting structures



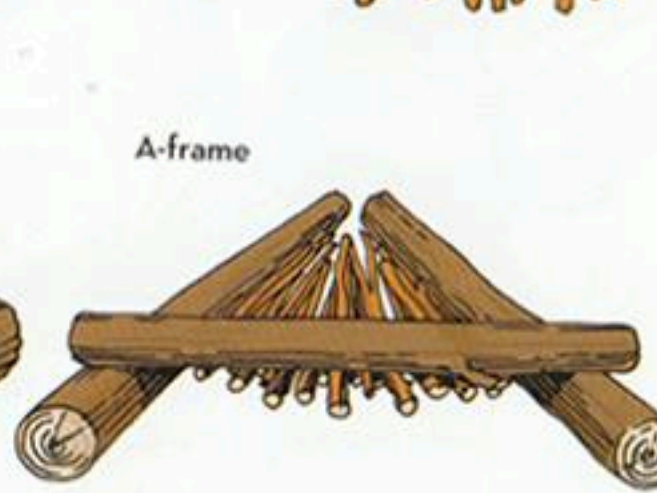
teepee



lean-to



log cabin



A-frame

Discover how to camp in the wild, find out how to spot and avoid dangers, learn how to find your way in any environment, and master amazing knots. Includes step-by-step instructions and tips from Bear!



USBORNE
BOOKS & MORE

BUILD YOUR OWN WEBSITE!



5. Add a second picture below the site banner by typing in this.

```


    
```

Note: style="float: right; width: 100px; height: 100px; border: 1px solid black; margin-top: 10px; margin-left: 10px;" puts different types of code in different colors. Tags are blue. Attributes are red. Anything between quotation marks (" ") is purple.

6. Now it's time to introduce your website. Type the following and close your <section> tags.

```

<p>Welcome to the Fox Hill Community Space website. From art to music to ping pong, you will find out everything you need to know about our community space and what goes on here.</p>
<p>Make yourself at HOME on our homepage and have fun exploring the site.</p>
</section>
    
```

7. Finally, add a footer at the bottom or FOOT of your page, like this. Then close your <body> and <html> tags.

```

<div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto 10px auto;">
    <small>A footer usually contains information about who made the page, contact information, or a site map.
    </small>
    <small>Made by A. Fox</small>
</div>
</body>
</html>
    
```

8. Save your work and run your file in your browser. This is what you should see...

LINKING PAGES

Now, you're going to make a new page with links to other sites – and link it to your homepage.

- Open your template and save a new copy named 'links.html' in your website folder.
- Give your new page a title by typing between the two <title> tags.


```

<title>Fox Hill Links</title>
            
```
- You're going to add the banner to the top of your page again, but this time it's also going to be a link to your homepage. Type this after the first <body> tag.


```

<div style="text-align: center; border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto 10px auto;">
                <small>The 'a' stands for 'anchor'.</small>
                <a href="index.html" style="text-decoration: none; color: inherit; text-align: center; padding: 5px 20px; border: 1px solid black; border-radius: 10px; display: inline-block;">
                    Home
                </a>
            </div>
            
```

This tag will become a link you can click on.

'href' is an attribute that tells the browser where the link is.

This adds a link.
- Type in the following to add a second link.


```

<p>Here are links to websites recommended by Fox Hill Community Space.</p>
<a href="https://www.usborne.com">Click here to find out where Fox Hill Community Space gets the books for their library...</a>
            
```

This adds ordinary text.

The text in black is what you'll see on the page.

TYPES OF LINKS

Web addresses are known as 'urls'. A link to another page on the same website is known as a **relative url**. Think of your website as a family – each page is a 'relative' of the other pages.

A link to a separate site is an **absolute url**. For these you need to add **http://** or **https://** before the address.

```

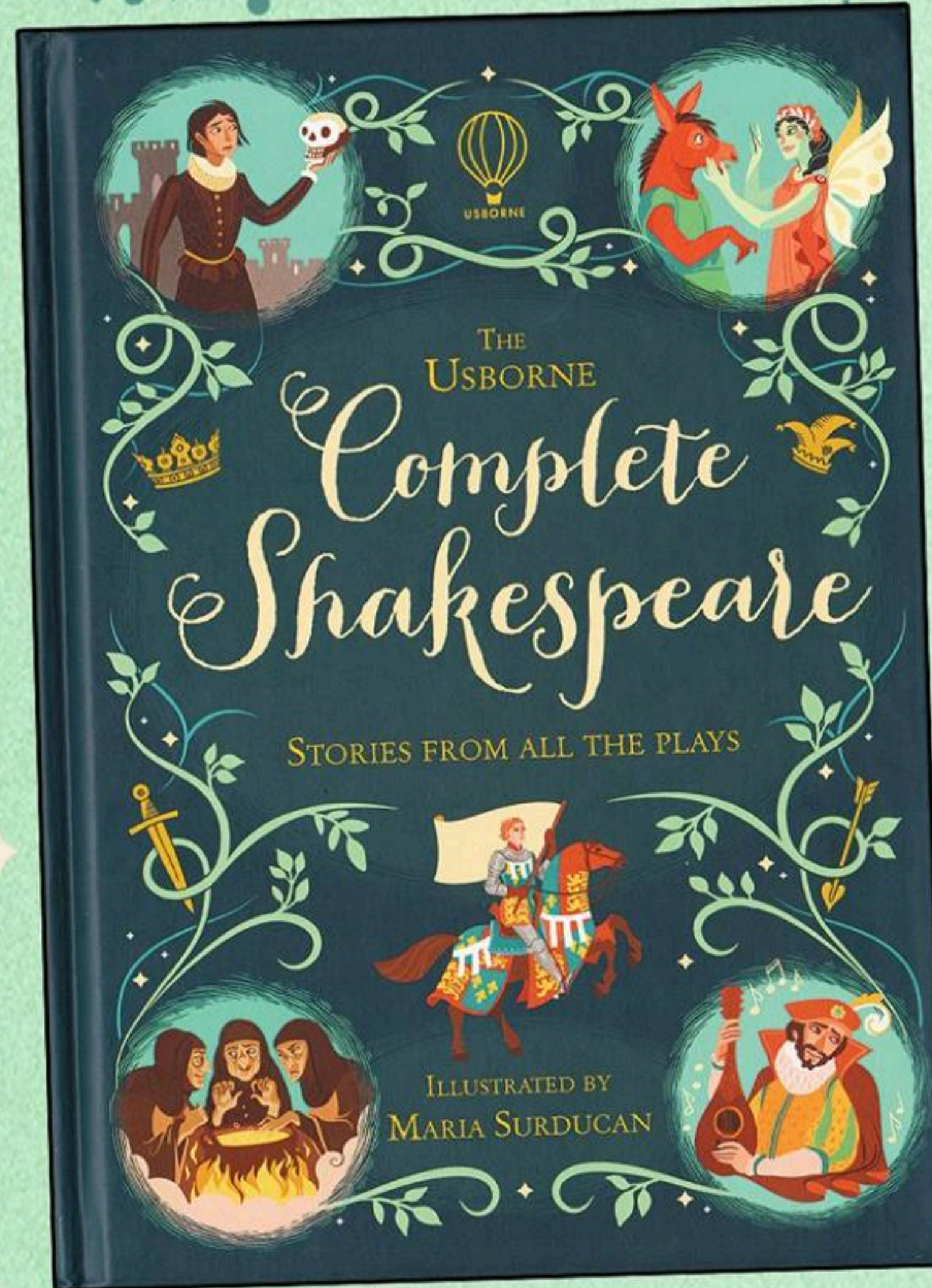
<ul class="menu">
  <li>
    <a href="videos.html"> Videos
  </li>
  <li>
    <a href="links.html"> What's on
  </li>
  <li>
    <a href="whatson.html"> Links
  </li>
</ul>
    
```

Visible part of page

Only the tip of each bar is visible until it slides inwards.

Design and build a real, working website from scratch using HTML, CSS, and Javascript. Includes simple step-by-step instructions written especially for beginners. Also includes extra help and downloads online.

Complete Shakespeare



From Romeo and Juliet's star-crossed love, to the dark ambitions of Macbeth, the characters from Shakespeare's plays are famous throughout the world. This collection of stories from all the plays, with beautiful illustrations and quotations, is the perfect introduction to Shakespeare.

In The Physics of Popcorn, you'll discover the truth about toast, learn how the microwave oven works, and conduct experiments with static electricity!



POP
into this
Great Title!

THE PHYSICS OF POPCORN

DISCOVER AND LEARN WITH 22 EXPERIMENTS



THE CURIOUS WORLD OF
KITCHEN SCIENCE

DR. AIDAN RANDLE-CONDE



WHAT HAPPENS?

When light moves through water, it refracts and separates out the different wavelengths (see pages 52-53 for more on refraction). Each wavelength has its own color, and the colors spread out. When the light shines through the water, it makes rainbows: their shapes depend on the shape of the glass and the angle of the light.

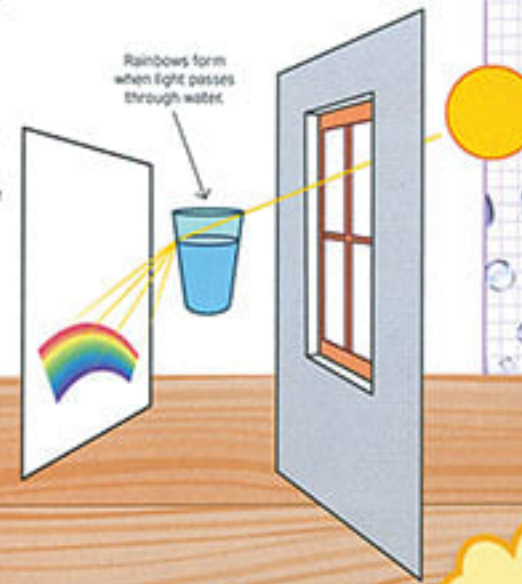
The first rainbow happens when the light reflects off the water once and refracts. To get the second rainbow, the light needs

to reflect off the water twice and refract twice. The second reflection means that the order of the rainbow's colors will be reversed compared to the first rainbow. It also means that the second rainbow will be fainter because not all the light will reflect once, and even less light will reflect twice. The sun produces enough light that a second rainbow is usually visible, but a flashlight usually does not produce enough light to make the second rainbow visible.

If you are using sunlight:

1. Fill the glass three-quarters full with water.

2. Place the glass on a table so that half of it is illuminated by the sun. Place the paper on the other side of the glass; you should see a rainbow appear. You may even be able to make a large rainbow on a wall. See if you can identify a secondary rainbow (a fainter second rainbow outside the main rainbow).



THE BIOLOGY OF BANANAS



DISCOVER AND LEARN WITH 20 EXPERIMENTS



THE CURIOUS WORLD OF KITCHEN SCIENCE
KATIE STECKLES

THE CHEMISTRY OF COLA

DISCOVER AND LEARN WITH 20 EXPERIMENTS



THE CURIOUS WORLD OF KITCHEN SCIENCE
DR. JAMIE GALLAGHER



NEW SERIES!

EXPLORE THE KEY PRINCIPLES AND PRACTICES OF EVERYDAY SCIENCE BY USING ANALOGIES, EXPERIMENTS, AND RESEARCH WITH FOOD AND DRINK IN THE HOME KITCHEN ENVIRONMENT!

USBORNE
BOOKS & MORE

EXPERIMENT: ICE AND OIL

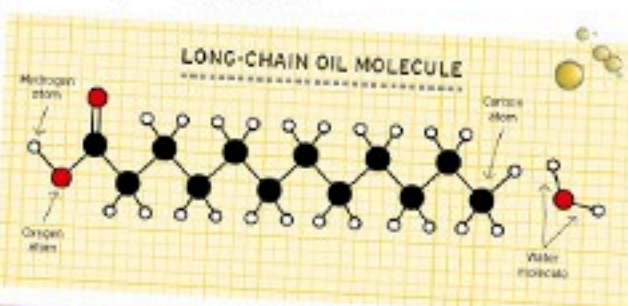
When you add ice to your drink, the ice cubes will float and gradually melt away. But since cola is almost entirely water, it isn't possible to see the melted ice mix with the liquid already in the glass. So, in this experiment, you will see very clearly the density difference between water and ice by separating the two with a layer of oil.

Water and oil don't like to mix. Pages 18–19 explained that water is made of one oxygen and two hydrogen atoms in a "V" shape. This molecule is "polar," which means it has a positive charge at one side and a slight negative charge at the other. Oils, on the other hand, are made of long carbon chains and are nonpolar (or, less polar than water).

Polar molecules are drawn to other polar molecules, so water molecules like to stick together. If you try and mix a nonpolar liquid with water, the water

molecules will draw together because of their uneven electron charge and be repelled by the nonpolar liquid.

Since the water and oil won't mix, the least dense liquid will form a layer on top of the other one. Water is denser than most cooking oils, so in this experiment the vegetable oil will float on the surface of the water. Ice, however, is less dense than water, and also less dense than many cooking oils, so the oil will float on the water, and the ice will float on the oil.



YOU WILL NEED:

- 1 tall, thin, transparent glass, tube, or measuring cylinder
- 200 ml (7 fl. oz.) of vegetable oil
- 200 ml of water
- Red or blue food coloring (optional)
- Ice cube tray (and water to fill it)

WHAT TO DO:

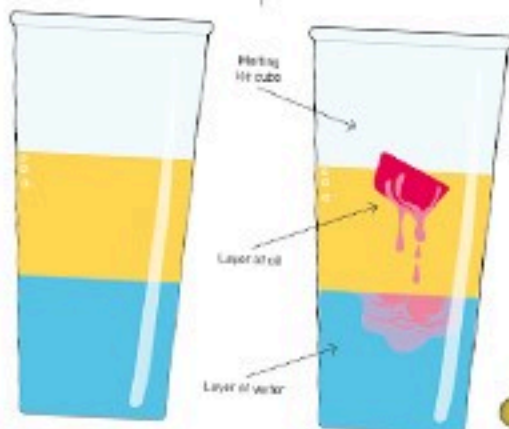
1. Make ice cubes (the cubes with food coloring will be easier to see, but they aren't essential).

2. Add the water and the vegetable oil to the transparent container. Leave them to separate out, until the oil is floating on top of the water.

3. Add a completely frozen ice cube to the oil. It should float near the top.

4. Watch as the ice begins to melt, and the denser water drips down through the oil to join the rest of the water below.

5. Eventually so much of the ice will have melted that the weight of the water will drag the whole cube down, though it might also happen if water drips off the cube.



EXPERIMENT: MAKING CELL COOKIES

A great (and delicious) way to remember all the parts of a cell is to decorate some cookies to look like different kinds of cells. Pick your favorite type of cell from pages 12–13—or do them all! Use the diagrams to see what you'll need to include.

YOU WILL NEED:

- Plain cookies (round, rectangular, or uneven shaped)
- Different colors of ready-made frosting in squeezable tubes
- Different sizes of candy sprinkles, chocolate chips, and other tasty things to stick on

WHAT TO DO:

1. Decide what type of cell you're going to make—animal, plant, yeast, or bacteria—or maybe make one of each!

2. For each of the parts of the cell you want to make, decide which type of decoration is going to represent it. You could use frosting to pipe a cell wall around the outside, a large candy for the nucleus, green gumdrops for the chloroplasts, a marshmallow for the vacuole, and sprinkles for the tiny ribosomes.

3. Use frosting to stick the candies on the cookies in the right arrangement.

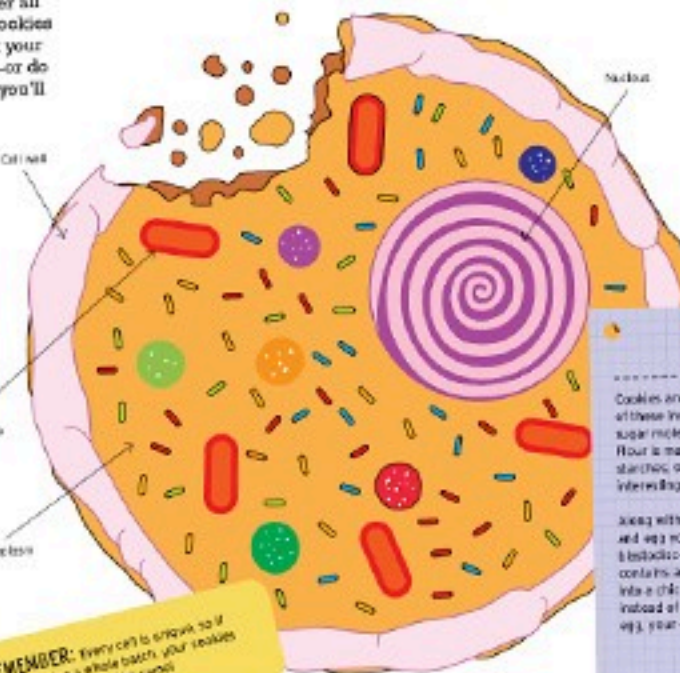
4. Share and enjoy delicious cell cookies! Ask people if they can identify what all the parts are.

CELLS IN YOUR CELLS

Cookies are usually made with flour, sugar, butter, and eggs. Most of these ingredients don't include any cells: sugar is made up of sugar molecules, and butter is a mixture of fats and proteins. Flour is made by grinding up wheat kernels, and is a mixture of starches, sugars, and proteins. But the egg contains the most interesting biology! Read all about it on pages 70–79.

Along with egg whites (which is mostly water, with a little protein), and egg yolks (high in fats and proteins), the egg also contains a little bit of a small white dot on the surface of the yolk, which contains around 20,000 cells. These are what might have grown into a chicken if the egg had been fertilized and incubated. Instead of being made into cookies, so if they were made with egg, your cell cookies could contain the remnants of actual cells!

REMEMBER: Every cell is unique, so if you're making a whole batch, your cookies don't have to all look the same!



Unleash your CREATIVITY!

DEVELOP a brand
Design a logo **RUN WILD**
Pick a palette
Apply your brand
STYLE your own lettering

Usborne DESIGN Activity Book

MAKE a movie poster
Initial ideas
Rough design
Final poster

DESIGN a board game

PLAN a webpage

Here are two posters for two very different concerts. **ADD** the word **MUSIC** in a typeface that works for each kind of concert.

Try out ideas here first. Then add the word **MUSIC** in the white space on each poster.

ORCHESTRAL CONCERT

Sophisticated
Calm
Swingy



ROCK BAND CONCERT

EYE-CATCHING
BOLD
HEAVY

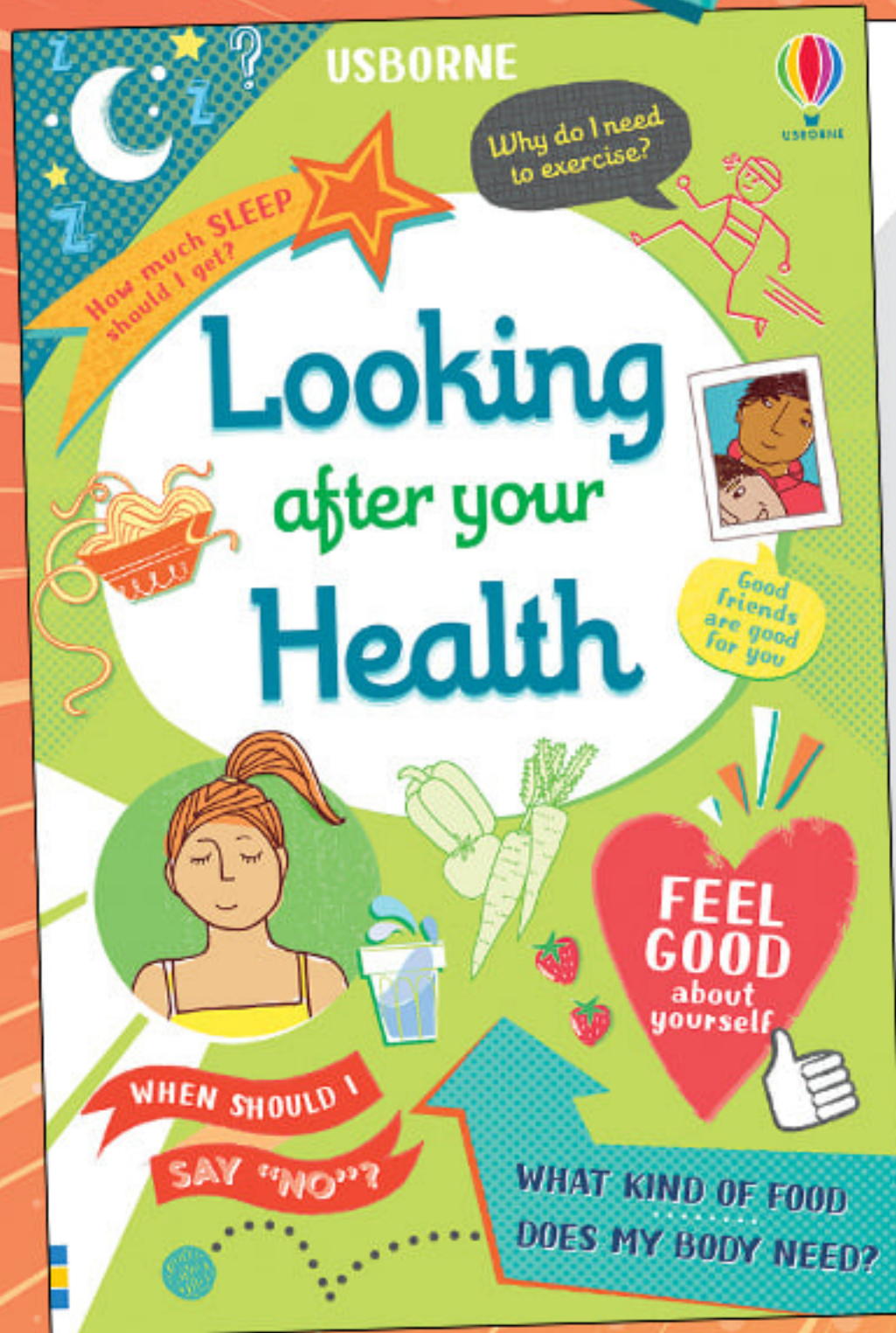


An entertaining activity book packed with fun design projects - from lettering and book covers, to costumes and gadgets. Full of helpful tips and space to imagine, draw and create.



LOOK!

A USEFUL GUIDE FOR TEENS!



3 KIDNEYS

Your (two) kidneys help filter your blood, and create urine (pee). All the blood in your body will pass through your kidneys many times a day.

4 LIVER

Your liver removes toxins from your blood, and doesn't work as well if you're overweight. (But luckily for us, it can usually repair itself if it's not in tip-top condition. Hooray!)

5 LUNGS

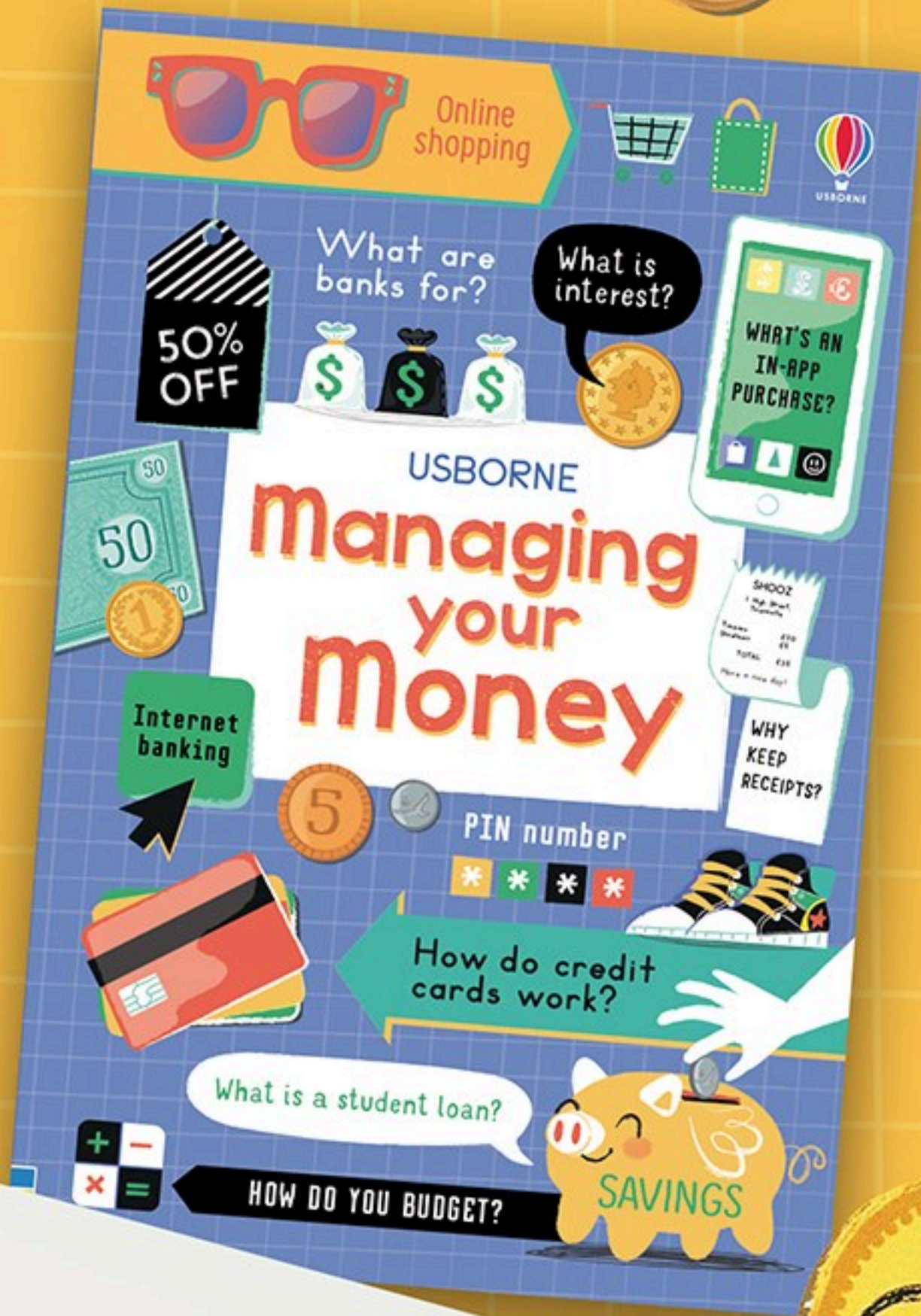
Your lungs take in oxygen as you breathe in, and get rid of carbon dioxide as you breathe out. Your left lung is a bit smaller, to fit your heart in your chest, but they both work very hard.

Yeah, if I had to pick 5, these would be my faves.




THIS USEFUL GUIDE TO TEENAGE HEALTH OFFERS CLEAR ADVICE ON EATING AND SLEEPING WELL, COPING WITH STRESS, AND BUILDING EXERCISE INTO YOUR LIFE. THERE'S ALSO HELPFUL GUIDANCE ON THE PRESSURES THAT CAN SURROUND SEX, DRUGS AND ALCOHOL. PACKED WITH PRACTICAL TIPS, IT INCLUDES FUN QUIZZES AND CHECKLISTS TO HELP YOU ENJOY A HEALTHY LIFESTYLE.

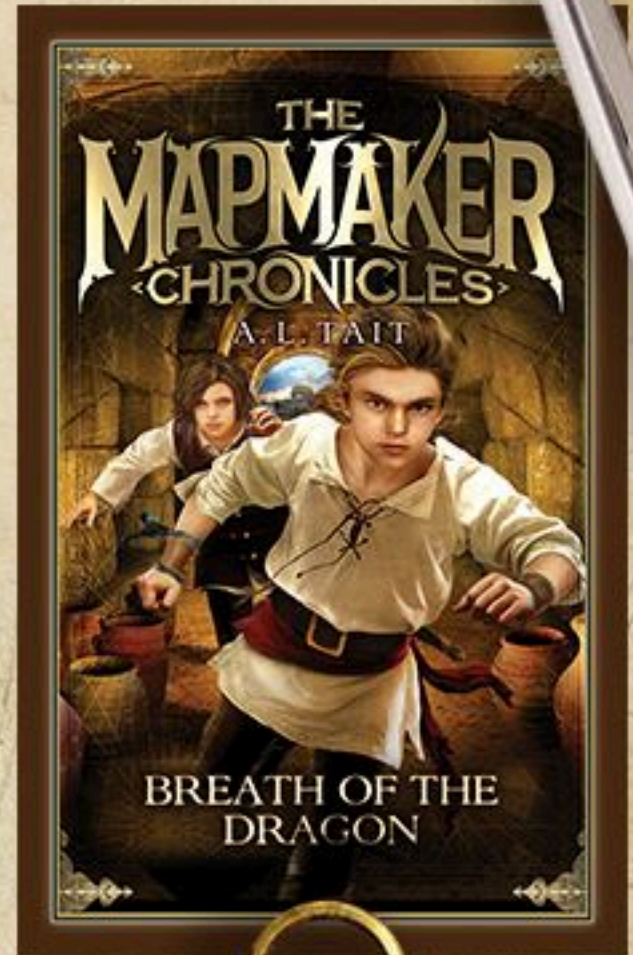
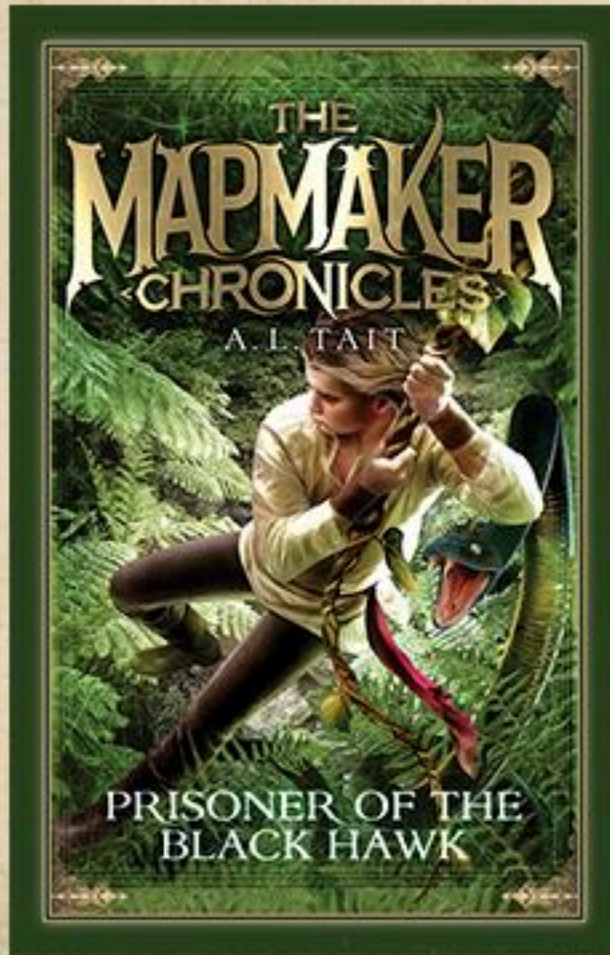
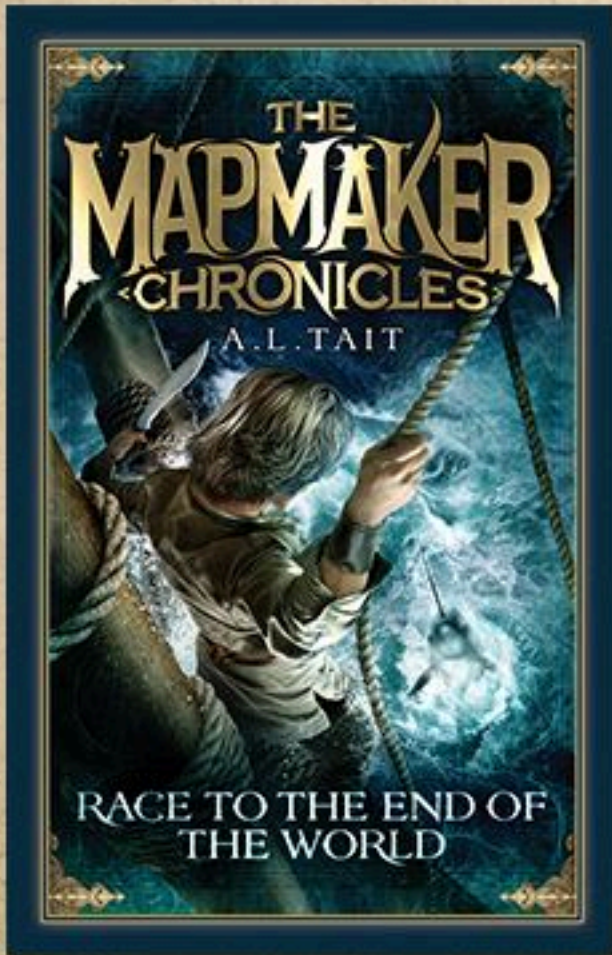
Get invested in a Good Book!



Filled with practical advice on such topics as how to save money, how to be a smart shopper, and how to budget, it will equip young people with the skills they need to survive in the world of money - now and in the future.



Discovery and danger
lie just off the edge of the map!



The Mapmaker Chronicles is an exciting
adventure series about a race to map the
world ... and a boy who discovers more
than he ever imagined!



TÍTULOS EN ESPAÑOL!

(TITLES IN SPANISH!)

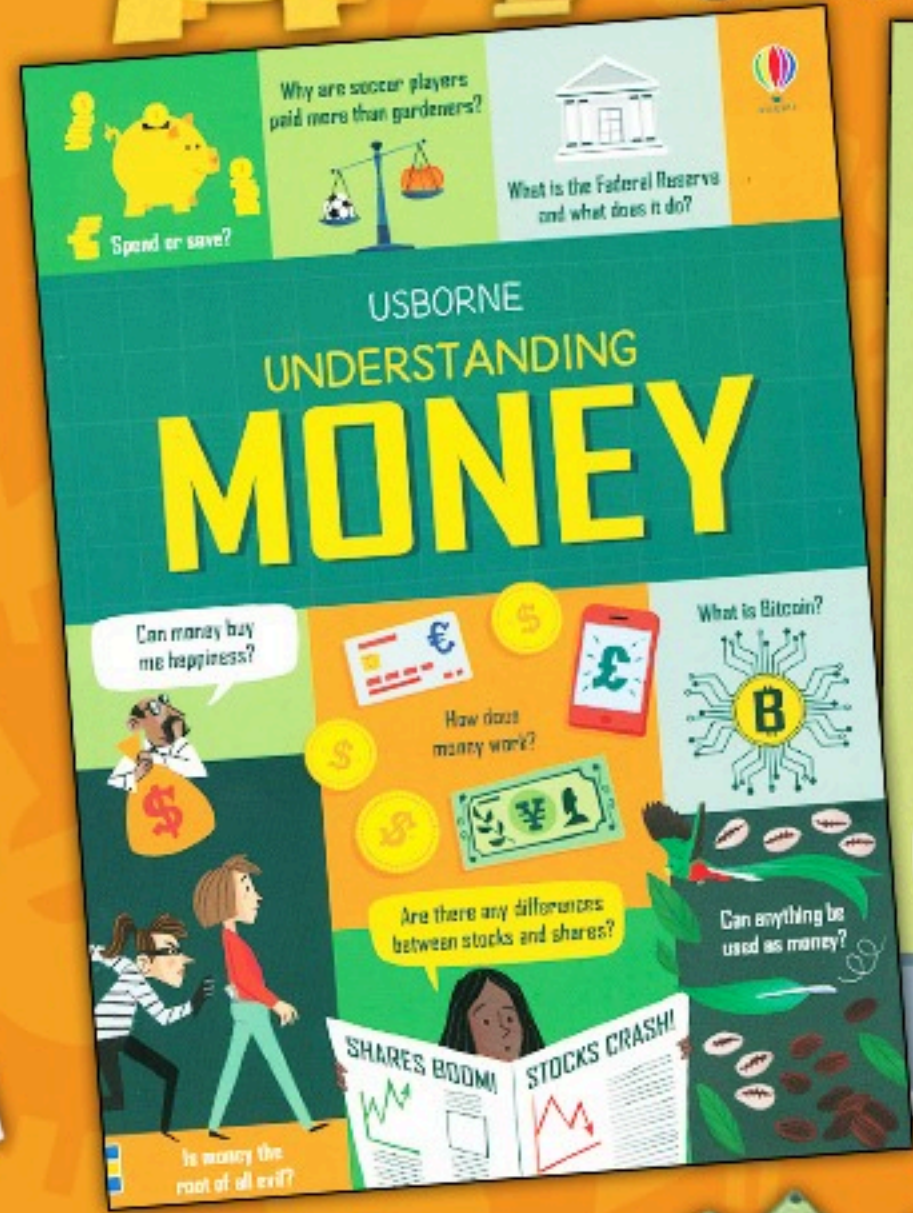


Attention Aspiring Astronomers!

More than just a journal...
...inspirational, beautifully illustrated, and includes plenty of space for your own notes and sketches.



INVEST IN A GOOD BOOK!



Growing money in a bank

Money isn't just for spending. You can use it to make even more money. One way to do this is by depositing it in a bank account that earns interest. It's a handy way of earning a bit more and saving for the future. Here's how it works.

If you've read chapter 3, you'll know that your money doesn't just sit in a bank account doing nothing...

The bank makes money from investments, and interest on loans to customers.

The amount of interest you receive is a percentage of the money in your account. This is known as an **interest rate**. Different types of accounts have different interest rates. If you don't spend your money, it will grow by different amounts, depending on the type of account you put it in.

Our savings account has an interest rate of 4.5%. After one year \$100 becomes \$104.50 if you don't add or take money out.

Our checking account doesn't earn any interest. After one year, \$100 will still be \$100, if you don't add or take money out.

GREEN TREE BANKING

Checking accounts tend to have lower interest rates than savings accounts. Why?

Checking accounts are designed to make everyday spending easier.

- I can access my money immediately using a debit card.
- I can pay for stuff online.
- And I can take out my money wherever I want.

Most people use their checking account several times each week, so the amount in the account changes often.

Savings accounts are designed to help people save and grow their money.

- I can only access my money by transferring it into my checking account, or by going to the bank directly.
- And I can only transfer money a limited number of times each month.

It's harder to use money in a savings account to pay for things, so the amount in the account changes quite rarely.

Banks need reliable sources of money so that they know how much they can lend out or invest. The amount in savings accounts changes less than checking accounts, making savings accounts more reliable. So banks try to encourage people to open them by offering higher interest rates.

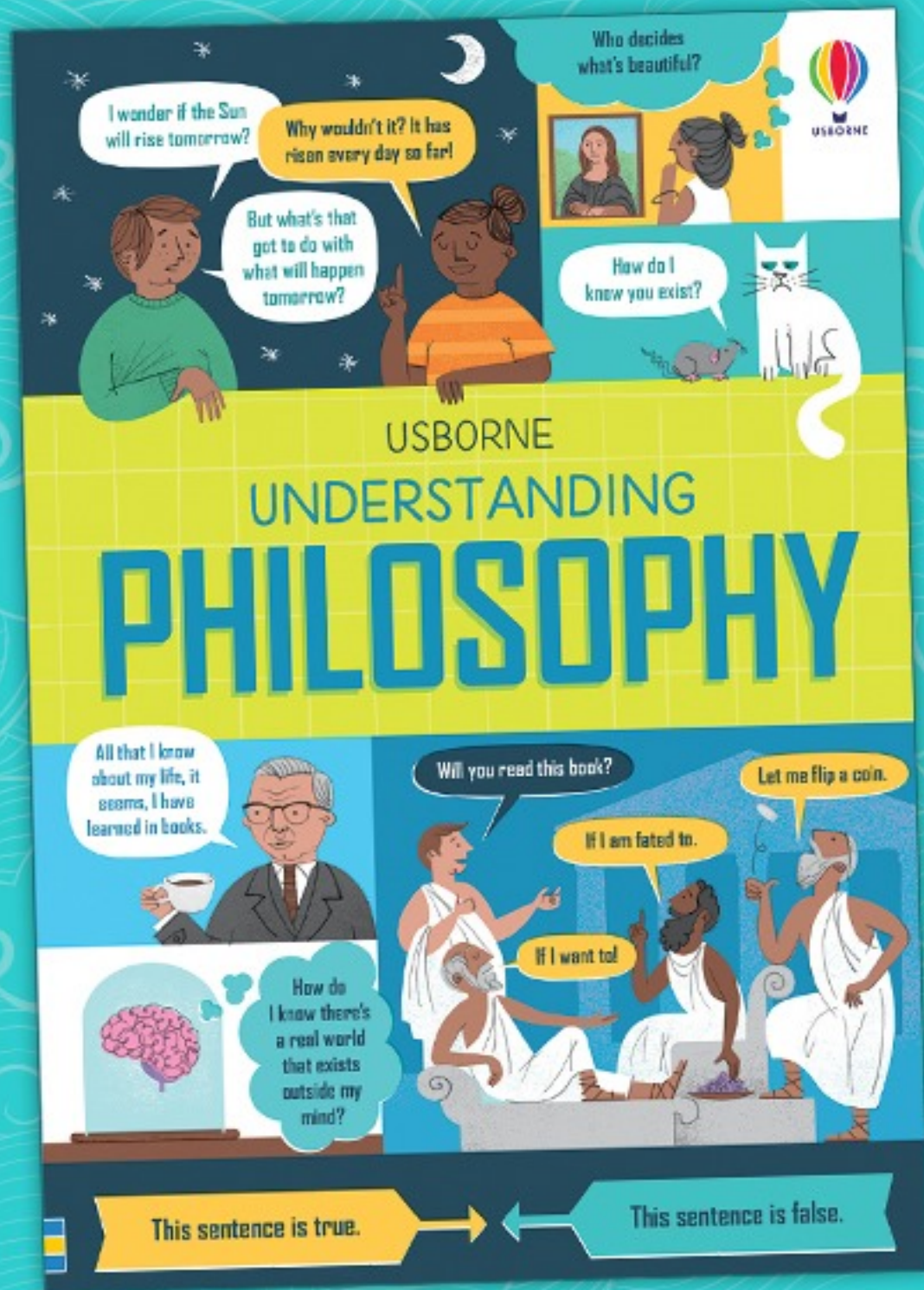
Who doesn't want to see their money grow fast?

77



This informative introduction to the world of money covers everything from bank accounts, earning, and borrowing to government spending, taxes, and inflation.

It includes bright, infographic pictures, a detailed glossary, and links to specially selected websites where you can visit a virtual bank, see money from around the world, and more!

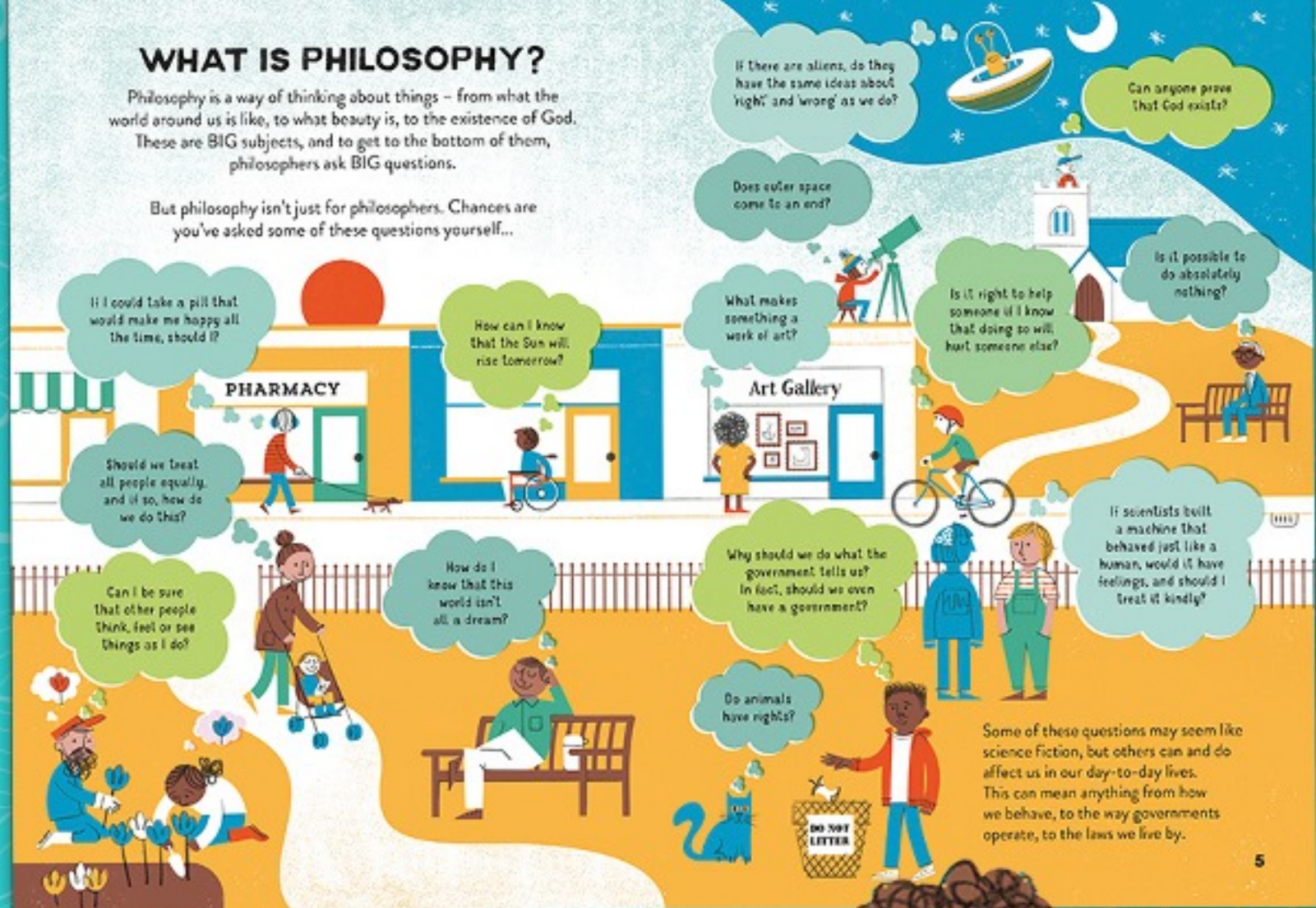


discover PHILOSOPHY!

WHAT IS PHILOSOPHY?

Philosophy is a way of thinking about things – from what the world around us is like, to what beauty is, to the existence of God. These are BIG subjects, and to get to the bottom of them, philosophers ask BIG questions.

But philosophy isn't just for philosophers. Chances are you've asked some of these questions yourself...



Some of these questions may seem like science fiction, but others can and do affect us in our day-to-day lives. This can mean anything from how we behave, to the way governments operate, to the laws we live by.

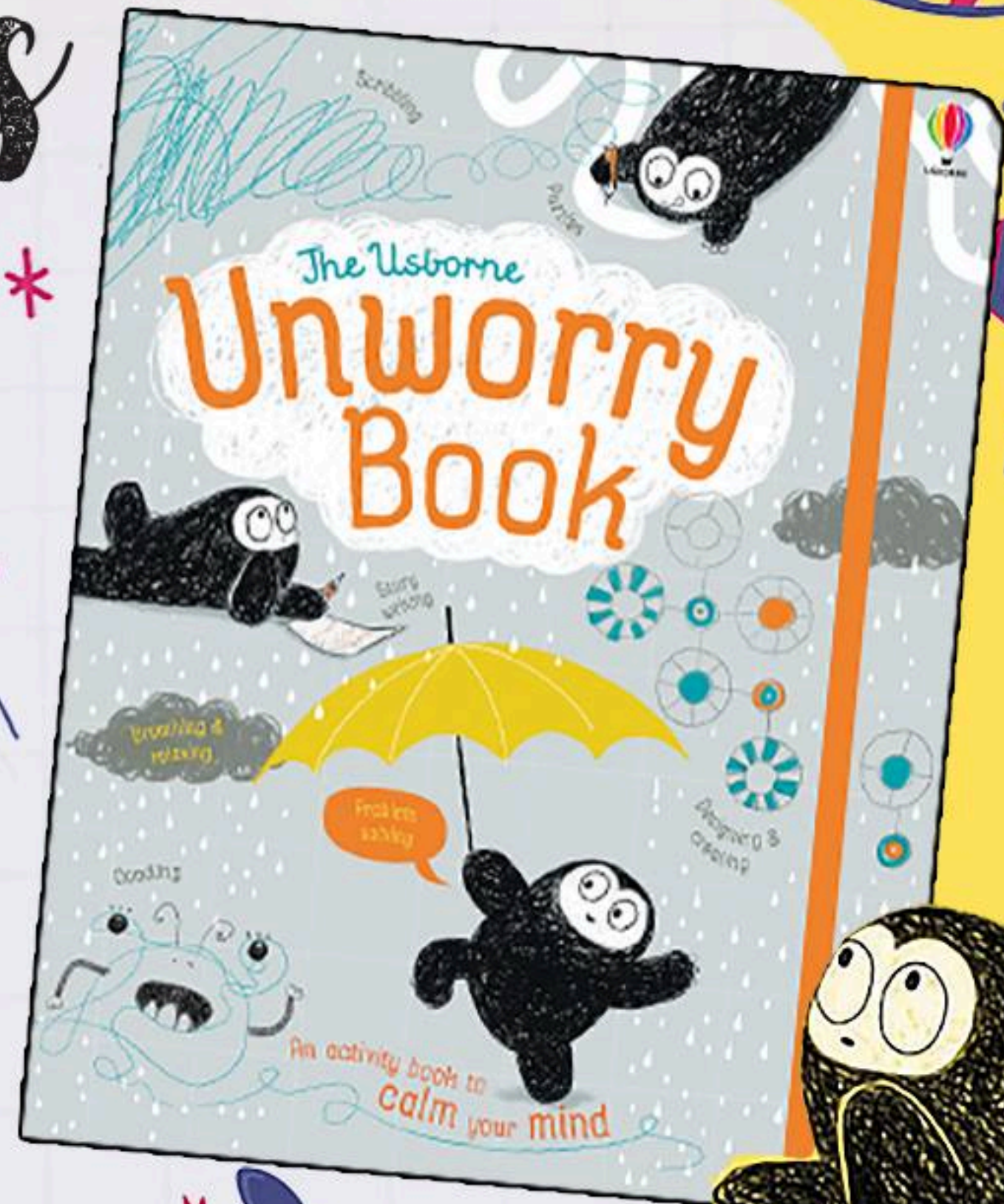
Who are we? Where are we going? What is the meaning of life? What do I know? Philosophy seeks to explore all of these questions and helps us ask other questions about the human experience.

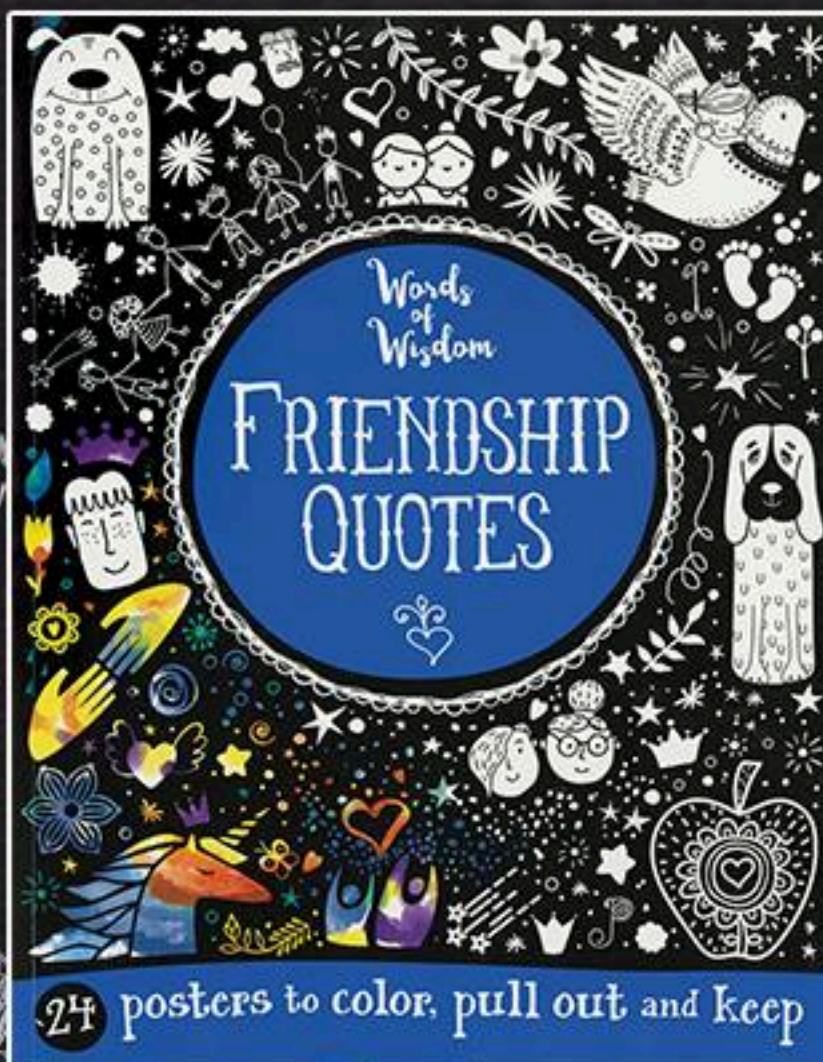
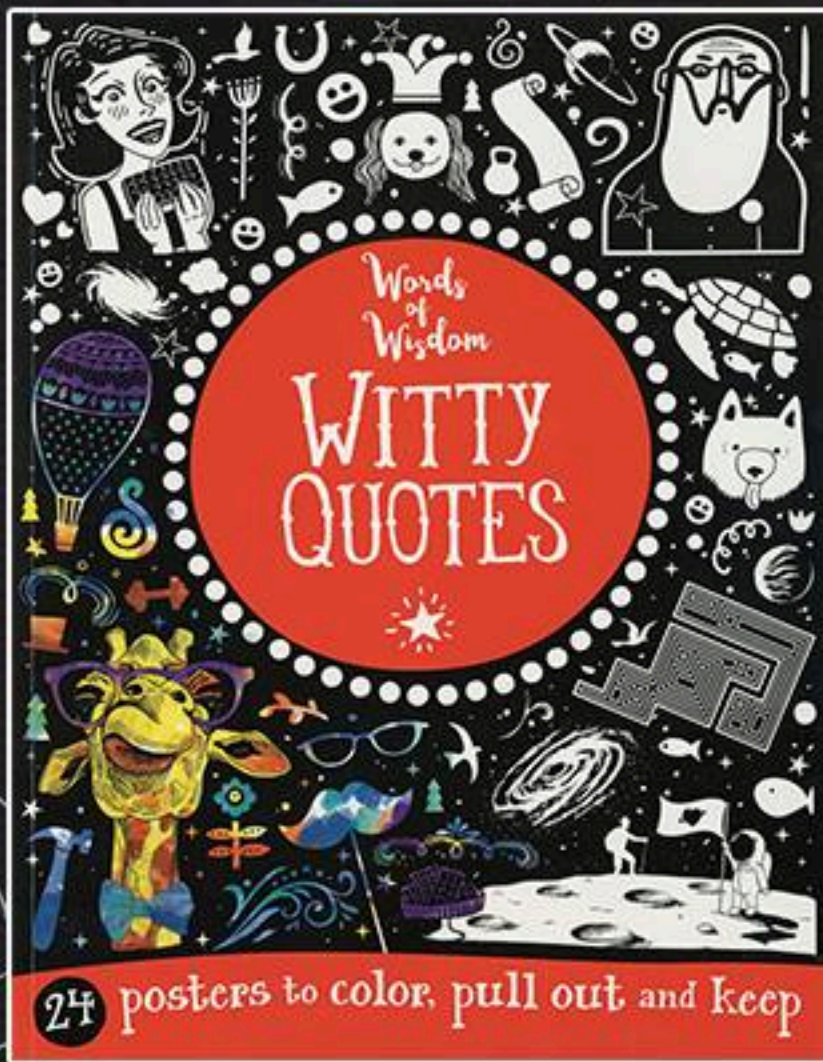


NEED A GOOD BOOK?

No Worries

We all worry. This book is full of ways to get worries out of your head and onto paper, with things to doodle, draw, write, scribble and scrunch.





 **USBORNE**
BOOKS & MORE

WONDERFUL WORDS OF WISDOM

These large-format coloring/poster books allow readers to color and decorate uplifting, motivational words and beautiful artwork. Printed on perforated paper, each page can be easily removed for display.

Lights, Camera, Action!



This book will help you write all kinds of scripts – scary ones, exciting ones, and hilariously silly ones. It's full of tips and ideas that will help you every step of the way – from planning and writing, to putting on your very own shows.



Bringing characters to life

Your characters are the beating heart of your story. So how do you make up a good one? One way is to answer a few questions.

Pick one of the characters you created on the previous page and answer this questionnaire about them. Not all the details you invent will come up in your script, but your answers will help you understand what makes your character tick.

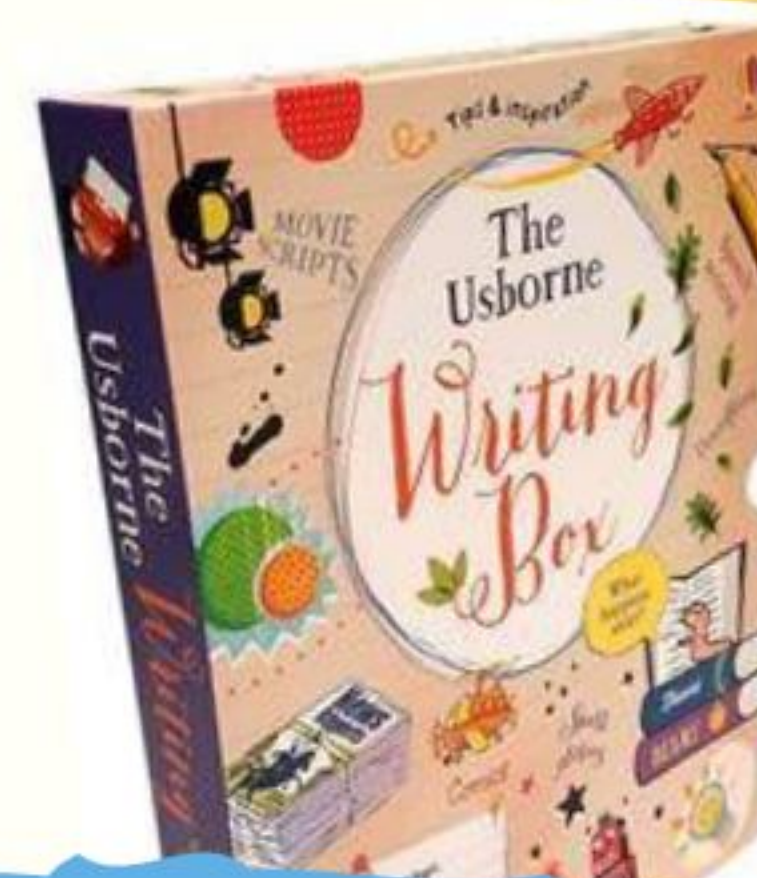
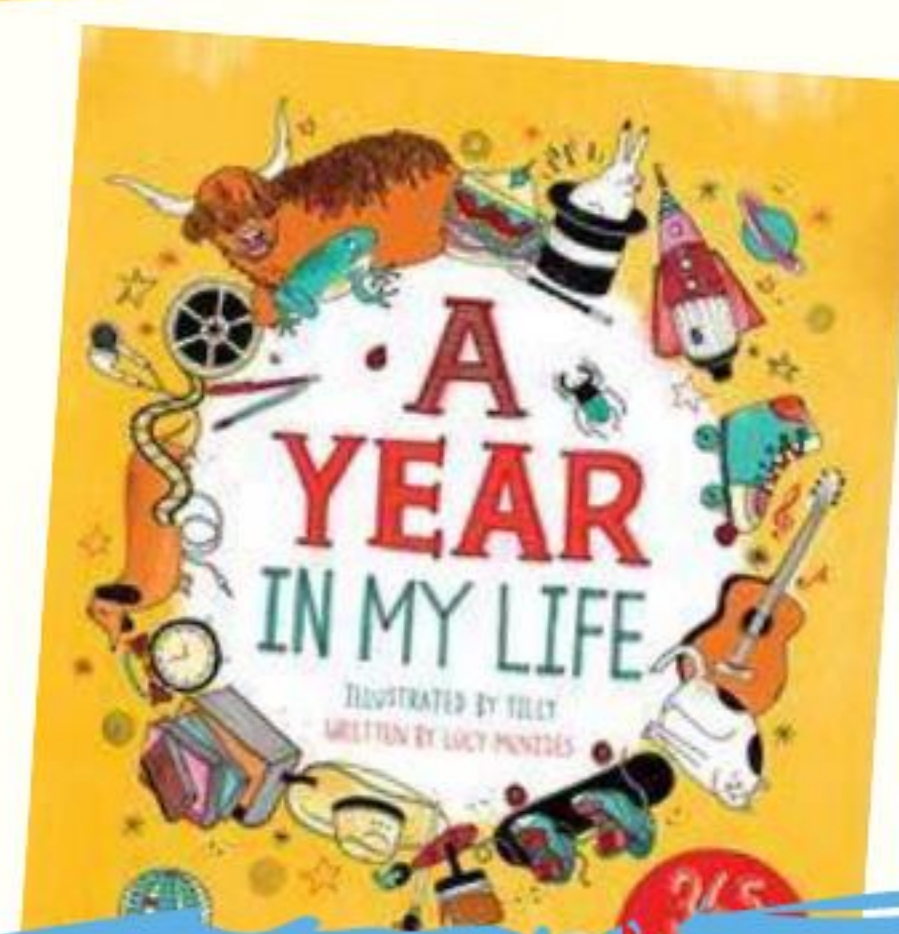
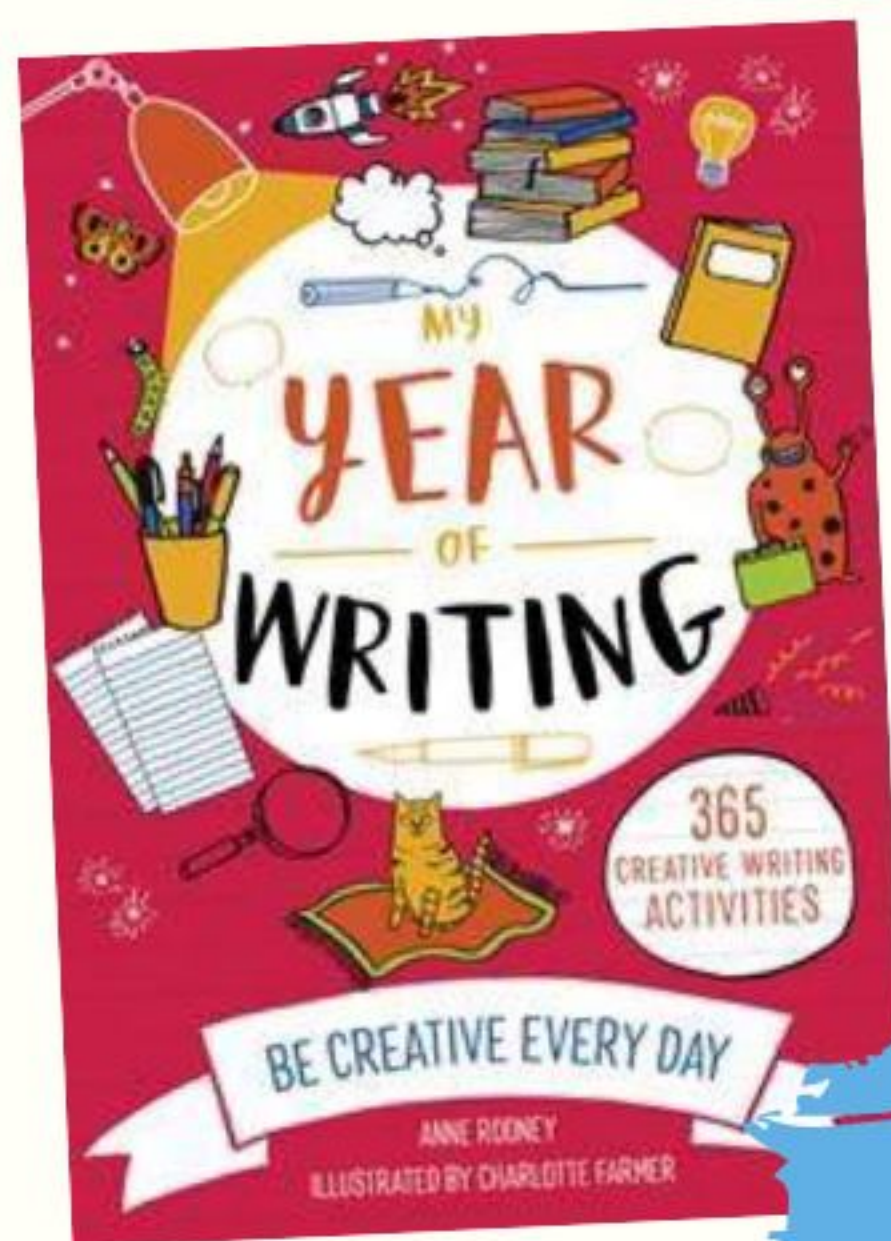
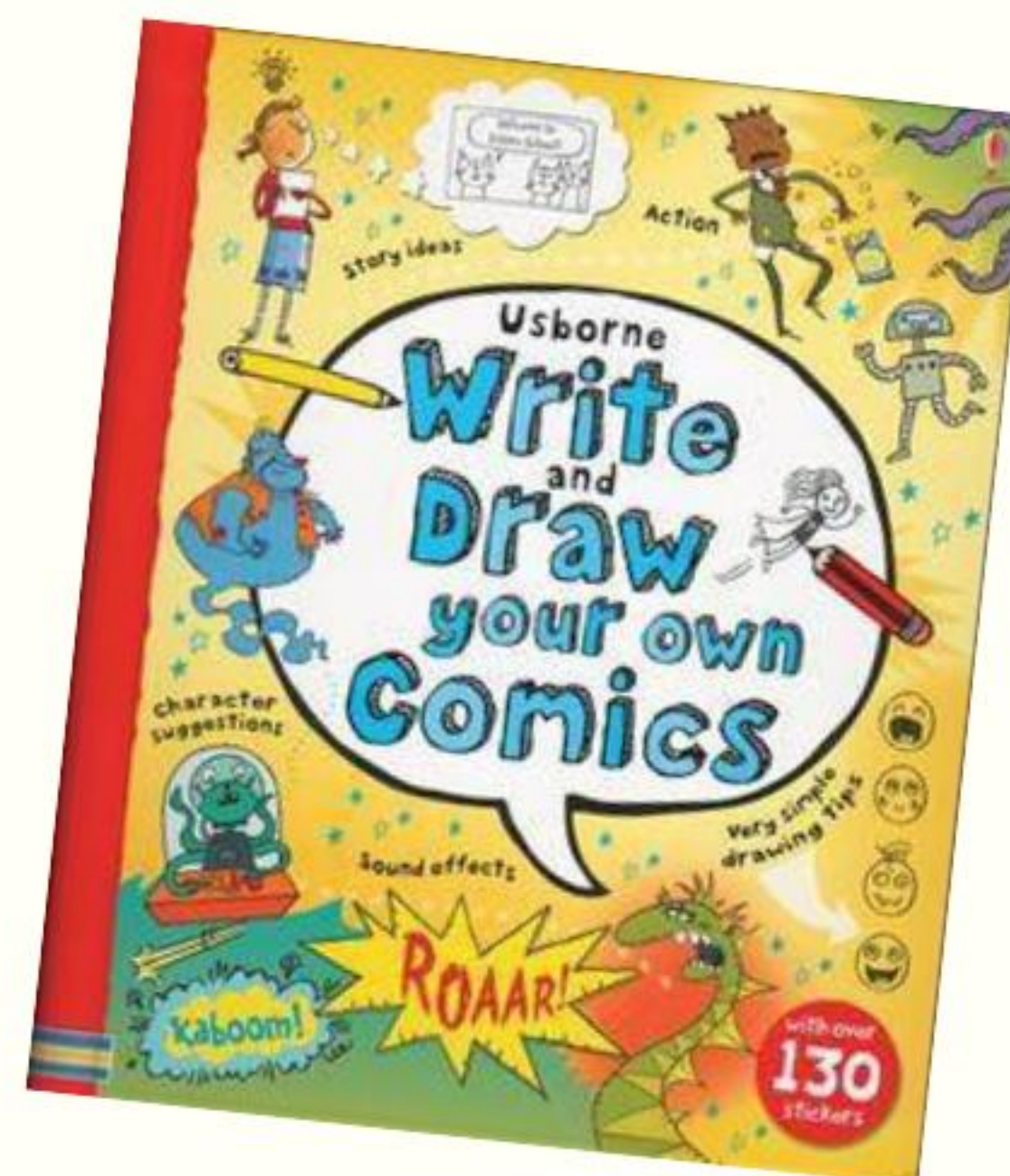
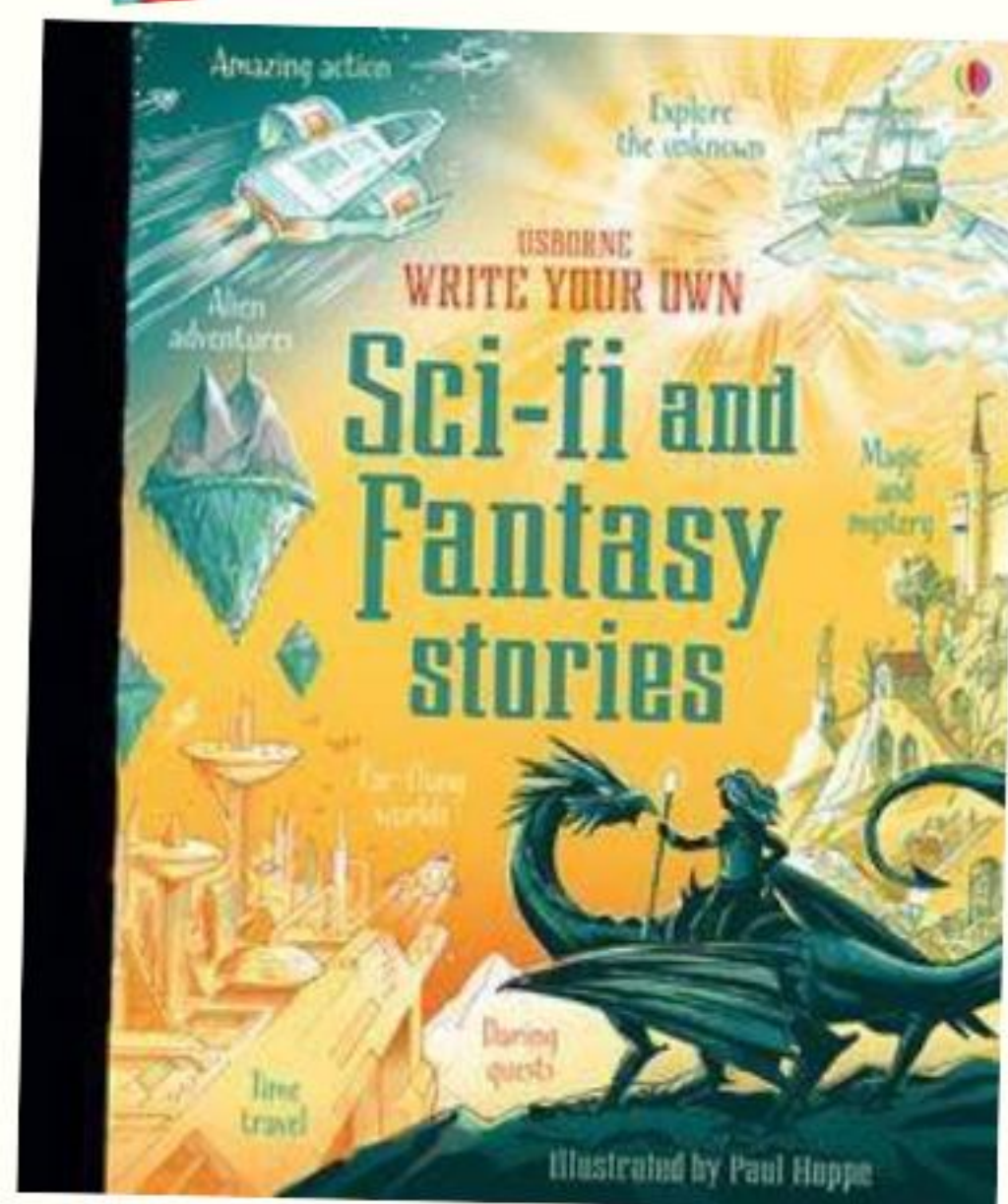
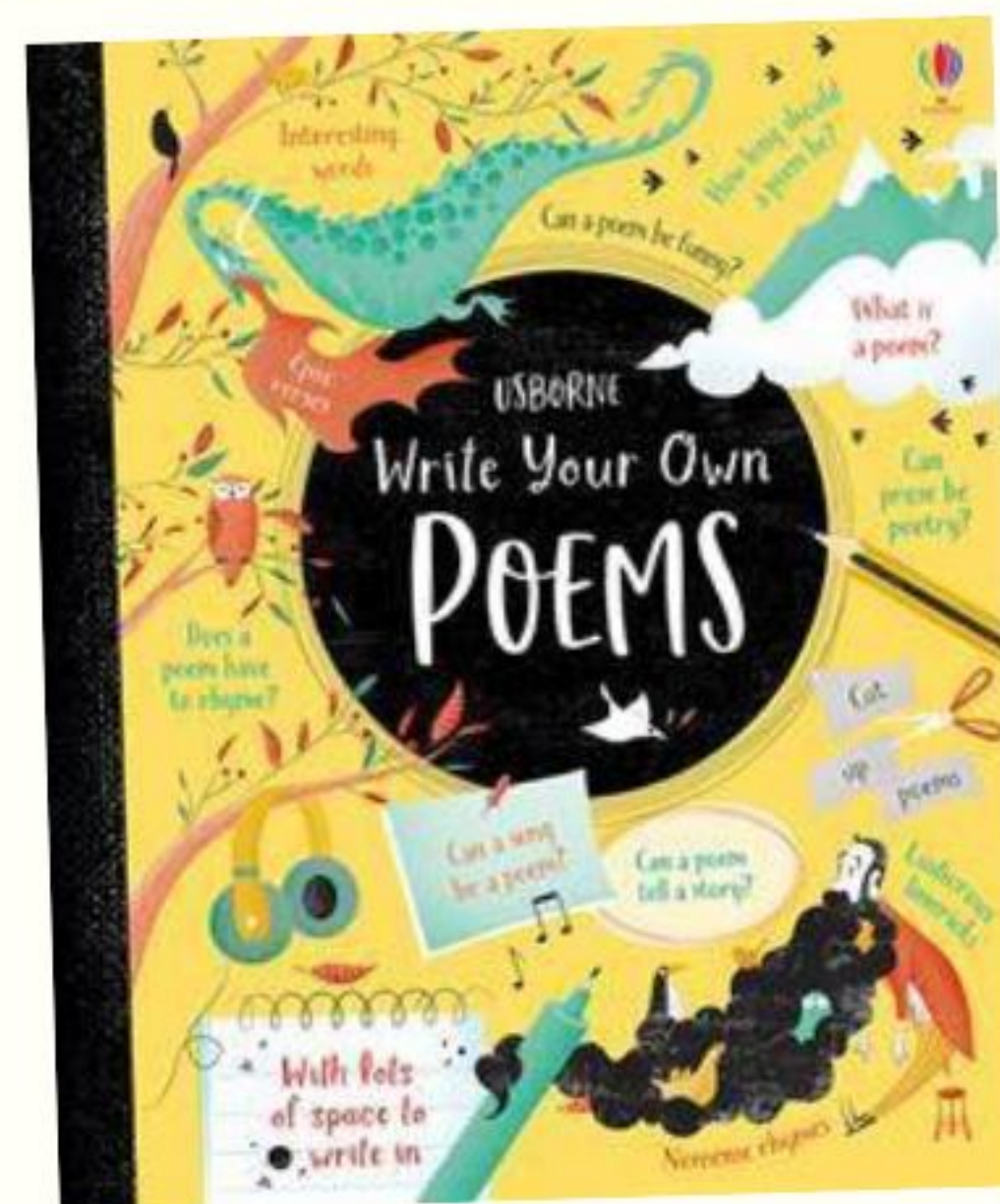
Name: _____
 Age: _____ Gender: _____
 Goal: _____
 Conflict: _____

Where does your character live?
 Who does your character live with?
 What does your character do every day?
 What three words best describe your character's personality?
 What does your character look like?
 How does your character feel?
 What's a character's favorite color?

Loves? _____
 Hates? _____
 Best qualities? _____
 Worst flaws? _____
 Best friend? _____
 Biggest enemy? _____
 Deepest secret? _____
 Biggest fears? _____
 How do your character's flaws, secrets and fears create problems?
 What kind of animal is your character most like, and why?
 What is your character's earliest memory?

It's a good idea to answer questions like these for all the important characters in your scripts.





WRITE AND CREATE



easy DIY steps

Hmm... WHAT SHOULD I WRITE ABOUT?

REVIEWS AND INTERVIEWS

USBORNE

WRITE and DESIGN YOUR OWN MAGAZINES

CUTTING & PASTING

STORIES ARTICLES DRAWINGS & PHOTOS

comics

pictures

pictures by cutting out... This technique is known as "cutting."

Try painting or decorating paper to cut shapes from.
Things don't have to make sense - let your imagination go wild.
Cut out pictures from old newspapers and glossy magazines to make into new pictures.

could take your photos to cut out use in a collage.
The pieces first, glue them down you're satisfied how it all looks.

Old newspaper or sheet music can make interesting patterns in pictures.

Cut-and-paste characters

Collage is a great way of inventing extraordinary characters to use in comics or to illustrate articles and stories. These characters might even inspire new ideas.

You could draw on extra details.

TIP
Keep leftover snippings to make cut-and-paste doodles and to decorate pages.

I'm Librosaurus - a living, breathing library that always knows what magazine you should read next.

Experiment with different options for legs.

If your character appears more than once, instead of gluing the pieces down, photograph them in one position...

...then rearrange the pieces, adding any extra bits you need, and photograph them again.

Goosorgeous darling - hold that pose!

Making magazines is fun and easy - and this marvelous title will help you every step of the way.

A new addition to the popular Write Your Own Series!

 **USBORNE**
BOOKS & MORE