

Knowledge Organiser

Year 4 Narrative – Spring 1



Key vocabulary from the vehicle text:

Words

| | | | |
|-------------|-----------|--------------|-----------|
| humble | ancestors | subsequent | epic |
| unlikeliest | plunged | bounded | clambered |
| canopy | embers | meddling | outwit |
| justice | parchment | triumphantly | solemnly |

Phrases

| | | | |
|----------------------|----------------------|-------------------|--------------------|
| treasured possession | death-defying escape | grant him help | enchanted staff |
| held the power | track down | command the skies | piped up |
| listened intently | under one condition | truly stumped | realms of the gods |

Prior Learning:

What is a fronted adverbial? Can you give an example of one in a sentence?

What punctuation do you use after fronted adverbials?

What is a prepositional sentence? Can you give an example?

Writer's Knowledge: Think about...

...using expanded noun phrases to describe characters and settings.

...using fronted adverbials to show the passage of time and to build tension.

...using an apostrophe accurately to show the difference between when a noun is plural or possessive.

...using different nouns or pronouns to avoid repetition. This will keep the reader interested.

...using adjectives and prepositions together to describe the noun. This gives the reader more information.

...describing the threat of the monster through effect on other character/setting.

...choosing words to create an atmosphere of danger throughout the text.

...using longer, more detailed sentences to explain key story points.

Key vocabulary from the example text:

Words

| | | | |
|------------|-----------|-----------|----------|
| courageous | intrepid | rumours | emerge |
| savage | ungodly | pored | retrieve |
| mystical | summoning | enveloped | plumes |

Phrases

| | | | |
|----------------------------|---------------------|-----------------------|---|
| test her to the very limit | terrorised the land | keep them at bay | pored over the ancient Book of the Gods |
| Determined in her stride | drew ever-closer | plumes of chalky dust | withering in the wind |

Knowledge Organiser

Year 4 Instruction Guide – Spring 2



Key vocabulary from the vehicle text:

Words

| | | | |
|-------------|-----------|--------------|-----------|
| humble | ancestors | subsequent | epic |
| unlikeliest | plunged | bounded | clambered |
| canopy | embers | meddling | outwit |
| justice | parchment | triumphantly | solemnly |

Phrases

| | | | |
|----------------------|----------------------|-------------------|--------------------|
| treasured possession | death-defying escape | grant him help | enchanted staff |
| held the power | track down | command the skies | piped up |
| listened intently | under one condition | truly stumped | realms of the gods |

Prior Learning:

Have you ever read an instruction guide before? What was it about? What can you remember?

What do we use apostrophes for? Can you give an example?

What is meant by 'using the third person'? Can you think of an example?

Writer's Knowledge: Think about...

...using other pronouns to avoid repeating a name.

...using sentences sequenced in paragraphs to develop detail of understanding.

...using an apostrophe accurately to show the difference between when a noun is plural or possessive.

...using adjectives and prepositions together to describe the noun. This gives the reader more information.

...using a clear title.

...using technical language to make the instructions more believable.

...using bold sub-headings to help the reader.

...using occasional fronted adverbials to describe the action that follows.

Key vocabulary from the example text:

Words

| | | | |
|-----------|-----------|-------------|----------------|
| agile | crucial | combat | attempt |
| imprison | felled | sacrificing | simultaneously |
| enchanted | identical | ransacked | frame |
| wielding | docile | gaping | outmanoeuvre |

Phrases

| | | |
|------------------------|-----------------------------|-----------------------|
| equip themselves fully | hooved animals | hailing from ancestry |
| methods of summoning | equivalent to approximately | poorly coordinated |
| severely limited | | |

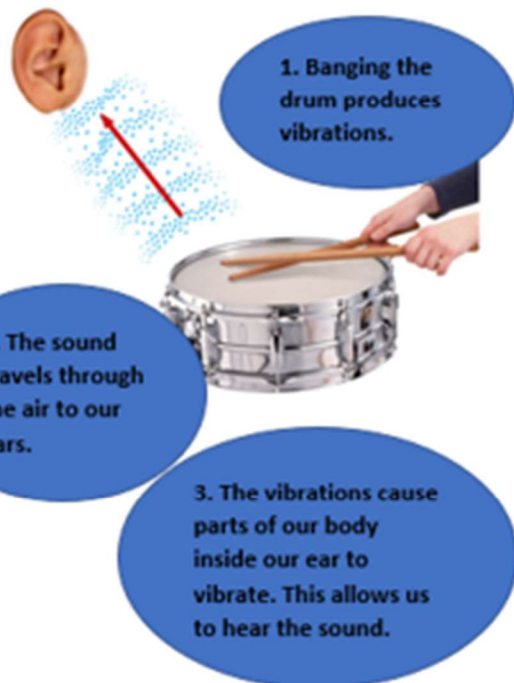
Year 4: Science Knowledge Organiser



Prior Learning

This is the first-time pupils have learnt about sound. They will be able to use their personal experience to answer the following questions:

- Have you ever used a telephone out of a pair of paper cups and paper string? Describe this to your partner.
- Have you ever played a drum before? Why does the drum look like it is moving?
- Which one do you think you can hear first, a sound or a noise?



Sound – Year 4

Significant scientist

Christian Doppler
(1803-1853)



Christian Doppler was an Austrian mathematician and physicist. He is celebrated for his principle known as the Doppler effect. This describes how noises sound different as you move toward or away from a noisy object.

As well as travelling through air (gas), sound can travel through solids and liquids:



Pitch



The longer bars on the xylophone make a lower sound.

The shorter bars on the xylophone make higher sounds.

Volume

The volume (loudness) of a sound depends on the size of the vibrations.



If we blow an instrument harder, we make a louder sound.

The closer we are to the sound source the louder it will be.



A train arriving at a station sounds loud.

The further away from a sound the fainter it will be.



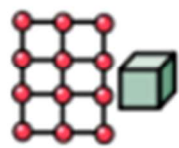
A train in the distance sounds quieter.

Insulating sound

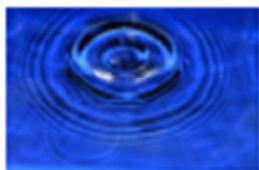


We can wear ear defenders to protect our ears from very loud sounds.

Key Vocabulary-Science



Solid



vibrations



source



travel



loudness



prediction



results



resources



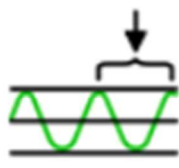
planning



pitch



soundwave



frequency



sign-language



fair-test



particles

Year 4: RE Knowledge Organiser

Spring 1: How is faith expressed in Hindu communities and traditions?



Prior Learning

Pupils will not have studied Hinduism before but will be able to answer the following questions drawing on their knowledge of RE in general:

- Last term you took part in a Diwali workshop. Describe what you did and what you learnt.
- All religions follow traditions and rituals. Can you give an example of one from any religion?
- Hindu's worship in a temple. Have you ever been in a temple or seen one before?

Core learning/skills

- Identify the terms 'dharma', Sanatan Dharma' and 'Hinduism' and say what they mean.
- Make links between Hindu practices and the idea that Hinduism/Sanatan Dharma is whole 'way of life' (dharma)
- Describe how Hindus show their faith within their families in Britain today (e.g. home puja)
- Describe how Hindus show their faith within their faith communities in Britain today in varied ways.
- Raise questions and suggest answers about what is good about being a Hindu in Britain today, and whether taking part in family and community rituals is a good thing for individuals and society, giving good reasons for their ideas.

Sticky Learning

Hindu's show their faith within their families. Can you describe what each object below means and how they are used:

- Murtis
- family shrine
- statues and pictures of deities
- puja tray
- Bhagavad Gita

During the week Hindu families, bless food, complete daily puja and arti ceremony, sing hymns, read holy texts and visit the temple. Pick one of these routines and tell your partner more about it.



Hindus show their traditions within their faith communities. They visit the temple/mandir; perform rituals including prayer, praise such as singing hymns/songs, sharing, and receiving prashad.



Did you know?

Hinduism is the oldest and most complex of all religions, it can be traced back more than 5000 years in India.



Key Vocabulary-RE



Hindu



Dharma



gods



goddesses



murti



mandir

Year 4: Computing Knowledge Organiser

Spring 1: Repetition in shapes



Prior Learning

Pupils will be able to use their previous learning to answer the questions below:

- What does programming mean and when have you done this before?
- In year 3 you learnt what an algorithm is. Explain using an example what the word means.
- Give an example of where you have debugged your work.

Core learning/skills

This unit is the first of the two programming units in Year 4 and looks at repetition and loops within programming. Pupils will create programs by planning, modifying, and testing commands to create shapes and patterns.

They will use Turtle academy, a text-based program that we can use to create shapes and patterns.

Sticky Learning

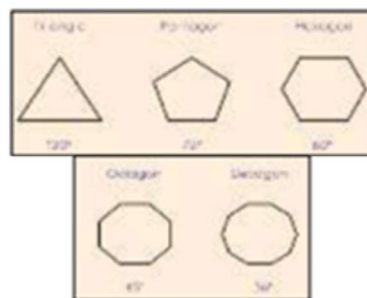
-Patterns: Patterns are things that repeat in a logical way. In everyday life, patterns are everywhere!

-Patterns in Logo: Instead of typing in the code to create each individual shape, we can save time by repeating a sequence of instructions. We use the 'repeat' function.

-Repeat: Type the command 'repeat' — this repeats commands a set number of times. The number following repeat is the number of times to repeat the code, and the code to be repeated is in square brackets, e.g. repeat 4 [FD 100 LT 90]

The above code will repeat FD 100 LT 90 four times.

-Creating Shapes and Loops: To make shapes, we need to know the angles of corners of different shapes (see right). Using the repeat function with shapes can help us to make spirals.



Did you know?

Cyberbullying is bullying that takes place online. Unlike bullying offline, online bullying can follow the child wherever they go, via social networks, gaming, and mobile phone. It is extremely important to reach out to a trusted adult if yourself or someone you know is worried about cyberbullying.



Key Vocabulary-Computing



Program



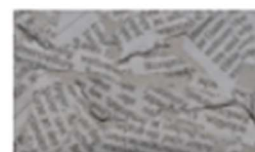
Turtle



Commands



Code



snippet



Design



Debug



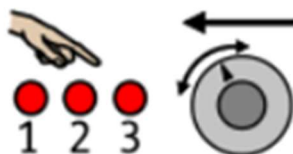
Logo



Pattern



repeat



count-controlled



loop



algorithm



value



trace



decompose



procedure

Year 4: PSHE Knowledge Organiser

Spring 1: How can we manage our feelings?



Prior Learning

Pupils learnt about feelings in year 2 PSHE lessons. They also learnt about the importance of looking after ourselves and the impact this has on our feelings:

- What happens to your emotions when you don't eat and sleep well?
- Why do we use the zones of regulation in school and how do they help you?
- What helps you to feel good, or better if you are not feeling good?

Core learning/skills

- To recognise that feelings can change over time and range in intensity.
- Everyday things that affect feelings and the importance of expressing feelings.
- A varied vocabulary to use when talking about feelings; about how to express feelings in different ways.
- Strategies to respond to feelings, including intense or conflicting feelings; how to manage and respond to feelings appropriately and proportionately in different situations.
- About change and loss, including death, and how these can affect feelings; ways of expressing and managing grief and bereavement.

Sticky Learning

It is not just big things that affect our mood, everyday things can affect feelings. For example, being late for school can make us feel sad or anxious. Do you have another example? We are aware that feelings change over time and can be experienced at different levels of intensity. This is perfectly normal and is experienced by all humans.



Did you know?

If you adjust your facial expression to reflect a certain emotion, you will actually begin to feel that emotion, studies have found. When you are happy you smile, right? But it works the other way, too. If you want to make yourself happy, all you have to do is force your face into a smile for around 30 seconds and you will instantly feel happier.



It is very important that we express our feelings. How we do this is just as important as there are lots of different ways and different circumstances.

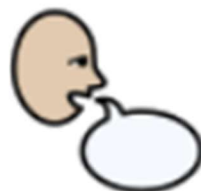
Our feelings can be very strong at times of loss, grief, and change. Can you describe some examples of this?

Who can you speak to if you require advice and support to help manage our own or others' feelings?

Key Vocabulary-PSHE



Intensity



expressing



proportionately



loss



grief



change

Year 4: DT Knowledge Organiser

Spring 1: Healthy and balanced diet



Prior Learning

Pupils will have learnt about healthy and balanced diets in year 3. They will be able to use this information to answer the following questions:

- There are 2 different techniques to chop safely. What are these?
- How do you record your evaluations when you complete food tests?
- If I wanted to grate cheese what kitchen equipment would I use?

Core learning/skills

- Have some basic knowledge and understanding about healthy eating and The Eatwell plate.
- Have used some equipment and utensils and prepared and combined ingredients to make a product.
- Use annotated sketches and appropriate information and communication technology.
- Select from a range of ingredients to make appropriate food products, thinking about sensory characteristics.
- Evaluate the ongoing work and the final product with reference to the design criteria and the views of others.

Sticky Learning

An iterative process is the relationship between a pupil's ideas and how they are communicated and clarified through activity. This is an example of how the iterative design and make process might be experienced by an individual pupil during this project:

THOUGHT

Who am I making the food product for?
How can I make it appealing for the range of users?

What kind of food product shall I make that can be carried easily?
What ingredients could it contain?

How will I make sure it looks appealing as well as tastes and smells good?

What techniques will I use to prepare the ingredients and what equipment do I need?

How long will it take?
What order will I work in?

More thoughts... appraising, reflecting and refining.

Has the snack met the needs of the user and achieved its purpose?

ACTION

Discussing and communicating ideas, researching existing products, drawing annotated sketches, generating design criteria.

Referring back to sensory evaluations carried out in IEAs.

Discussing ideas and how the type of food product and way it is eaten will affect the design.

Peeling, chopping, slicing, grating, spreading.

Using tools such as round ended knives, vegetable peelers, apple corers, strawberry hullers and graters.
Listing the equipment required.

Planning the order of the activity and timescale.

Acting on ongoing evaluation to make appropriate changes.

Evaluating the food product against the design criteria including the user and purpose.
Recording final product through an annotated sketch.

Did you know?

Here are some fun facts about cooking that you may not know:

1. Humans have been cooking for millions of years.
2. Cooking helps you feel calm and less stressed.
3. Bananas are classed as berries!
4. If you want to cool down your drink do not stir it as it makes it hotter!



Key Vocabulary-DT



techniques



ingredients



texture



appearance



preference



savoury



hygienic



edible



reared



caught



processed



seasonal



harvested



healthy/varied diet



annotated



sketch



sensory



evaluations

Year 4: PE Knowledge Organiser

Spring 1: Basketball



Prior Learning

- How do you keep possession when playing basketball?
- The aim of the game is for attackers to score a basket-true or false?
- What is the aim of the game for defenders?

Core learning/skills

The unit of work will develop pupils' ability to apply the principles of attack vs defence, with a particular focus on creating simple attacking tactics to move the ball up the court, creating an attack that results in a shooting opportunity.

Sticky Learning

There is a clear difference between attack and defence. Explain to your partner what these differences are.

You execute certain skills at different points during the match:

- **Space:** The team in possession of the ball need to identify open spaces to move into to enable them to create opportunities to score.
- **Bounce pass:** when you have possession and want to find space in a crowded area, this is a short pass.
- **Marking:** is when the attacking player has received the ball and you are making it difficult for them to pass the ball on by restricting their options
- **Pivot:** is used to allow the attacker in possession of the ball the opportunity to change direction without committing an offence.

Did you know?

The Harlem Globetrotters are an American exhibition basketball team. They combine athleticism and theatre in their style of play. They have played more than 26,000 exhibition games in over 124 countries.



Key Vocabulary-PE



possession



marking



space



Year 4: History Knowledge Organiser



Spring 1: What was the effect of Anglo-Saxon and Scots settlement in Britain?

Prior Learning

In Autumn 1, pupils learnt about the Romans. They will be able to use this knowledge to answer the following questions:

- What was the iron age and what link does it have to the Romans?
- Why did the Romans invade Britain?
- What is a roman Emperor and what emperors do you know about?
- How did Celtic people live?

Core learning/skills

- know and understand the history of these islands as a coherent, chronological narrative.
- know and understand significant aspects of the history of the wider world: the nature of ancient civilisations.
- gain and deploy a historically grounded understanding of abstract terms such as 'empire', 'civilisation', 'parliament' and 'peasantry'.
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections.
- understand the methods of historical enquiry
- gain historical perspective by placing their growing knowledge into different contexts.

Sticky Learning

The Roman's finally left Britain in c. AD 410, why was this the case?

After the Roman's left Britain, the Scots were free to invade from Ireland to north Britain (now called Scotland).



Anglo-Saxon's invaded England once the Romans left. What was village life like for them?



Anglo-Saxon people were very skilled at making very detailed jewellery including brooches. How do we know this? Where could you go to see the jewellery now days?

Did you know?

When they first came to Britain the Anglo-Saxons were pagans. Pagan Anglo-Saxons worshipped many gods who they believed controlled the weather, crop growing and war.



Over time the Anglo-Saxons became Christians after the Pope sent over a monk called Augustine from Rome to convince them to become Christians.



Key Vocabulary-History



Anglo-Saxon



invade



Scots



empire



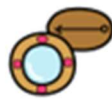
roman



art and culture



Tapestry



brooch



barbarian



tribes

The Brass Band: Exploring Rhythmic Patterns



In this unit, we will be learning all about the British brass band. The brass band is a collection of brass and percussion instruments. There are about 30 people in a brass band, including percussion.

Brass bands are well known for playing a wide range of music, ranging from orchestral works to military style marches, from church hymn tunes to arrangements of pop and rock songs, from film music to original brass band music written composers from all over the world.

The origins of brass bands come from the British armed forces and even today, a lot of brass bands wear military style uniforms whenever they perform.



cornet



flugelhorn



tenor horn



baritone horn



euphonium



tuba



trombone

Our Listening



O.R.B. (Brass Band March)



Abide With Me (Hymn Tune)



Olympic Fanfare and Theme by John Williams (Fanfare)



The William Tell Overture by Rossini (Classical Music)

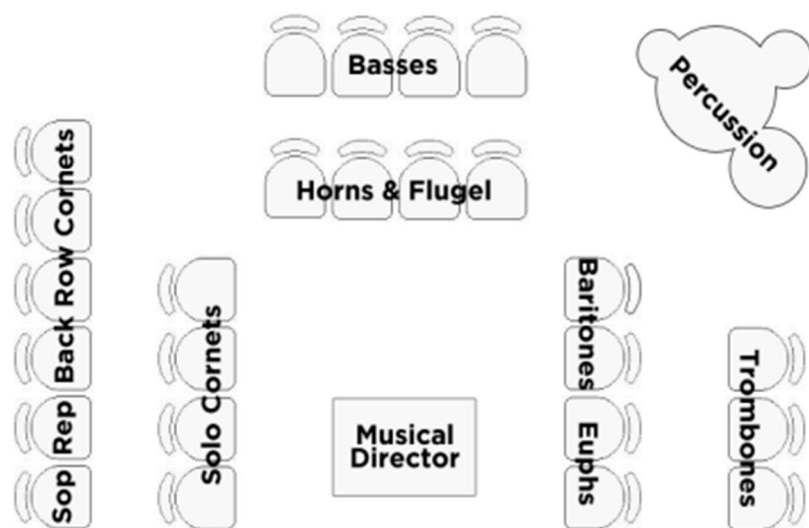


Thunderbirds Theme Tune by Barry Gray (Music for Film and Television)



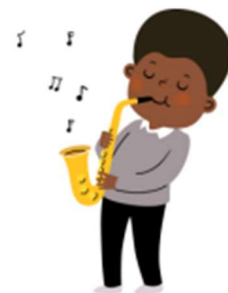
The Lonely Boy by Mnozil Brass (New Brass Band Music)

The Brass Band Layout



Improvisation

Improvisation is playing music on the spur of the moment without practise or written notation.



Dynamics



'f'

Loud

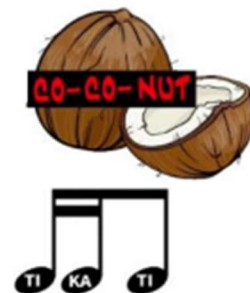


'p'

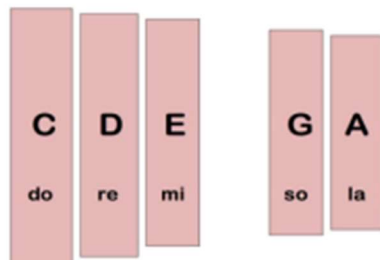
Quiet

Graphic Notation

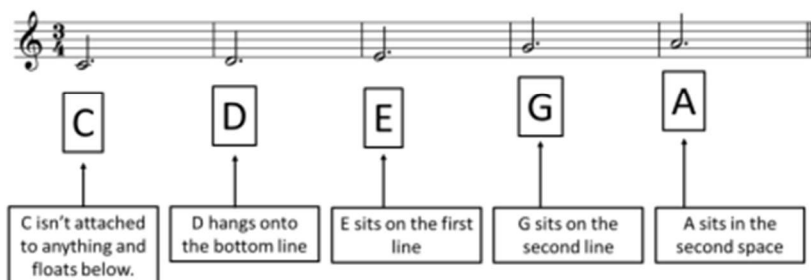
This is when music is written with pictures instead of musical notes.



C Major Pentatonic Scale



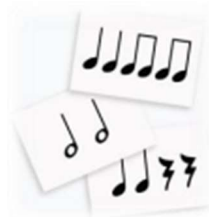
Musical Notes - Pitch



Pulse and Rhythm



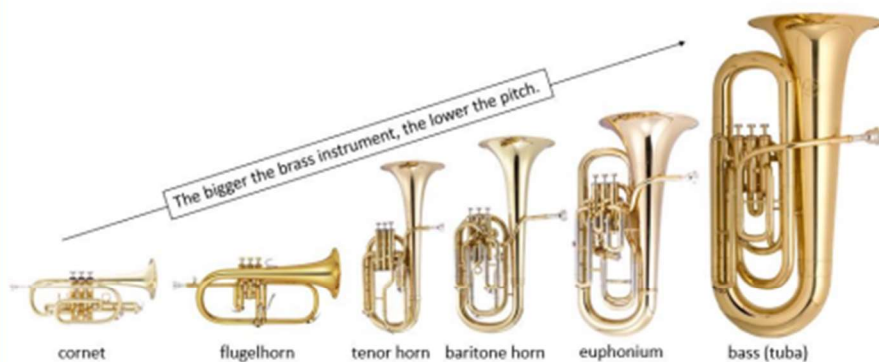
Pulse is the heartbeat of the music.



Rhythm is when long and short notes are joined together.

Pitch

Pitch is how high or low a sound is.



Musical Notes



Crotchet = 1 beat



Crotchet rest = 1 beat of silence



Minim = 2 beats



Semibreve = 4 beats



1 quaver = $\frac{1}{2}$ beat
2 quavers = 1 full beat



Quaver rest = $\frac{1}{2}$ beat of silence



1 semiquaver = $\frac{1}{4}$ beat
4 semiquavers = 1 full beat

Ostinato

An ostinato is a pattern that repeats.

