



## **Year 4**

# **Knowledge Organiser Booklet**

This booklet can be used along with the weekly booklets and online resources to practice the key facts from our curriculum themes from the year so far.

'Knowledge Organisers' are sent home each half term. Below is a series of tips and information to help your child learn the key content, vocabulary, spellings which are contained in the Knowledge Organiser

## What are knowledge organisers?

A knowledge organiser is a set of key facts or information that pupils need to know and be able to recall in order to master a unit or topic. Typically, an organiser fits onto one page of A4 or A3 – this helps pupils to remember the layout of the page, which helps them to memorise the information better. The secret to success is to regularly visit the knowledge to be learned (known as 'spaced retrieval'). This helps transfer the knowledge from the short-term memory to the long term memory. This not only helps to make 'learning stick' but it also frees up our short-term memory for day to day learning and experiences.

## How will a knowledge organiser help my child?

Knowledge organisers will be made available at the start of each half term for our curriculum theme to help children remember what they are learning and see the bigger learning journey in their subjects. Instead of forgetting previous learning, pupils continually revisit and retrieve prior learning from their memories.

## How will a knowledge organiser help me to help my child?

Many of you ask us how you can help to support your children at home. Some of you are worried that you don't have all of the subject specific knowledge to be able to help your children. Some of you worry how to check that your children have done their homework and revision. The knowledge organisers will help you to do this easily.








## Suggested activities for parents

### Top tips

- Make your practice active-don't just read it. Try **flash cards**, **mind maps** or use **post it notes** to **cover sections and try and remember them**,
- Watching videos online can really help to bring your facts alive!
- Test yourself by asking your parents or asking a friend to test you! This will show you what you know and what you still need to learn.



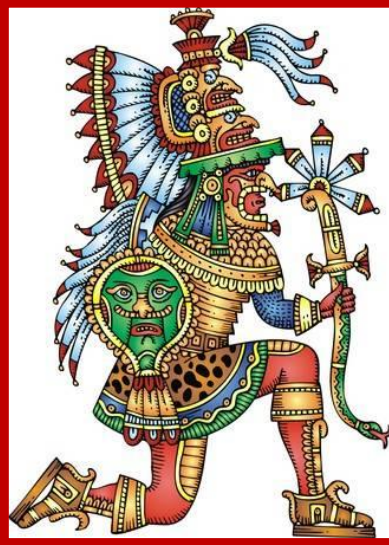
Here are some strategies that might help you to do this:

Strategy	Description	Image
Reading it	Read through the organiser with your child – if you don't understand the content then ask them to explain it to you – 'teaching' you helps them to reinforce their learning.	
Change it	Try changing the information into a mind map or make your own version using clip art imagery if the organiser contains a lot of text. Display on the wall or the fridge door until the memory 'sticks'.	
Test it- Spelling	Test them regularly on the spellings of key words until they are perfect. Make a note of the ones they get wrong – is there a pattern to the spelling of those words or a song you can make up to help?	
Test it- Facts	Read sections out to them, missing out key words or phrases that they have to fill in. Miss out more and more until they are word perfect.	
Record it	Try recording the knowledge from the organiser as an mp3 sound file (most phones have this as a free app) your child can listen to and speak along with.	
Research it	Once they can remember all of the knowledge on the organiser, use the internet or a book to find out more.	
Glossary	Make a glossary (list) of key words with definitions or a list of formulae.	



# MAYANS

- Mayan civilisation flourished in Central America from about 2600BC until around AD1000
- According to Mayans, the world was created on 11<sup>th</sup> August 3114BC (the date their calendar starts from).
- The Mayans developed the first proper written language.
- The Mayan system of hieroglyphics was not successfully decoded until the 1950s.
- Human sacrifice was rare but took place during times of difficulty, war or when new temple leaders
- They built pyramids, many of them larger than those in Egypt.
- Mayans worshipped nature gods, especially gods of the sun, rain and corn.



## Gods

- Mayan gods could change themselves into human and animal shapes.
- Priests performed ceremonies to keep the gods happy.
- The Maya (Mayans) thought the world was divided into three parts, the Heavens, the Earth and the Underworld, all linked together by a giant World Tree.
- Mayan kings were thought to become gods after their death

## Games

- Played ball game Pok-a-Tok
- Serious injuries occurred
- Sometimes prisoners played, if they won they were set free
- Sometimes, the losing team were sacrificed



## Hunting

The **Mayans** used bows and arrows to hunt animals for food. They hunted many different types of wildlife like deer, dogs, agouti, turkeys and peccaries.



## Clothing

The **Mayans** primarily wore **loincloths** that were made out of cotton and suitable for the hot climate that they lived in, but would wear a cloak called a **manta** if the weather was cold. A long cotton dress called a **huipil** was also worn by Mayan women.

The gigantic Mayan pyramids were monuments dedicated to the gods, and priests performed sacrifices and rituals after climbing on top of them. According to evidence provided by archaeological excavations, Maya cities featured large palaces, temples and plazas. Large populations of farmers surrounded the cities and provided supplies. During the 8<sup>th</sup> century, the Maya civilisation was in a state of decline, and by 900, it collapsed completely. The reason for this decline is subject to speculation, with some historians believing that it was due to a catastrophic environmental change. Others argue that the constant warfare with competing states led to the collapse of the Maya civilisation.

## Food and Drink

The Maya, Aztec and Inca civilisations ate simple food. Maize was the central food in their diet, along with vegetables such as beans and squashes. Potatoes and a tiny grain called quinoa were commonly grown by the Incas.

Almost every Mayan city had a ballcourt to play the ball game Pok-A-Tok. Pok-A-Tok games were often played as parts of religious ceremonies.

Serious injury could be inflicted on a player with the hard ball the weight of a average computer which was mainly struck with the elbows, knees or hips, but was not to be hit with the hands, feet or calves. Players were known to throw themselves on the ground to hit the ball properly. Players wore equipment for protection such as chin pieces, masks, gloves, knee pads and leather aprons.

## **Heritage and Values Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.



# CHINA



China is a country in the continent of Asia.  
Its official name is People's Republic of China.

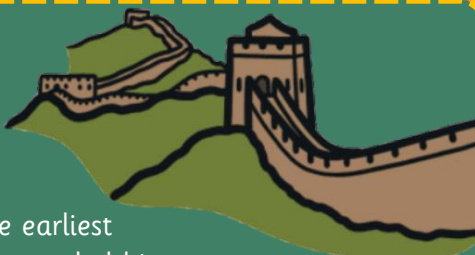
## KEY VOCABULARY

**Emperor** - a sovereign ruler of an empire.

**Continent** - A continent is a large solid area of land. Earth has seven continents.

**Shang Dynasty** - The Shang Dynasty is the earliest ruling dynasty of China to be established in recorded history.

**The Great Wall of China** - a system of fortified walls with a roadway along the top, constructed as a defence for China against the nomads of the regions that are now Mongolia and Manchuria



## KEY DATES

- **1600BC to 1046BC** - Shang Dynasty
- **October 1<sup>st</sup>** - National Day
- **1<sup>st</sup> day in Lunar months** (normally Jan or Feb) - Chinese New Year.
- **5<sup>th</sup> day in 5<sup>th</sup> Lunar month** - Dragon Boat Festival

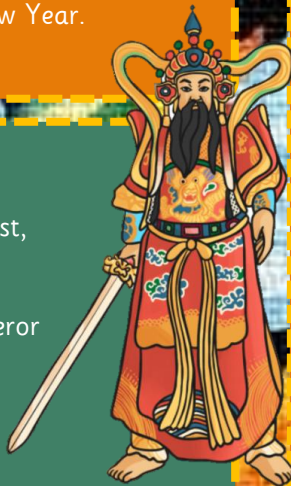


## KEY PEOPLE

**Shangdi** - the supreme god who controlled victory in battle, harvest, the fate of the capital, and the weather.

China was ruled by an emperor for over 2000 years. The first emperor was Qin Shi Huang who took the title in 221BC after he united all of China under one rule. The last emperor was Puyi of the Qing Dynasty who was overthrown in 1912 by the Republic of China.

**Xi Jinping** - Current president of the People's Republic of China, has been president since March 2013.



## INTERESTING FACTS



- **Capital city** - Beijing
- **Population** - approx. 1.4 billion. Most populated country on Earth.
- **Major Cities** - Shanghai, Shenzhen, Guangzhou
- **Major Rivers** - Yangtze. This is the 3<sup>rd</sup> longest river in the world.
- **Bordering Oceans** - Pacific Ocean
- **Bordering Countries** - Afghanistan, Bhutan, Burma, India, Kazakhstan, Kyrgyzstan, Laos, Mongolia, Nepal, North Korea, Pakistan, Russia, Tajikistan, and Vietnam.
- **Main languages** - Chinese, spoken in dialects. Most popular dialect is Mandarin.
- **Red** is considered to be a lucky colour in China.



## CAN YOU ...?

- Design a Chinese dragon?
- Find out what Chinese year you were born in e.g. the year of the ox.
- Go to the library and research Chinese history!

## EXTRA INFORMATION

### Chinese New Year

- Falls Between 21/01 and 20/02 each year.
- Celebrated over 15 days
- Each year is represented by one of 12 animals - tiger, rabbit, dragon, snake, horse, goat, monkey, rooster, dog, pig, rat, and ox.



### Dragons

- In China, dragons are associated with wealth, power, and leadership.
- Chinese dragons come in many different forms. Typically, a Chinese dragon is a snake-like creature, however, you might spot dragon depictions that are more like turtles and fish!
- During Dragon Boat Festival, dragon decorated boats race through the waters in many Chinese cities.
- At Chinese New Year people can witness a dragon dance. A team of "dancers" manipulates a cloth and wood puppet of a dragon.



## **Citizens and Culture Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.

# DESIGN COMPANY

This term we are going to use our enterprise skills to design a chocolate company.



- Chocolate grows on the tropical tree called the Theobroma cacao, or simply, "cacao." Theobroma is Greek for "food of the gods."
- Cacao is native to Central and South America, but it is grown commercially throughout the tropics.
- About 70% of the world's cacao is grown in Africa.
- A cacao tree can produce close to two thousand pods per year.
- The cacao pod is shaped like a football and grows straight out from the branches.
- The pods, which mature throughout the year, encase a sticky white pulp and about 30 or 40 seeds. These seeds are very bitter.
- After the beans are picked they are allowed to ferment and dry. These can take several weeks. After they are dried, they are sent to the factory where they are made into chocolate.
- Once the beans are at the factory they are cleaned, sorted and weighed. Every manufacturer knows exactly which beans make which kind of chocolate. Sometimes it takes 12 different kinds of beans to make a certain kind of chocolate.



**Graphic designer:** A graphic designer decides what the packaging of a product look like.

**Market researcher specialists:** Market researchers find out what products are already available, the history of products and what product the public would like.

**Advertising executive:** Advertising executives are in charge of planning and creating television, billboard and social media campaigns.

**Financial planners:** Financial planners are in charge of the money. They keep a record of how much is being spent and make sure everyone stays in the budget!

## Can you ....?

Taste a variety of different chocolates at home!

Design your own chocolate bar wrapper!

Remind yourself of how chocolate relates to the Mayans.

## KEY VOCABULARY

**Marketing:** promoting or selling a product.

**Advertisement:** A notice or announcement which shows a product and encourages people to purchase it.

**Cocoa beans:** The beans that chocolate is made from.

**Cocoa Pods:** the casing that contains cocoa beans

**Cocoa tree:** The plant that the cacao seeds grow on.

**Product:** an object or food that is designed and made to be sold

**Ingredients:** any of the foods or substances that are combined to make a particular dish

**Market research:** The process of gathering, analysing and interpreting information about a about a product or service to be offered for sale in that market

**Curriculum Vitae:** A curriculum vitae is a document used to list your skills and apply for a job.

**Fairtrade:** Fair trade is a way of buying and selling products that allows the farmers to be paid a fair price for their produce, and have better working conditions.

**Nets:** A pattern that you can cut and fold to make a model of a solid shape

**Packaging:** materials used to wrap or protect goods **Expenditure (expenses):** the amount of money spent.

**Budget:** a set amount of money to spend.

**Income:** A set amount of money received weekly, monthly or yearly.

**Profit:** The amount of money made or left over after expenses have been calculated.

**Logo:** A symbol or sign that a company uses to be recognised by the public.



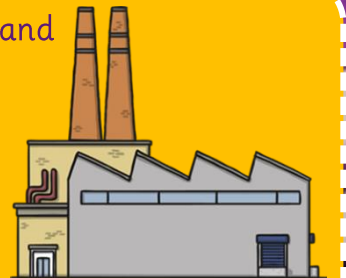
**Nestle** – Founded in 1866, Vevey, Switzerland

**Cadbury** – Founded in 1824, Birmingham

**Thorntons** – Founded in 1911, Sheffield

**Green and Blacks** – Founded in 1991

**Lindt** – Founded in 1845, Zürich, Switzerland





## **Enterprise Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.

# ROCK 'N' ROLL SOUNDS

Henry needs your help! He is playing at a rock concert and needs an instrument that has the correct pitch and volume. Research the different elements of sound and vibrations that change the way we hear things.

## WHY ARE WE LEARNING THIS?

We are learning to identify how sounds are made (vibrations, pitch and sound). The more vibrations, mean the louder the sound. Recognise that sound gets fainter as the distance decreases.

## KEY VOCABULARY

**Sound** - vibrations that travel through the air or another medium and can be heard when they reach a person's or animal's ear.

**Pitch** - the quality of a sound governed by the rate of vibrations producing it; the degree of highness or lowness of a tone.

**Materials** - the matter from which a thing is or can be made.

**Instruments** - a tool or implement, especially one for precision work.

**Sound waves** - a wave of compression and rarefaction, by which sound is propagated in an elastic medium such as air.

**Particles** - a minute portion of matter.

**Tune** - a melody, especially one which characterises a certain piece of music.

**Energy** - power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines.

## CAN YOU ...?

- Identify what sounds different materials make at home.
- Create your own sound walk, listening hard to the various sounds within your home or outside.

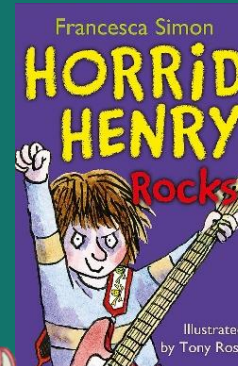


## INTERESTING FACTS

- When an object moves it creates a vibration
- Vibrations move air particles around
- Our ears pick up these particle vibrations as sound
- The stronger the vibrations, the louder the sound
- Fast moving particles make a high sound, slow moving particles are low-sounding
- Sound does not travel as fast as light
- The speed of sound is around 767 miles per hour
- Sound travels fastest through steel at 4,512 meters-per-second
- A voice of a whale can travel up to 800 kilometres (479) through the ocean waters



## BOOK FOCUS



### Horrid Henry Rocks

- Written by: Francesca Simon
- Published in: 2010

### **General description:**

All Henry wants is to see the best band in the world! But his family buys tickets for 'Daffy and her dancing daisies' instead. AARRGHHH!



## EXTRA INFORMATION

- Pitch is the quality of a sound (high or low) and depends on the speed of the vibrations
- Different materials produce different pitches, depending on how quick the vibrations are
- Dogs can hear more high frequency pitched sounds than humans



## **STEM Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.

## BRITISH DEMOCRACY

**Rule of Law-** Clear and explained sanctions

**Individual liberty-** To be able to make changes and have freedom

**Democracy-** To have your opinion heard, respected and thought about

**Acceptance-** To understand, listen and respect others beliefs and faiths

**Debate-** A formal discussion on a particular matter in which there will be different opinions argued for

**MP (Member of Parliament)-** someone who has been voted into parliament through election

**Political Parties-** An organised group of people with similar political aims and opinions that want to try and influence people in order to get their vote in elections

**Manifesto-** A document explaining the action and aims that a political party wants to achieve and change

**Petition-** A formal written request appealing for a specific case

**Election-** A formal and organised event in order to vote for a political party or decision. Have to be 18 years old or over to vote



# SELF

## OUTDOOR LEARNING

Key vocabulary for maps:

**Map key-** Part of a map that explains any symbols or colours on a map.

**Compass -** A magnetic needle on a round dial or card tells you where north is. Regardless of where you are, the needle always points north.

**Latitude-** Lines that cross the globe from east to west

**Longitude-** Lines that cross the globe from north to south

**Mountain range-** A group of mountains



## HOW TO MAKE SAUSAGE, MASH AND PEAS!

Preheat the oven to 200C/400F/Gas 6.

Place the sausages into a roasting tin and place in the preheated oven. Cook for 10 minutes then turn the sausages and cook for a further five minutes, or until they have a good colour on the outside.

For the mash, boil the potatoes in a pan of boiling water until tender. Drain and mash.

Heat the butter and milk until the butter has melted. Add a pinch of salt and pepper then pour over the mashed potato and mix until smooth. Set aside until ready to serve.

Cook the peas in a saucepan of boiling water for 2-3 minutes, or steam them for 1-2 minutes. Drain thoroughly and set aside.

Serve it all up, eat and enjoy!



## WELLBEING

Key strategies to self-control:

Take yourself away from any difficult situation

Take a deep breath and respond when you are ready

Speak to an adult to help you

To create a worry catcher you will need: a paper plate, scissors, glue, sticky tape, string and feathers to decorate. Let go of all worries by using this creation.





## **Self Workspace for learning facts or additional research.**

Make notes/drawings here to help you learn the facts from the knowledge organiser or add in extra research.