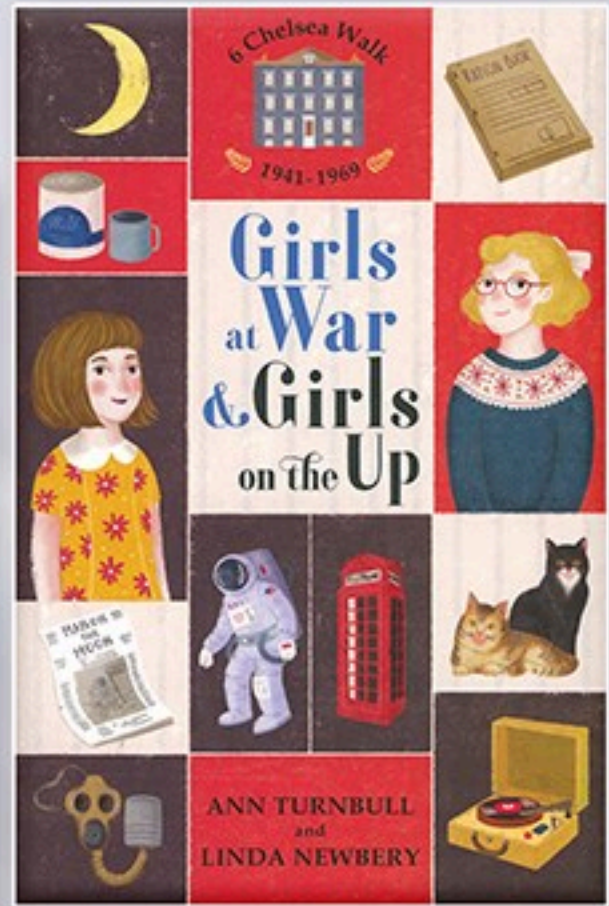
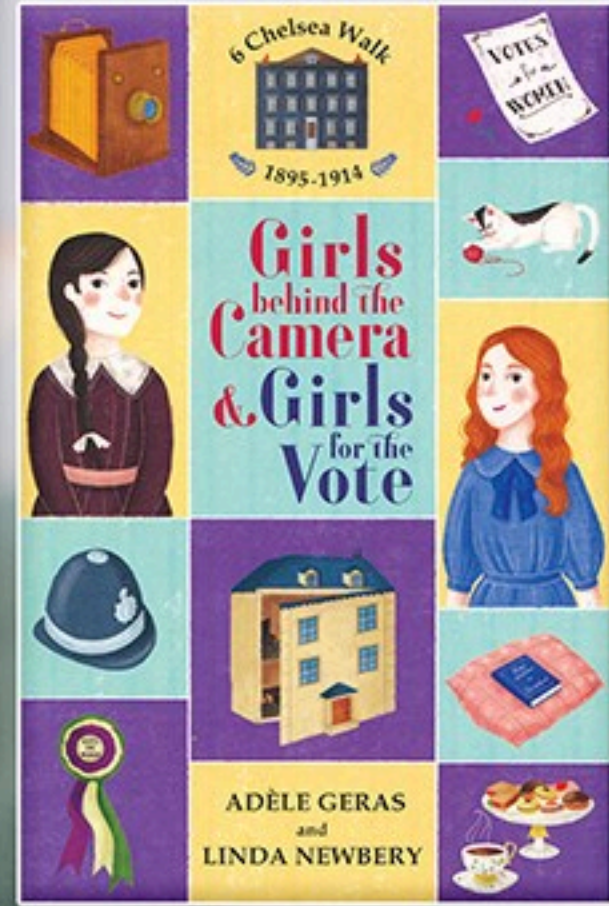


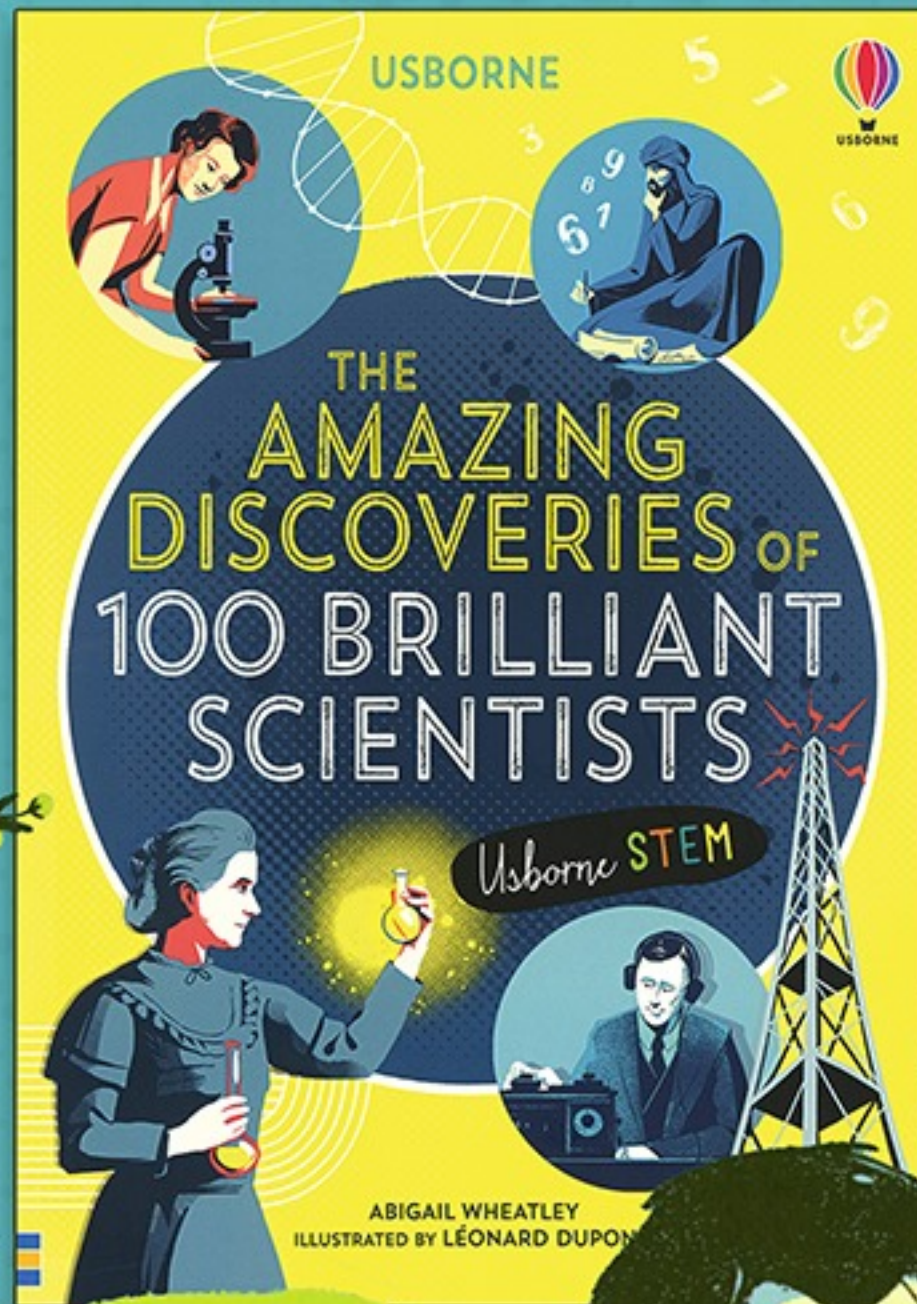
6th Grade Collection

 **USBORNE**
BOOKS & MORE
Independent Consultant



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

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.

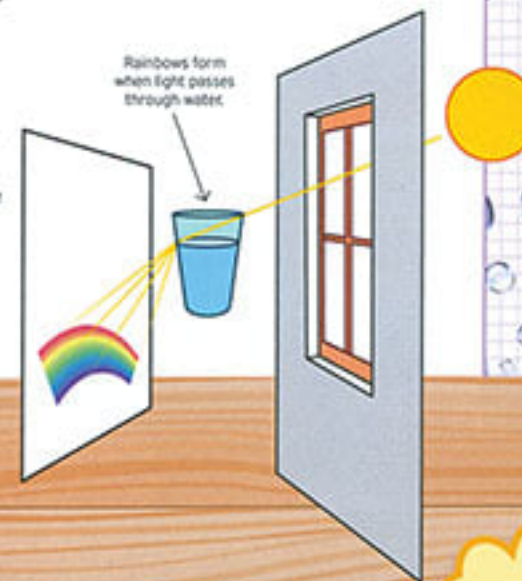
The first rainbow happens when the light reflects off the water once and refracts. To get the second rainbow, the light needs

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).



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

DESIGN
a board game

Initial ideas → Rough design → Final poster

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



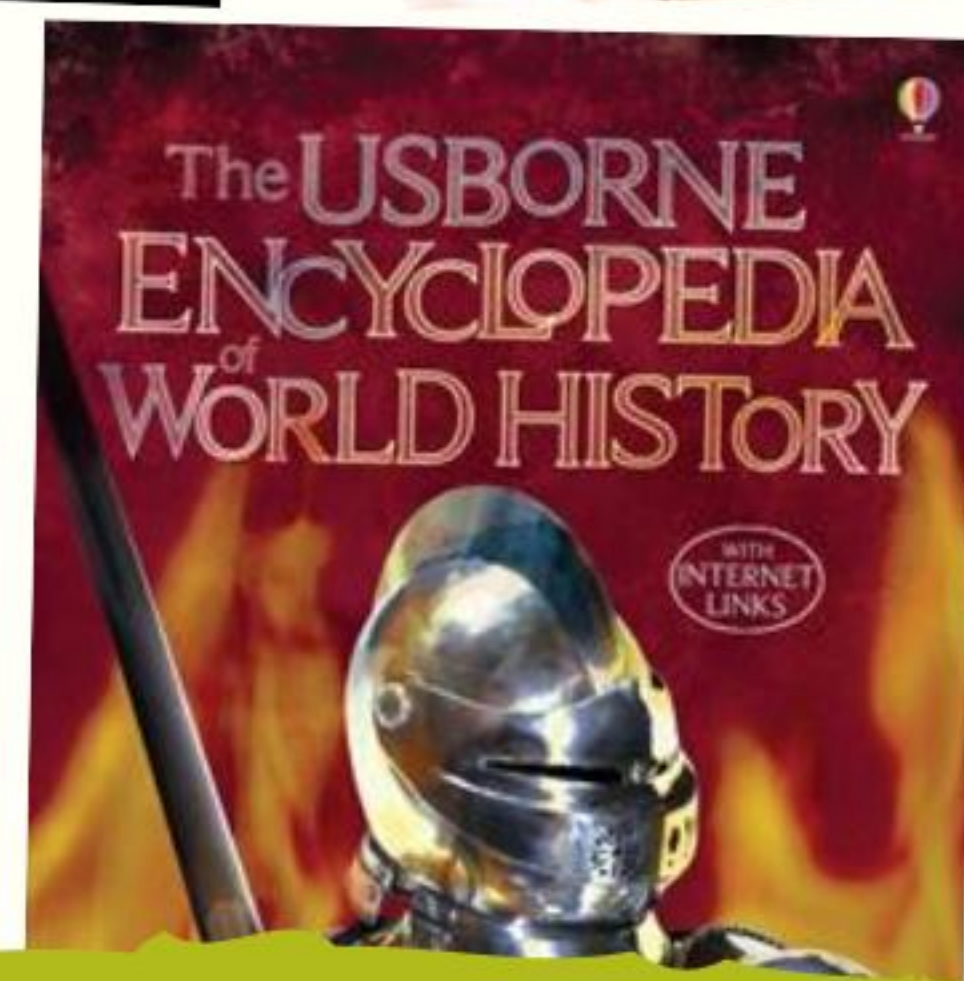
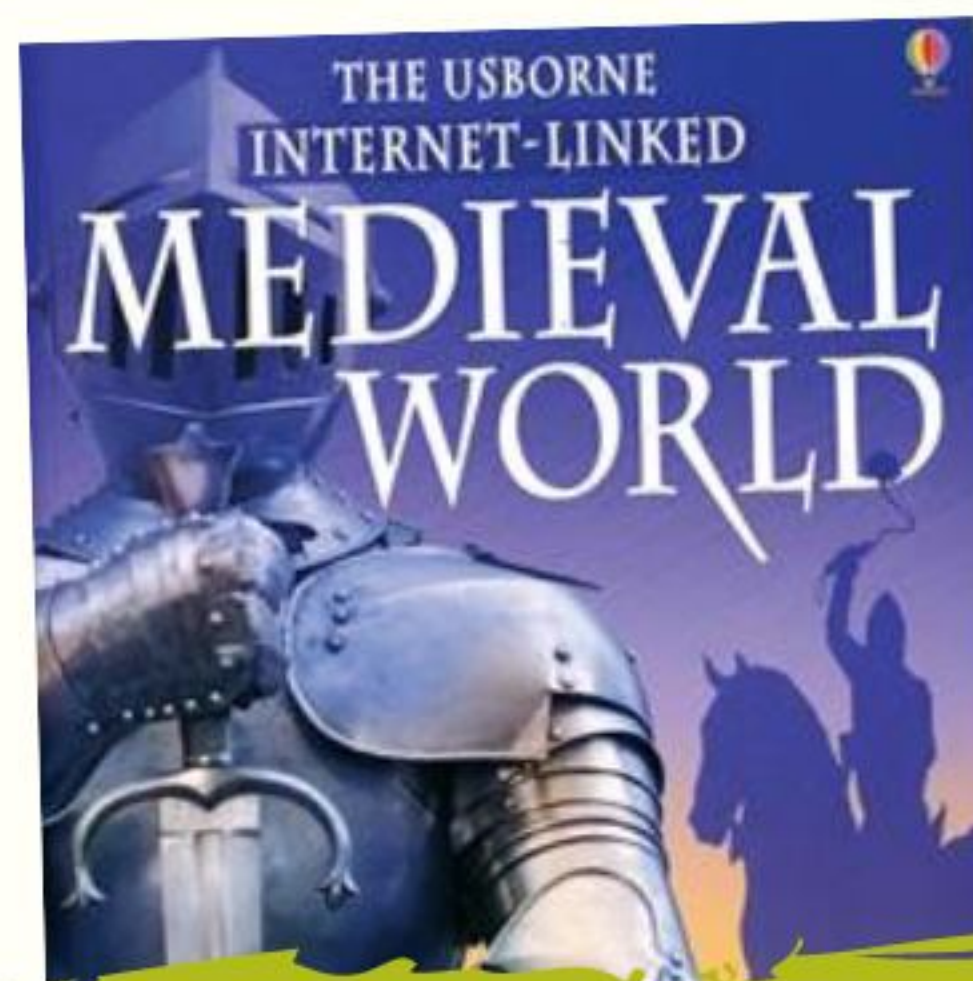
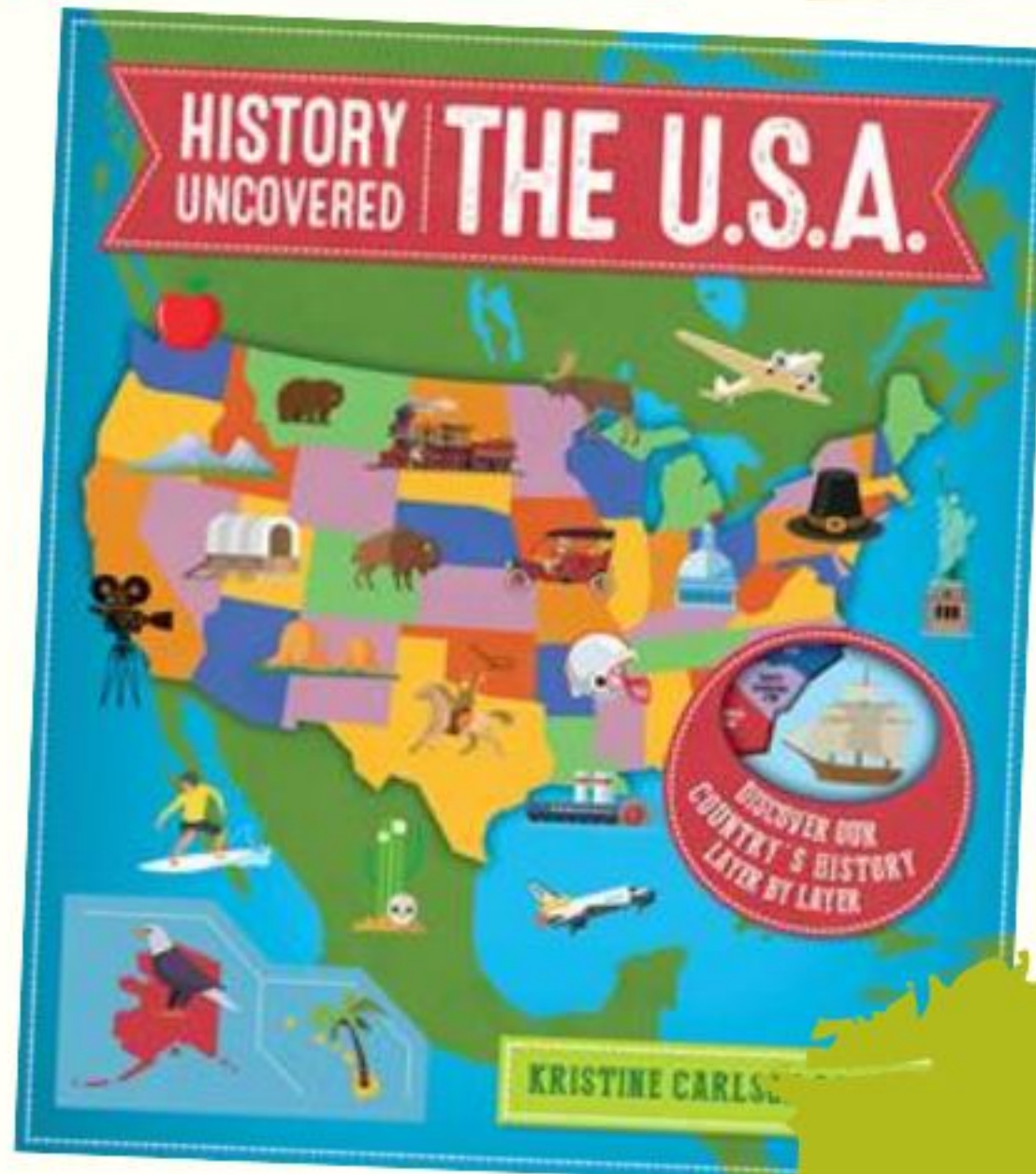
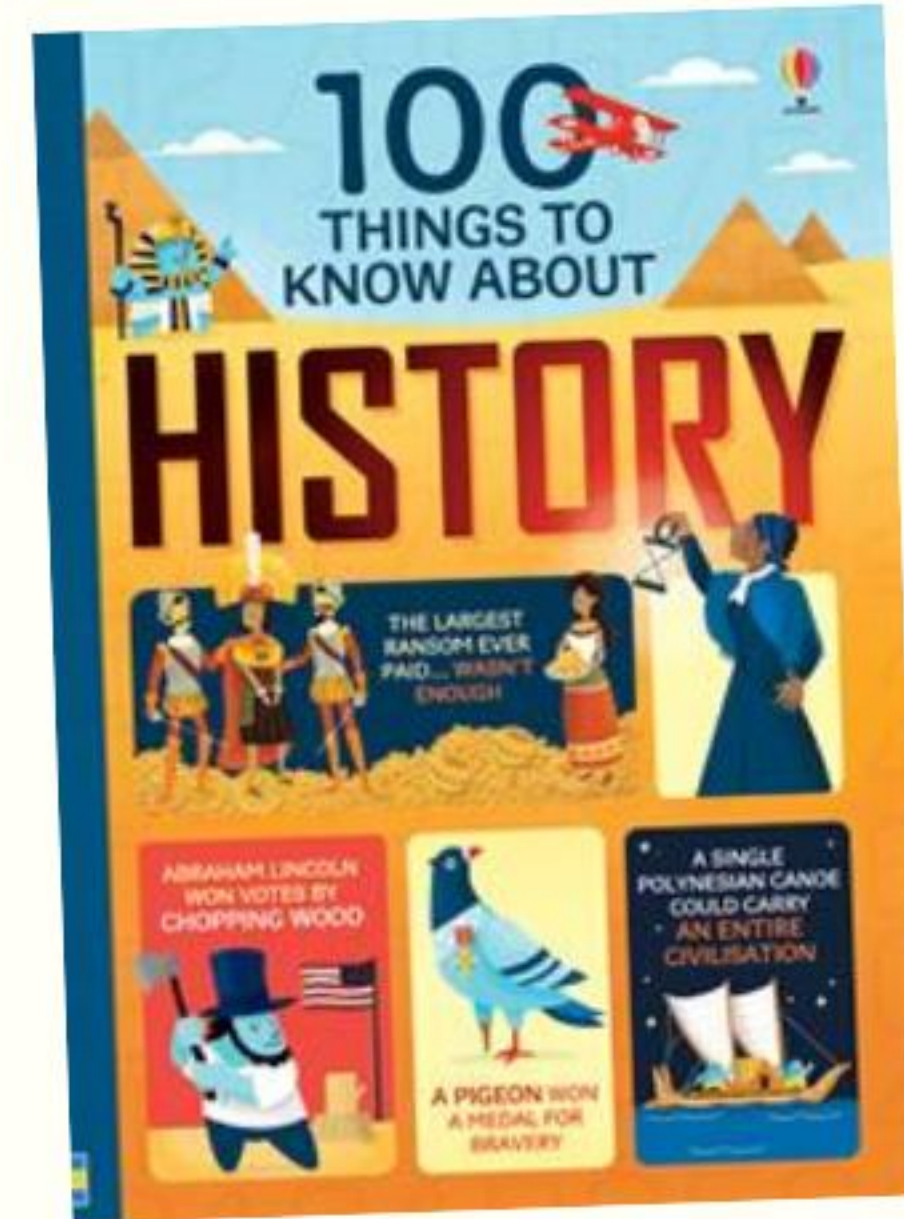
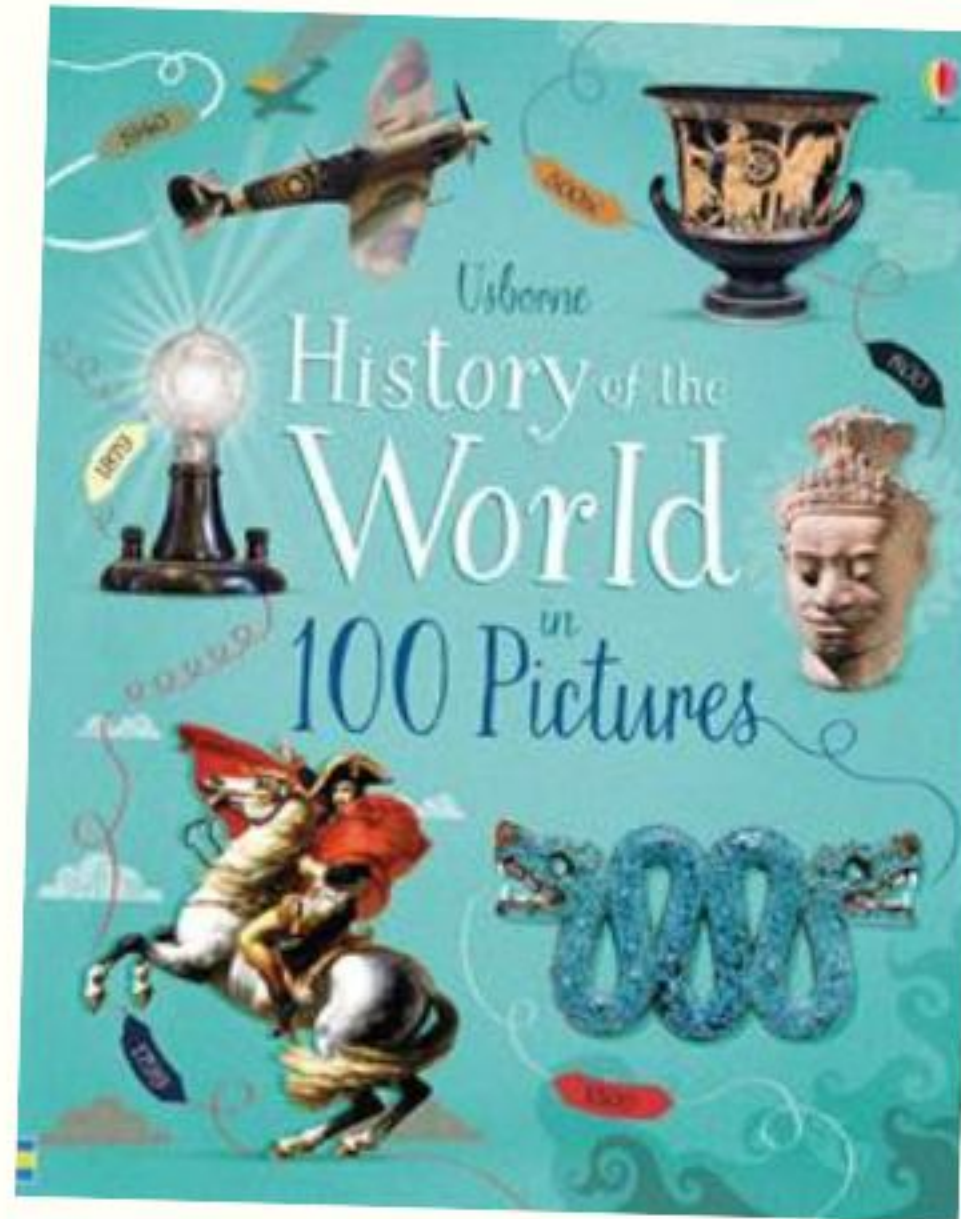
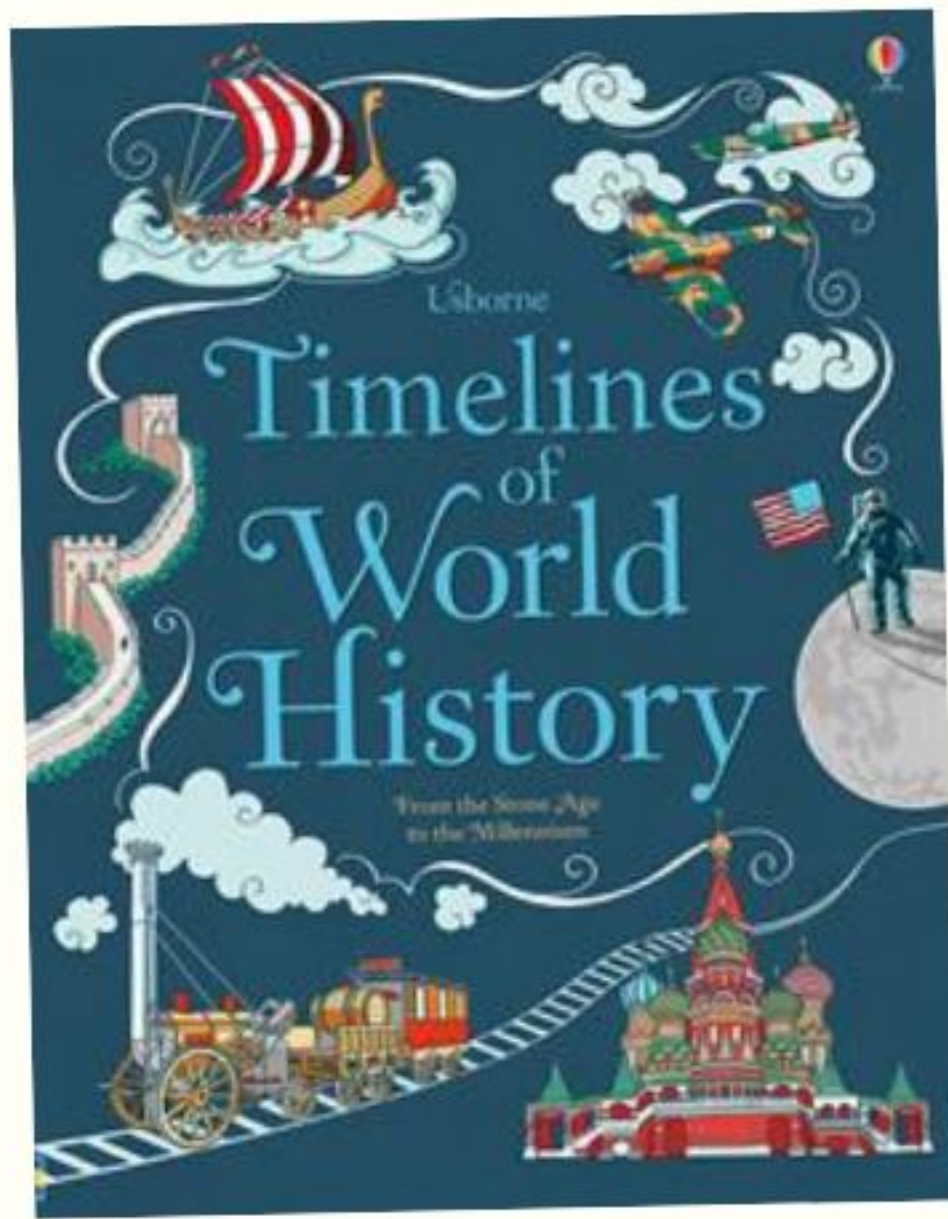
ROCK BAND CONCERT

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.

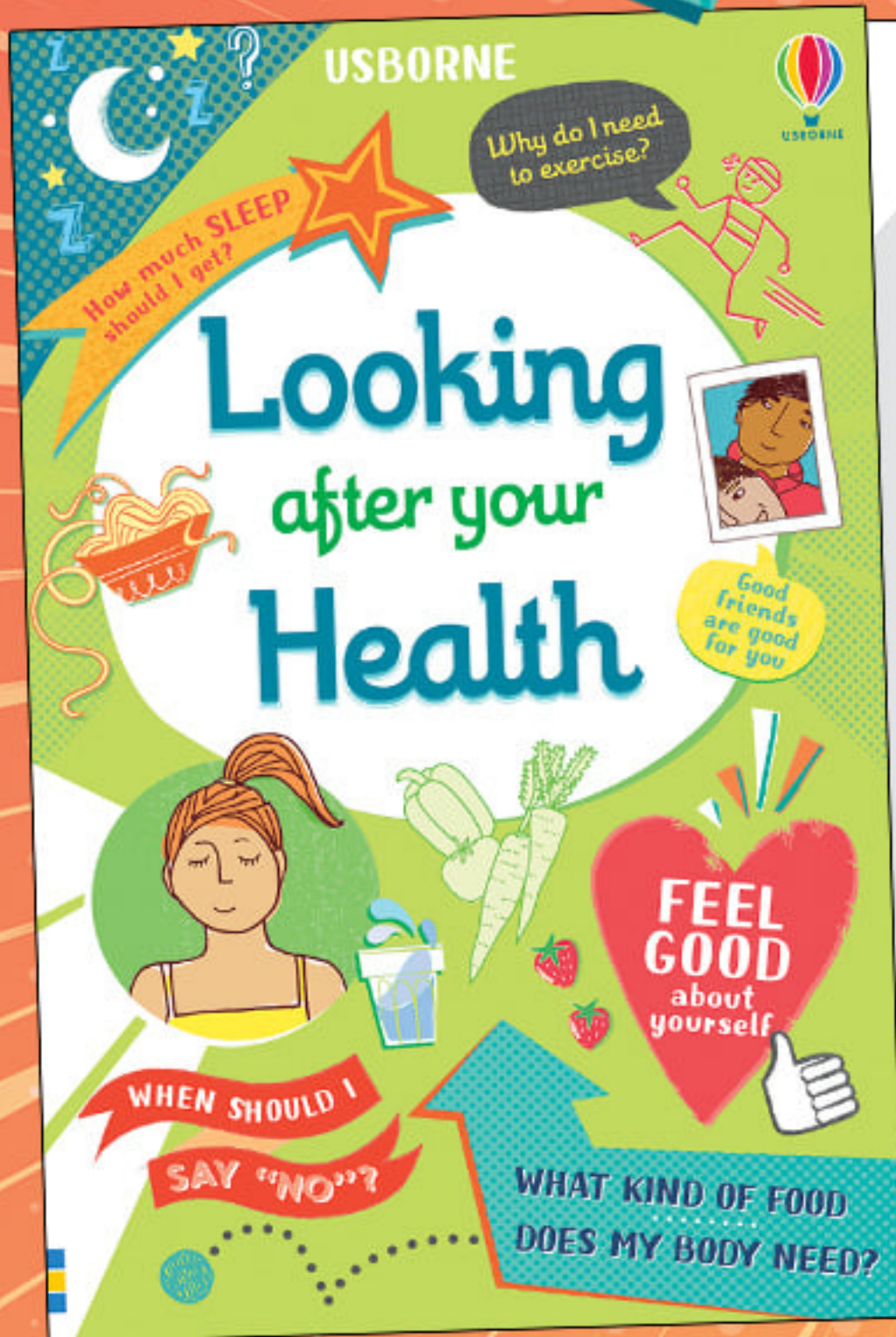




HISTORY HELPERS

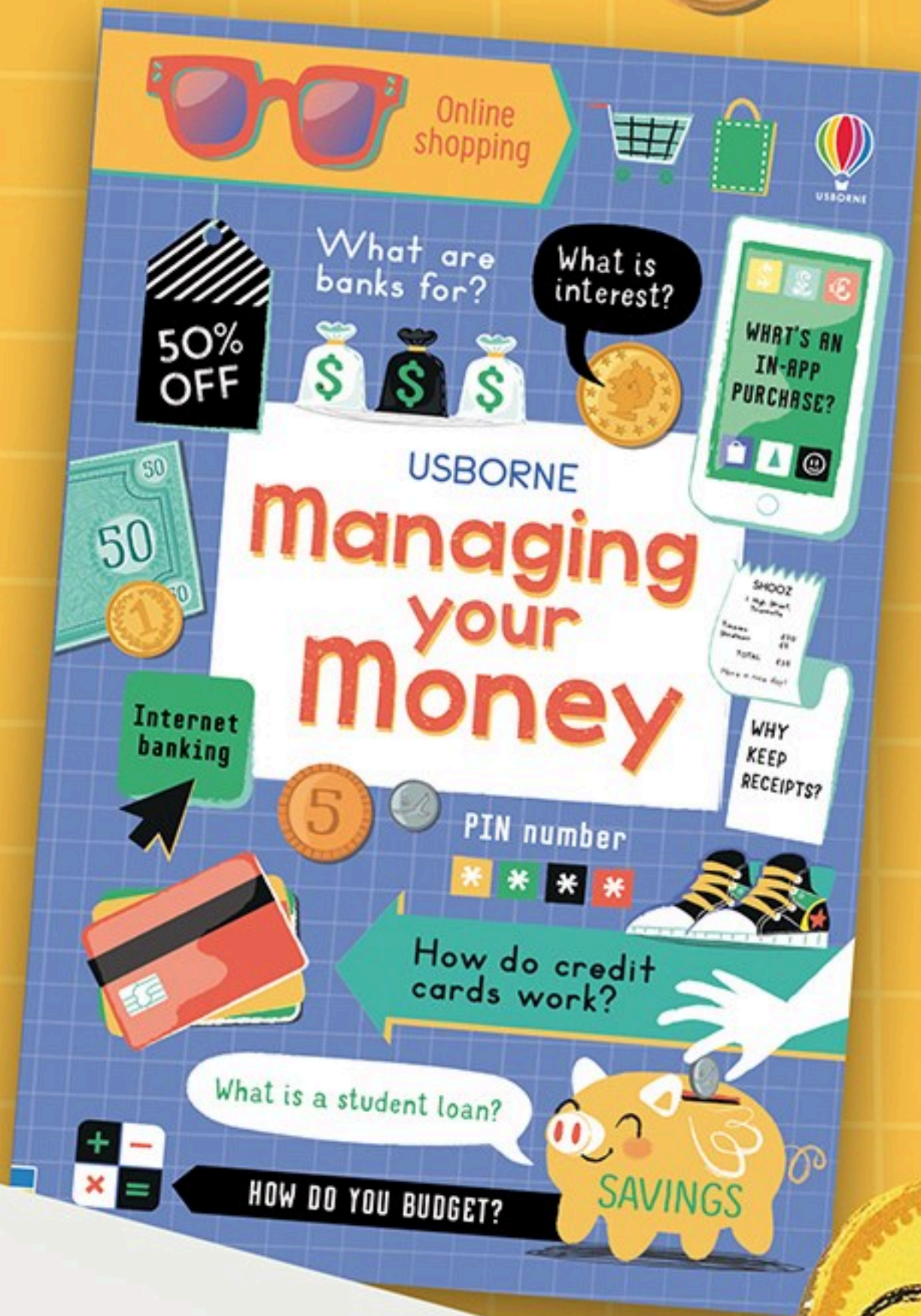
LOOK!

A USEFUL GUIDE FOR TEENS!



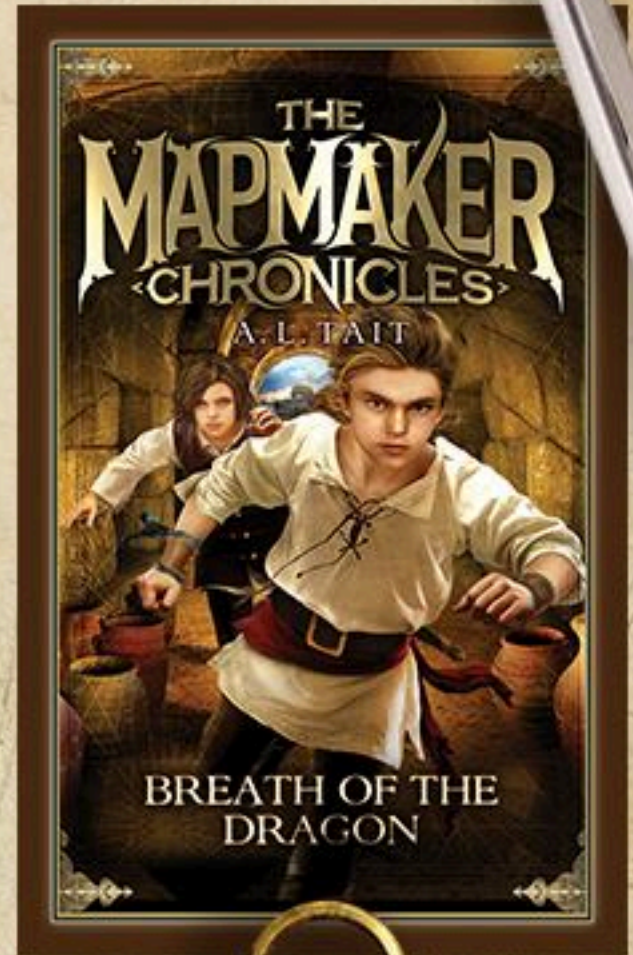
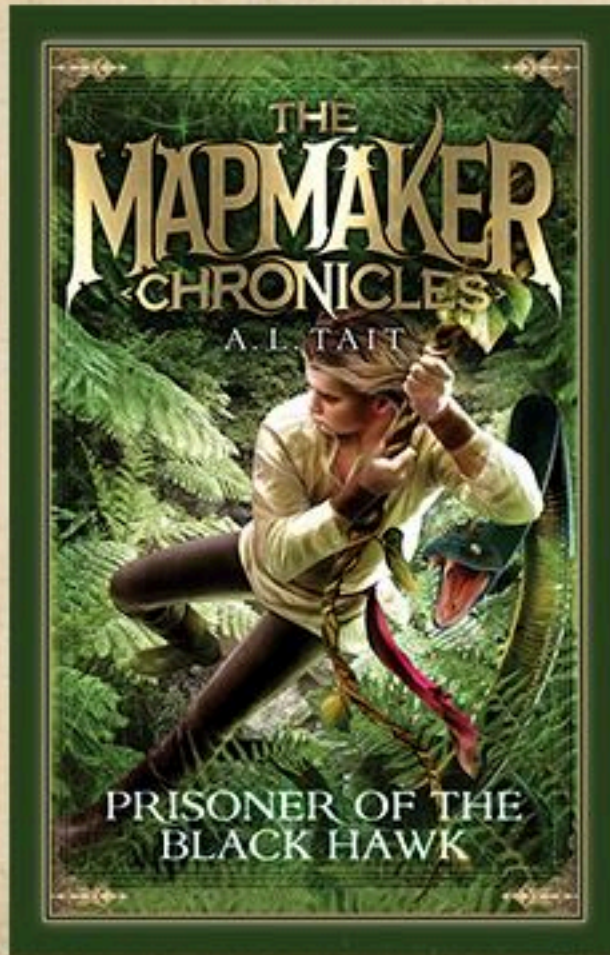
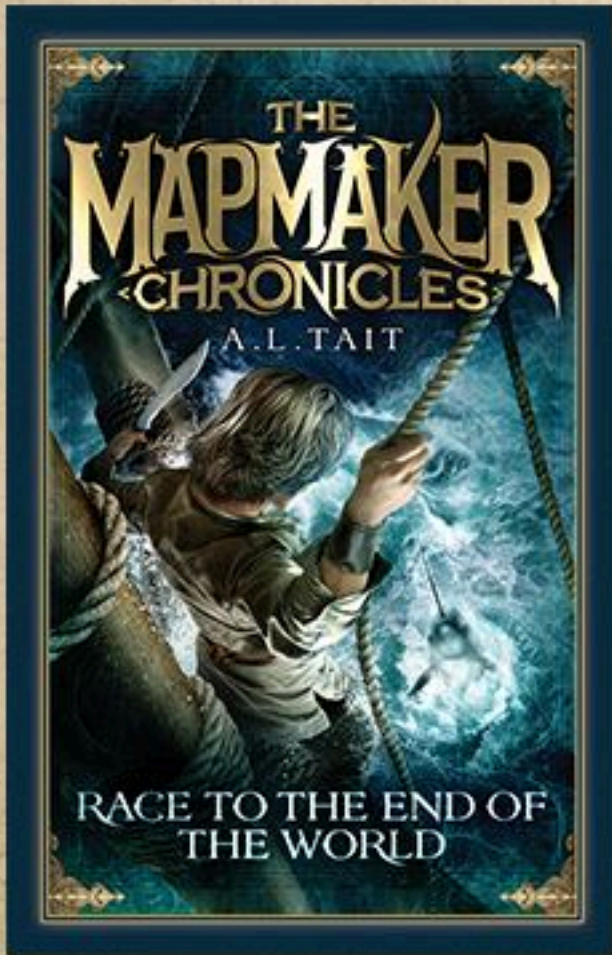

THIS USEFUL GUIDE TO TEENAGE HEALTH OFFERS CLEAR ADVICE ON EATING AND SLEEPING WELL, COPING WITH STRESS, AND BUILDING EXERCISE INTO YOUR LIFE. THERE'S ALSO HELPFUL GUIDANCE ON THE PRESSURES THAT CAN SURROUND SEX, DRUGS AND ALCOHOL. PACKED WITH PRACTICAL TIPS, IT INCLUDES FUN QUIZZES AND CHECKLISTS TO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



Corta
y
pega
palabras



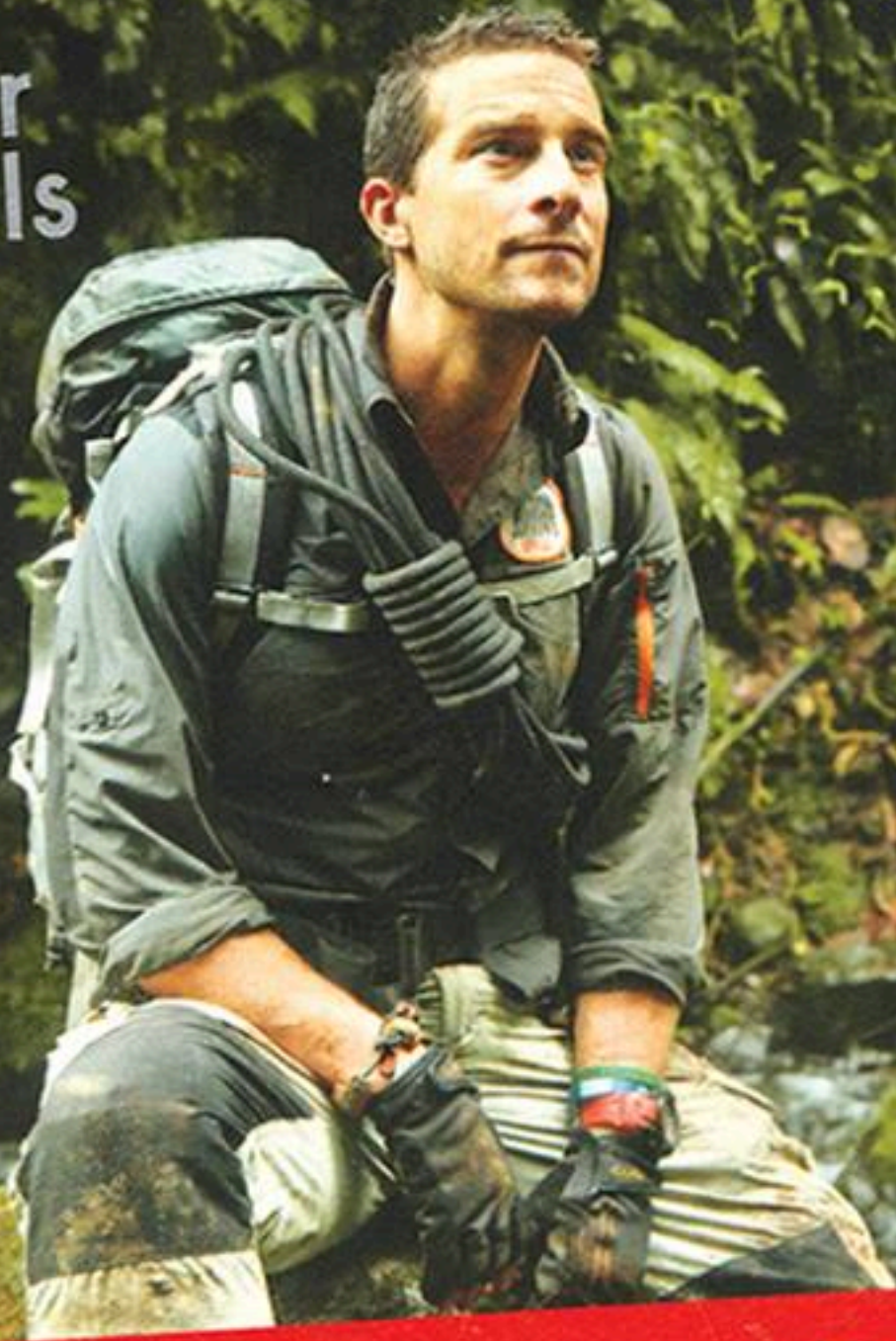
Attention Aspiring Astronomers!

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



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.

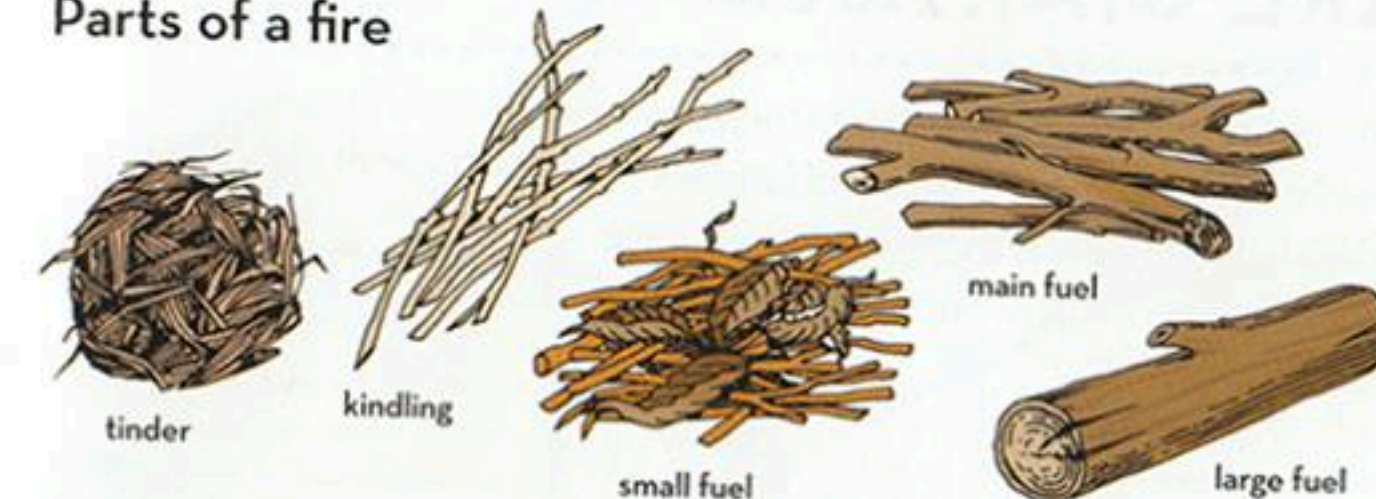


Grass
Break down stalks of dry grass into fine fibers.



Leaves
Dry dead leaves are often easy to find.

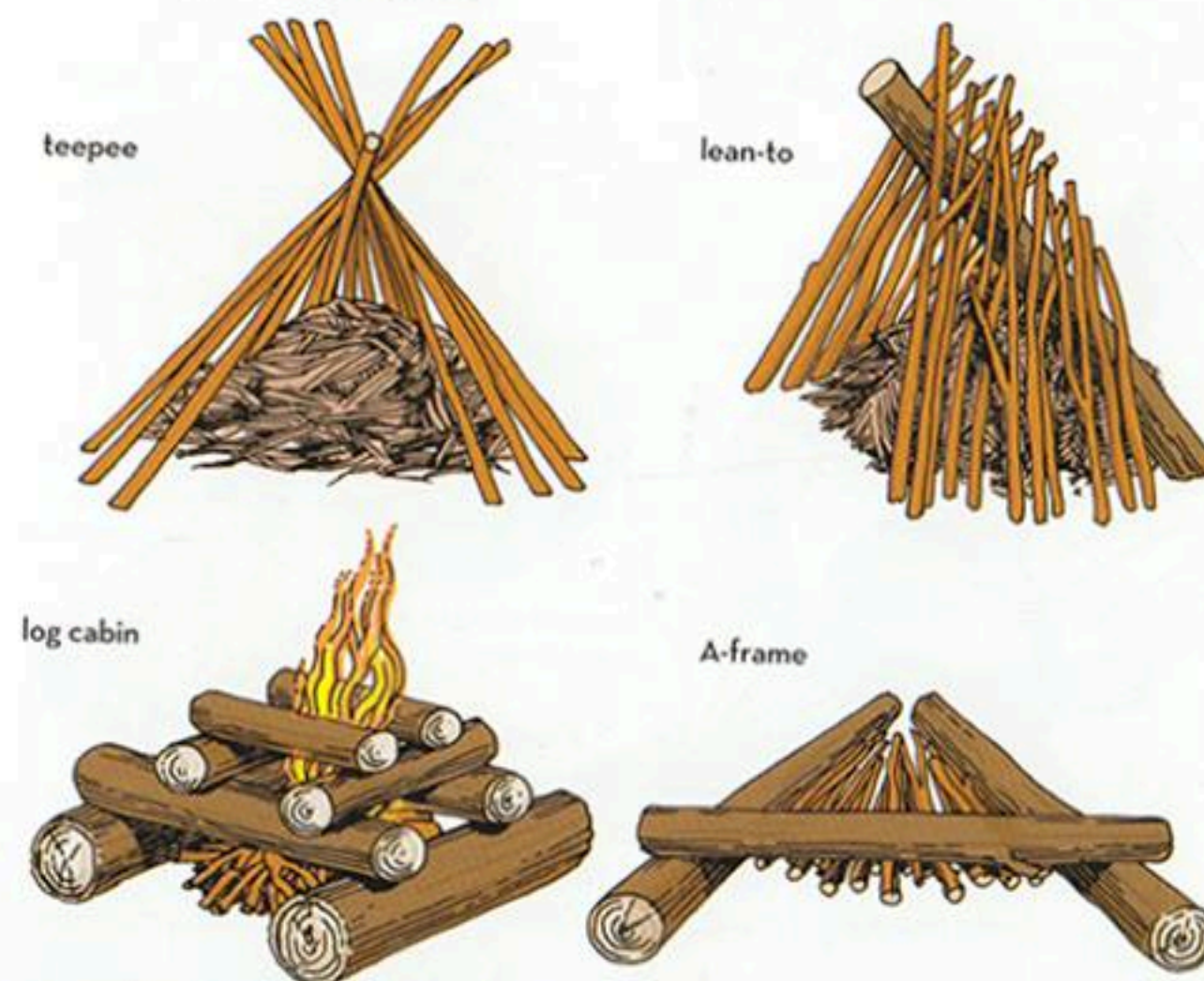
Parts of a fire



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



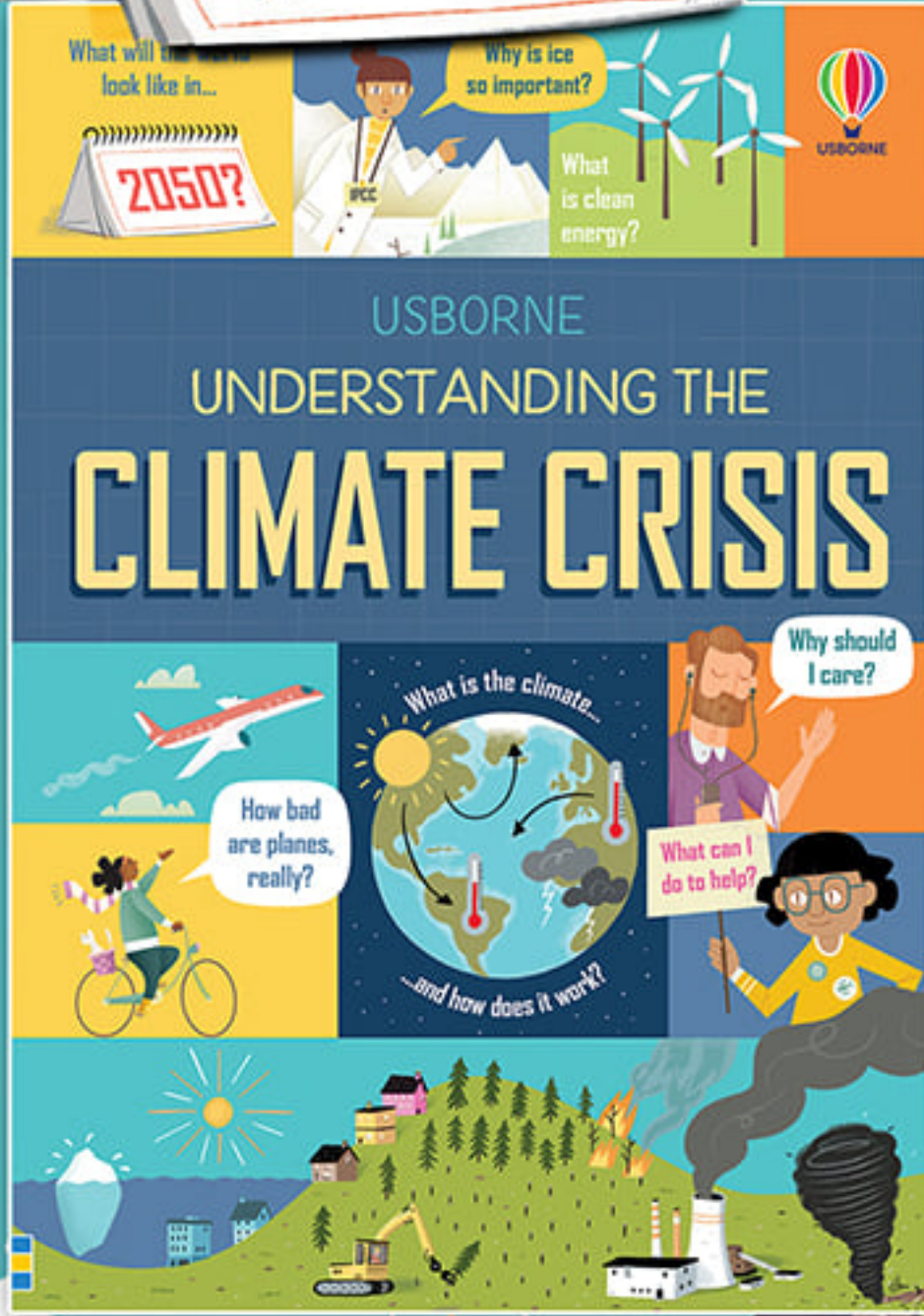
Discover how to camp in the wild, find out how to spot and avoid dangers, learn how to find your way in any environment, and master amazing knots. Includes step-by-step instructions and tips from Bear!



USBORNE
BOOKS & MORE

Help kids understand difficult topics

THE CLIMATE CRISIS IS REAL. IT IS ALREADY CHANGING THE WORLD AROUND US. THIS BOOK WILL HELP YOU TO UNDERSTAND HOW WE KNOW THIS TO BE TRUE, AND WHAT EFFECT IT MIGHT HAVE IN THE FUTURE. THE GOOD NEWS IS THAT WE HAVE A PLAN. BUT THE BIG QUESTION STILL REMAINS — WILL WE CHOOSE TO DO IT?



What makes a good choice?

Whether we're trying to reduce our emissions, or adapt to new conditions, we will have to ask the following questions about whatever we choose to do. Ideally, the answer to each one will be YES.

1. Is it fair?

Some people are worse affected than others by the crisis – particularly poorer people. Our choices need to take this into account. Ideally, the choices we make won't put anybody at a big disadvantage.

If you ban vehicles in cities, will it still be easy for people with disabilities to get around?

I'll lose my job on this oil field if we suddenly stop using fossil fuels. That's not fair!

Our country pollutes less than yours, but we're more at risk from the crisis. YOU should pay to repair the damage!



2. Is it possible?

Even if an idea would work in theory, it has to work in practice to be useful.

Build a spaceship that collects energy from the Sun and beams it back to Earth? We don't have the technology!



3. Will people actually do it?

Good solutions are deliberately designed to make sure people are motivated to do them.

We could REWARD companies for emitting less CO₂?

LOW CARBON CASH PRIZE

People might buy eco-friendly things if they were CHEAPER!

100% HEMP CLOTHING

If we make cutting down forests ILLEGAL, will people stop?

I'd recycle more if it wasn't so confusing.



Messy choices

In reality, most choices will be a bit messy – they'll have a mixture of positive and negative consequences. So we'll have to choose what sacrifices we are willing to make.

They should build a dam here to power our city using water, not fossil fuels.

NO! Dams can harm the plants and animals that live in the river!

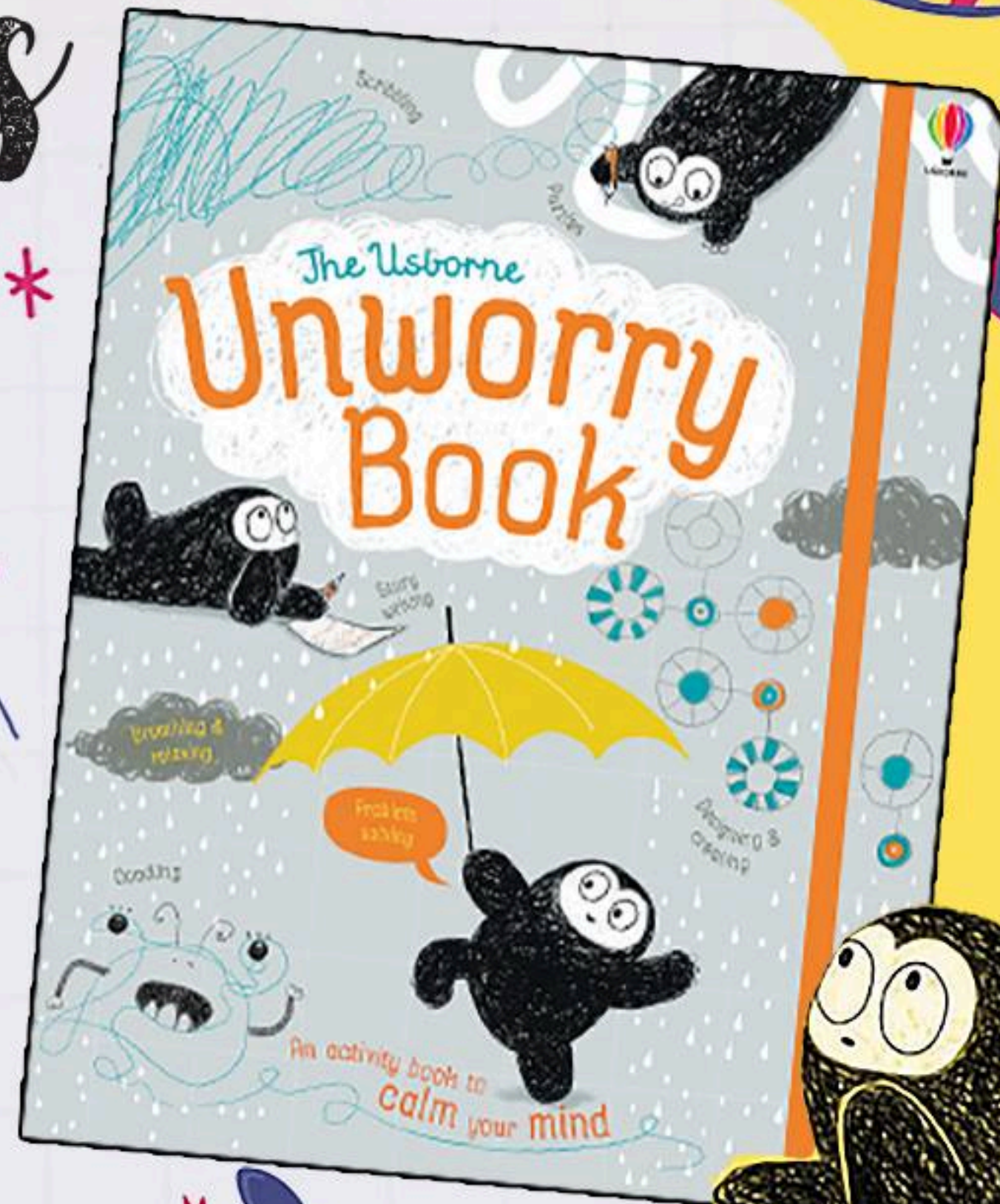
But we need to stop using fossil fuels! Which is more important, Dam?

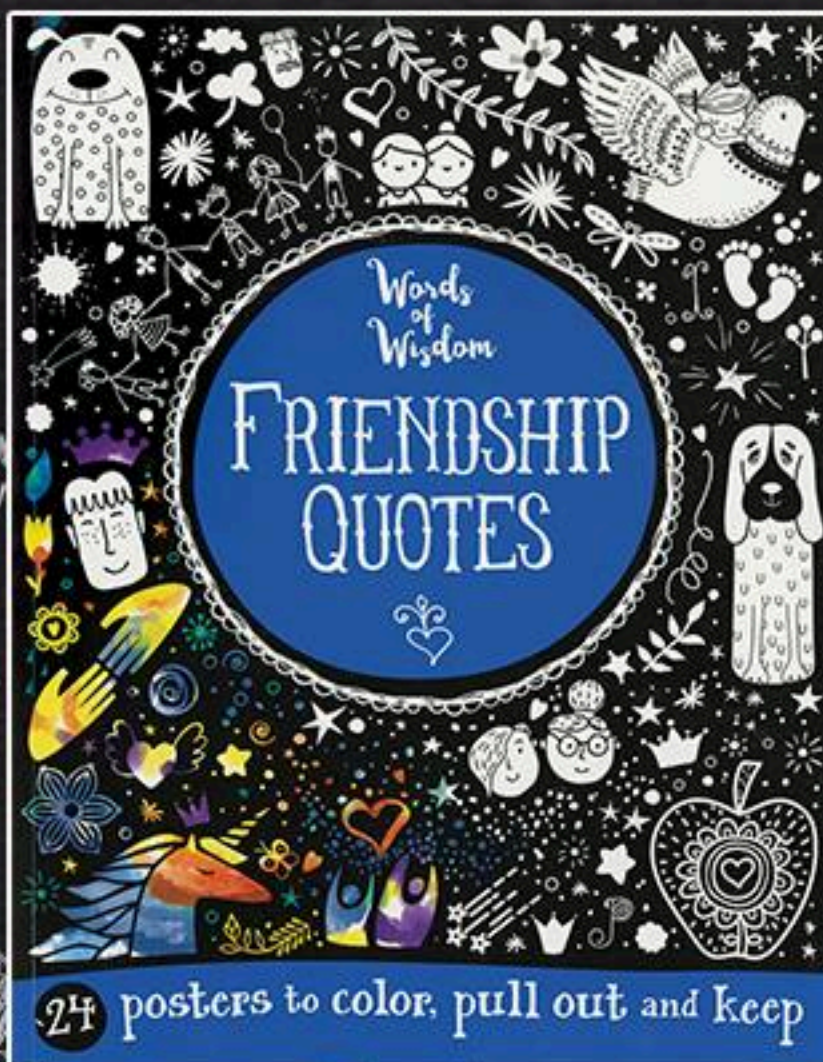
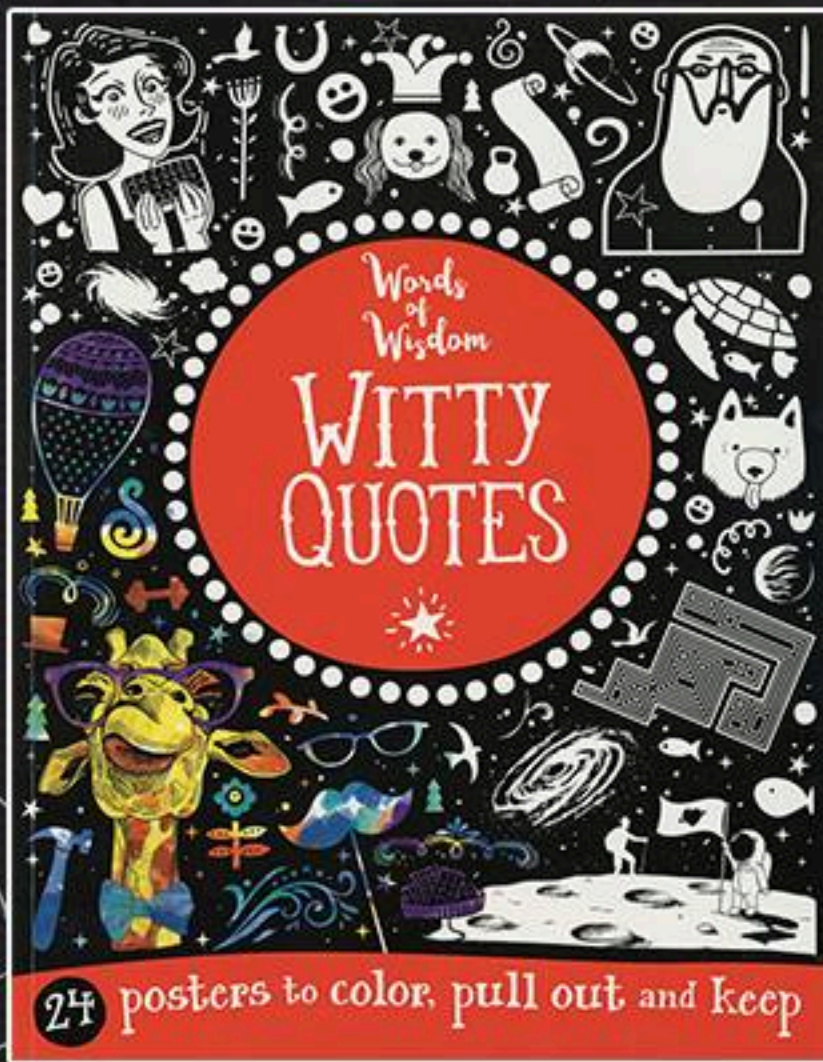


NEED A GOOD BOOK?

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

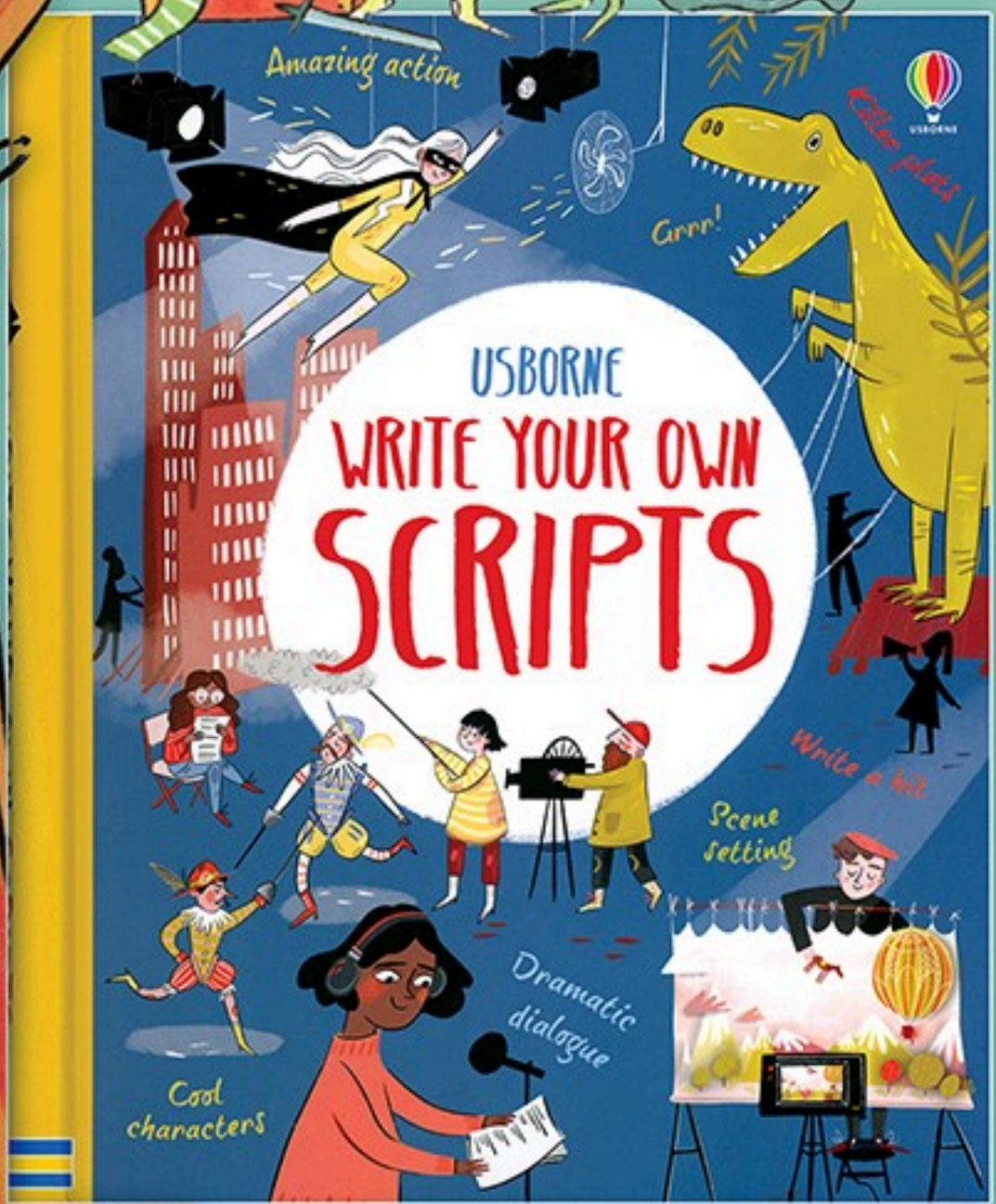
WONDERFUL WORDS OF WISDOM

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.

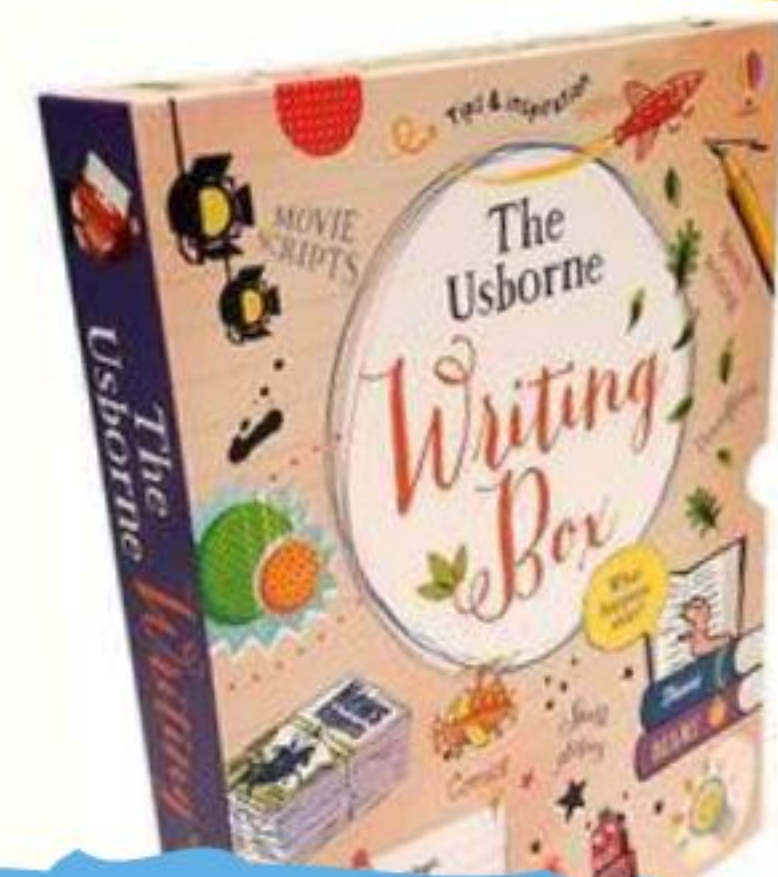
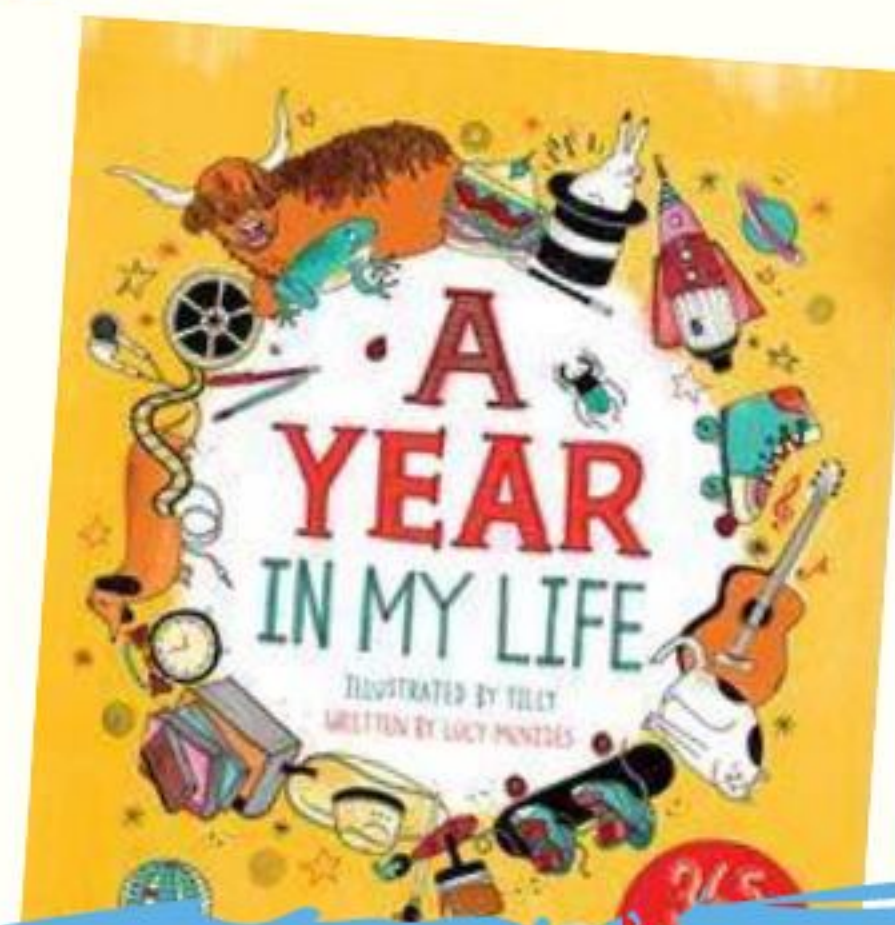
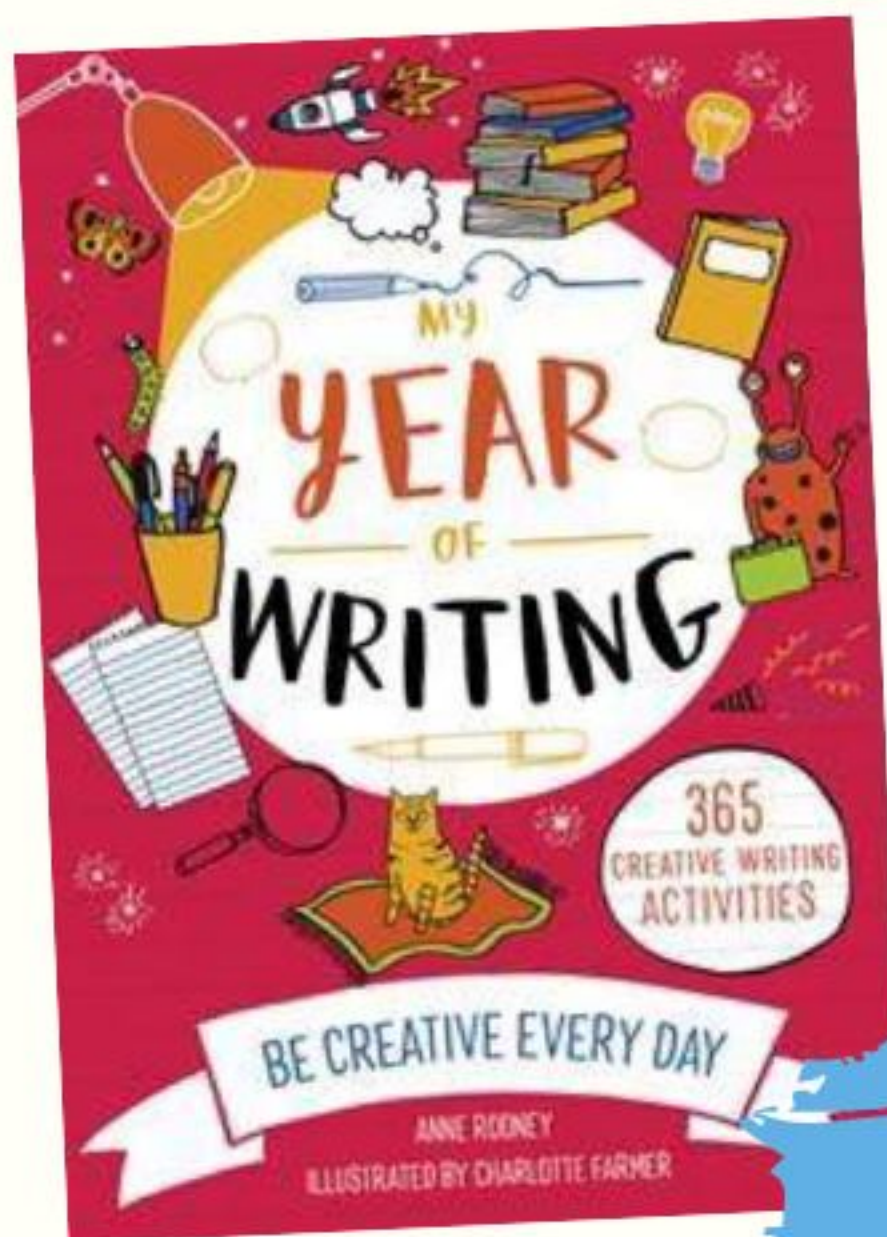
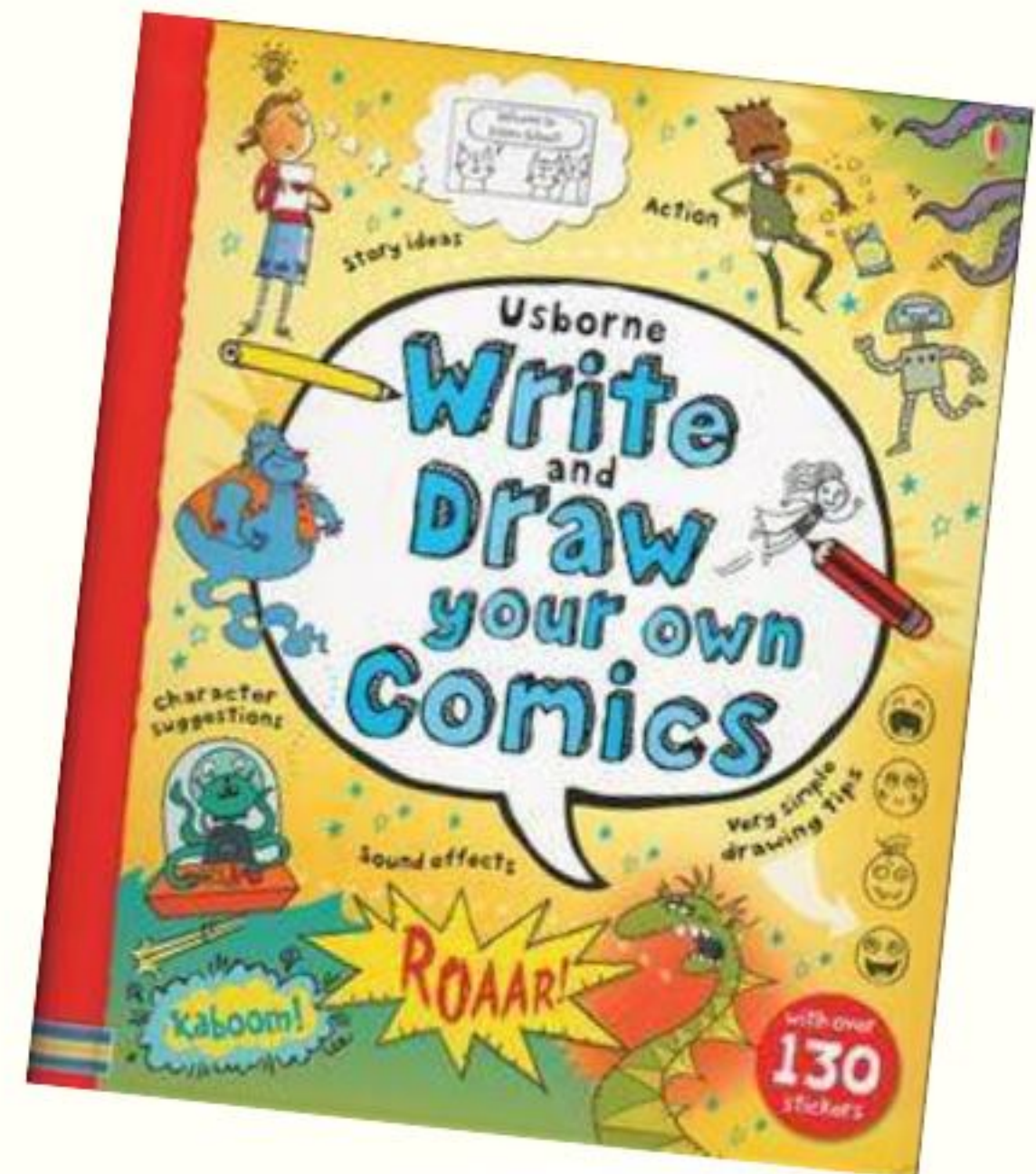
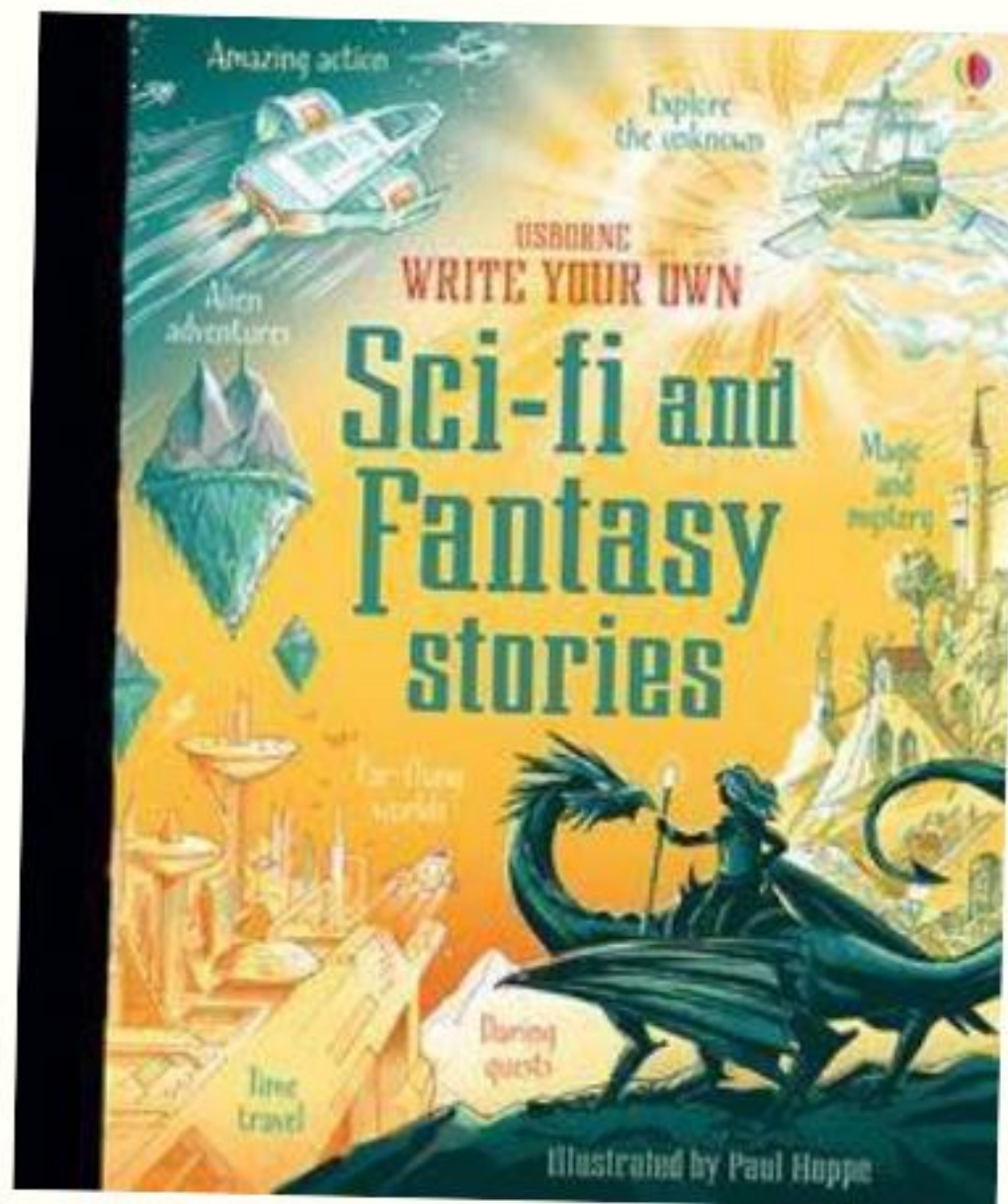
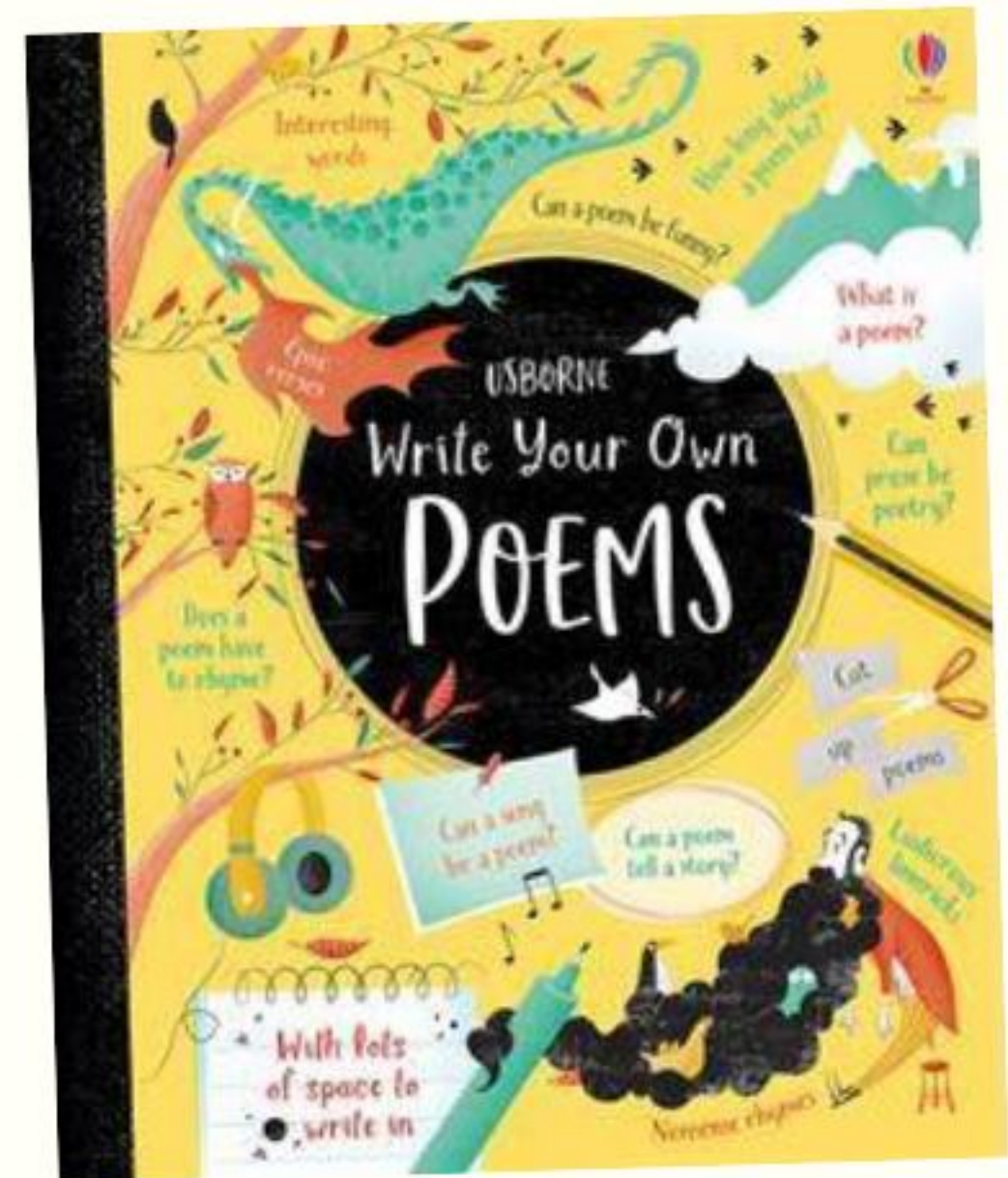
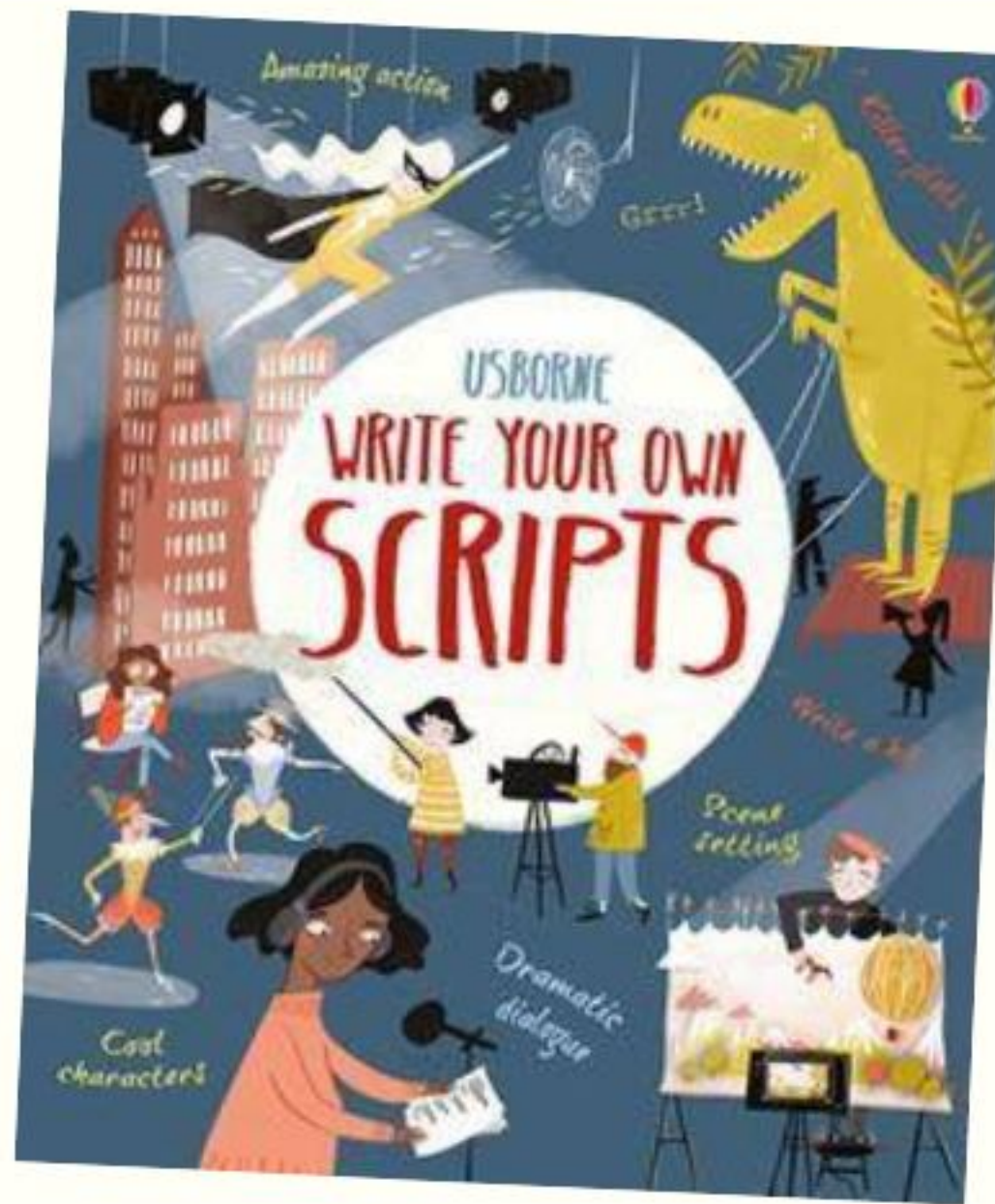
Name: _____
 Age: _____ Gender: _____
 Goal: _____
 Conflict: _____

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 collage.

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.

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

The pieces first, glue them down, you're satisfied how it all looks.

could take your photos to cut out use in a collage.

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.

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.

AH... TCHOO!

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

