

Knowledge Organiser

Year 4 Information – Autumn 2



Features and organisation for your writing:

Feature	Tick
Title	
Picture	
Subheadings	
Introduction – classifying subject	
Organised into paragraphs	
Third person	

Include language techniques:

Technical language
Figures representing facts
Concise detail
Precise verbs and adjectives
Factual expanded noun phrases



Example text:

Arctic Fox

The Arctic fox (*Vulpes lagopus*) is an omnivore native to the Arctic regions of the Northern Hemisphere.



Appearance

As the name suggests, the Arctic fox lives in extremely cold environments. It has a thick coat of white fur which is a key indicator of how well adapted this species is to survive hostile sub-zero temperatures. The body length of these mammals can range from 46 to 68 cm. They have a rounded body shape which reduces the escape of body heat. Also, they curl up tightly, tucking their head and limbs under the body and tail to stay warm.

Predator and Prey

The Arctic Fox's diet consists of meat and plant-based nutrition. They prey on a variety of small creatures including lemmings (which is why they are sometimes called the 'lemming fox'), voles, ringed seal pups, fish, waterfowl and seabirds. They also eat carrion, berries, seaweed and insects. Interestingly, Arctic foxes survive harsh winters by storing food, in particular eggs from snow geese, to consume later. Natural predators of the Arctic Fox are golden eagles, polar bears, wolverines, red foxes, wolves and grizzly bears. On average, the life span of an Arctic fox is only 3-4 years in the wild.

Habitat

Arctic foxes live in large dens. These are complex systems of tunnels that cover vast distances. Often, these dens may be in existence for many decades and used by different generations of foxes. The foxes' dens have a large variety of entrances that are easily accessible. Arctic foxes can be found in northern Europe, northern Asia and North America, with the colour of their coats determining where they are most likely to be found.

Key vocabulary from the example & vehicle text:

Words:

omnivore	consume	Arctic	regions
environments	indicator	adapted	species
prey	carrion	determining	consume
vast	dens	hostile	Northern Hemisphere

Phrases:

Native to	The escape of body heat	Harsh winters	Natural predators
Complex systems	In existence for many decades	On average	Most likely to be
Easily accessible			

Sentence accuracy focus:

- Understanding of the difference between plural and possessive. Indicating possession using the possessive apostrophe with plural nouns
- Commas after fronted adverbials.
- Inverted commas to indicate direct speech.
- Use of comma after a reporting clause and use of end punctuation within inverted commas
- Cohesion (avoiding repetition, and using appropriate choice of nouns)
- Noun phrases expanded by the addition of modifying adjectives, nouns and prepositional phrases.

Punctuation:

Brackets ()	Used to go around parenthesis (extra information or an after thought) They prey on a variety of small creatures including lemmings (which is why they are sometimes called the 'lemming fox'), voles, ringed seal pups, fish, waterfowl and seabirds.
Possessive apostrophe with plural nouns ,	If the noun is plural and ends with an 's', we just attach an apostrophe without an 's' after it. The foxes' dens have a variety of entrances that are easily accessible.

Knowledge Organiser

Year 4 Narrative – Autumn 2



Features and organisation for your writing:

Feature	Tick
Paragraphs	
Written in chronological order	
Tension built through varied pace – detailed description balanced with action	
Written in first person	
Writing flows and is coherent	



Key vocabulary from the example & vehicle text:

Words:

habit	situation	drifted
deserted	rifled	matted
shunned	landmark	

Phrases:

Its seat in the blanket of darkness and stars	Bitter wind lashed and tore	Unkind and unforgiving
Clucked and tutted	A beat of hope fluttered in my heart	Once distant
I slipped into darkness	Came to my senses	

Example text:

Belonging

Overhead, the pale moon peered down at me from its seat in the blanket of darkness and stars. A bitter wind lashed and tore at the mountain. It rifled through my matted feathers and stung my tired eyes. My wings ached with exhaustion and all strength had deserted me. Alone and afraid, I was lost in a foreign land.

Day by day, I explored the world around me, searching for a sign or a clue to the way back home, but none could be found. Everywhere I went, I met animals who shunned me. I wondered how I appeared to them? If I was so very different? Perhaps my feathers are the wrong colour, or my beak the wrong shape. They kept their distance and I remained alone. Still I searched and searched for a way back to where I was known, to where I belonged.

One day, in desperation, I flew as high as I could to search for a landmark, or something to guide me. I had to get home, I could stay here no more. So I beat my weary wings ferociously, harder and harder and sped upwards into the open, endless sky. But the wind that had forced me here was unkind and unforgiving. Once more, it whipped and beat me, sending me spiralling downward into a forest, crashing through a tangle of branches and leaves. My wing was broken and useless. I lay in a heap. Grounded. I slipped into darkness.

When I came to my senses, those once distant creatures now surrounded me. They muttered and clucked and tutted to one another. Where there had once been fear on their faces, there was now concern. They had made me a bed of dried moss and a patchwork of leaves. Together, they fed me and nursed me like I was one of their own. They let me belong and a beat of hope fluttered in my heart.

After a few slow weeks, strength returned to my injured wing. The forest's creatures shared their knowledge with me, showing me the safest route home. I soared in a blue sky of promise, eager to get home, happy in the knowledge that I would always be accepted here.

Include language techniques:

Similes	Fronted adverbials
Metaphors	Prepositional phrases
Adverbs	Short sentences to stress drama
Conjunctions	Emotive language
Personification	Rhetorical questions
Alliteration	Figurative language
Verbs to make the weather sound violent.	
Repetition to show character's struggle	

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- Commas after fronted adverbials.
- Inverted commas to indicate direct speech.
- Use of comma after a reporting clause and use of end punctuation within inverted commas
- Cohesion (avoiding repetition, and using appropriate choice of nouns)
- Noun phrases expanded by the addition of modifying adjectives, nouns and prepositional phrases.

Punctuation:

Commas	Used to separate items in a list, separates a subordinate clause from a main clause at the start of a sentence, follows a fronted adverbial, and marks out a relative clause.
,	Under his feet, the rickety boat disturbed as the blanket of once white clouds gathered to an ominous grey.
Rhetorical question	A question that doesn't require an answer as the person asking either already knows the answer or isn't expecting one in return.
?	Would he be safe? Would the looming storm subside?
Ellipses marks	Used to show the trailing off of thoughts or to create suspense.
	Without hesitation, he pressed on.

Year 4: Science Knowledge Organiser

Prior Learning

- Have you ever seen something melt before? Why did it happen?
- Do you know why the kettle turns itself off when it boils?
- When it is raining a puddle forms. The next day the puddle has gone. What has happened?

Solids, liquids and gases

A **solid** keeps its shape and has a fixed volume.

Ice



sugar



A **liquid** has a fixed volume but changes in shape to fit the container. It can be poured.

water



honey



A **gas** fills all the available space; it has no fixed shape or volume.

water vapour



bubbles in cola



Information relating to 'famous scientists' adapted from work I Alex Sinclair & Amy Strachan of St Mary's University

Autumn 2: States of Matter

Significant scientist

Bernard Palissy (1510-1590)



Bernard Palissy was a French potter and scientist. He is often credited as the man who 'discovered' the modern theory of the water cycle. He asserted that rainfall alone was sufficient for the maintenance of rivers.

Melting and freezing



Melting is a change of state from solid to liquid. The melting point of water is 0°C .



Freezing is a change of state from liquid to solid. The freezing point of water is 0°C .

Boiling is a change of state from liquid to gas. Water boils when it is heated to 100°C .



Evaporation and condensation



Evaporating puddles

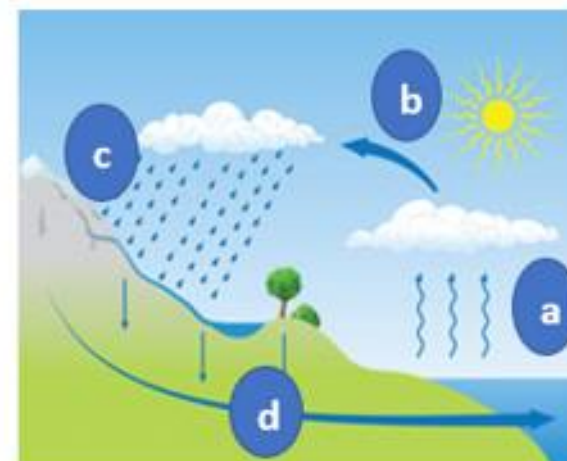
Evaporation is the change from a liquid to a gas at the surface of the liquid.



Condensation in the bathroom

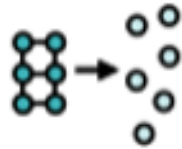
Condensation is the change from a gas to a liquid, caused by cooling.

The Water Cycle



a	Water evaporates into the air The sun heats up water at the surface of seas, rivers, lakes and turns it into water vapour. The water vapour rises into the air.
b	Water vapour condenses into clouds Water vapour in the air cools and changes back into tiny drops of liquid water, forming clouds.
c	Water falls as rain snow, sleet etc When too much water has condensed the water droplets in the clouds get too heavy and water falls back down to Earth in the form of rain, snow, sleet etc. This is called precipitation.
d	Water returns to the sea. Rainwater runs over the land and collects in lakes or rivers which take it back to the sea. The cycle starts all over again

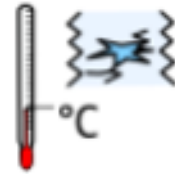
Key Vocabulary-Science



change of state



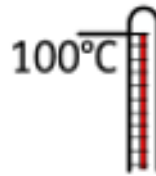
melting



freezing



melting point



boiling point



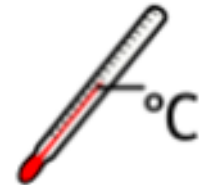
evaporation



condensation



water cycle



temperature

Year 4: Geography Knowledge Organiser

Autumn 2: Earthquakes and Volcanoes



Prior Learning

In year 3, we learnt to answer the following questions:

- What are South American cities like?
- Are south American cities similar to North America cities?
- What are Americas' main environmental regions?
- What is Route 66?

Core learning/skills

- What is happening when the earth shakes?
- What is happening when the earth rattles and rolls?
- How and why do people live where the Earth shakes/rattles and rolls?
- How disastrous have recent earthquakes and/or volcanic eruptions been?
- Can we make a model volcano that erupts?

Sticky Learning

Earthquakes are the result of sudden movement along faults within the Earth.

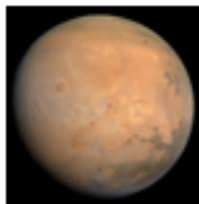


While there are many active volcanoes around the world (and in space), experts generally classify the most dangerous ones as those that are closest to highly populated areas, as they can have the deadliest effects.

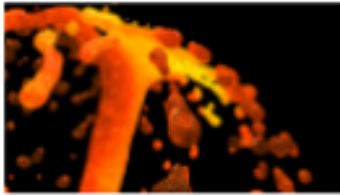


Did you know?

The largest volcano in our solar system isn't on planet Earth, it's on Mars! The volcano is called Olympus Mons!



Key Vocabulary-Geography



magma



plates



dormant



eruption



extinct



tremors



lava

Year 4: Art Knowledge Organiser

Autumn : Roman Gladiators-collage



Prior Learning

- In year 3, you made a fantasy animal collage. Can you tell your partner what a collage is?
- In year 3, you had lots of different experiences of sketching. Why is it important to sketch lightly?
- Why is it important to ensure your work is precise?

Core learning/skills

- Adapt and refine ideas as they progress.
- Explore ideas in a variety of ways.
- Annotate sketches to explain and elaborate ideas.
- Sketch lightly (no need to use a rubber to correct mistakes).
- Select and arrange materials for a striking effect.
- Use coiling, overlapping, tessellation, mosaic, and montage. Ensure work is precise.
- Develop ideas from starting points throughout the curriculum.
- Make printing blocks Make precise repeating patterns.
- Collect information, sketches and resources.

Sticky Learning

During this unit you will create an original piece of work that has been influenced by Henri Matisse.



How would you replicate some of the techniques used in the artwork above?

Once you have completed your mosaic you will need to comment on your artwork. Think carefully about the Language you are going to use.



Did you know?

Henri Matisse was not planning on becoming an artist!
He was a lawyer but one day he became ill. His mother gifted him some art supplies to use while he was in bed and that's when he discovered how much he liked art.



Key Vocabulary-Art



mosaic



stamp



emblem



Motif



geometric



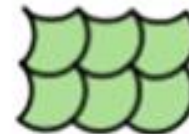
stylised



abstract



collage



tessellation

Year 4: RE Knowledge Organiser

Autumn 2: How do festivals and family life show what matters to Jewish people?



Prior Learning

- Think about a time when you said sorry. Why did you say sorry and how did it make you become a better person?
- Have you ever been to a festival before or seen one on the TV? Can you use 3 words to describe what it is like?
- Why do you think it is important to ask questions when we are learning about different faiths?

Core learning/skills

- Identify some Jewish beliefs about God, sin and forgiveness and describe what they mean.
- make clear links between the story of the Exodus and Jewish beliefs about God and his relationship with the Jewish people.
- Offer informed suggestions about the meaning of the Exodus story for Jews today and understand the impact.
- Make simple links between Jewish beliefs about God and his people and how Jews live (e.g. through celebrating forgiveness, salvation and freedom at festivals).

Sticky Learning

Jews show their beliefs through worship in festivals, both at home and in wider communities:

- **Hanukkah** – The Festival of Lights which is a week-long celebration. It marks the date when the Maccabees recaptured the Holy Temple in Jerusalem and re-directed it to Jewish worship.
- **Rosh Hashanah** – Jewish New Year. It is a 10-day festival which ends with Yom Kippur, the holiest day of the year.
- **Passover** – when Jews remember how God rescued them from slavery.



Jews remember the past and look forward to the future.

Do you think it is good to remember the past and look forward to the future? Why do you think this?



Did you know?

Israel is known as the Holy Land to the Jewish people, as it is where Judaism started.

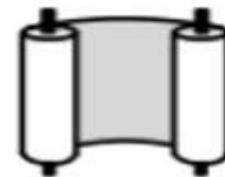
Jerusalem in Israel is known as the Holy City.



Key Vocabulary-RE



Almighty/Eternal



Torah



Chosen



people



Jewish



ritual

Year 4: PSHE Knowledge Organiser

Autumn 2: How do we treat each other with respect?



Prior Learning

- Think to a time when you have been playing a game online with your friend/family member. How did their behaviour affect you?
- When have you acted as a role model? How did you do this?
- Think back to a time when you kept a secret. How could you tell that it was ok to keep it?
-

Core learning/skills

- How people's behaviour affects themselves and others, including online
- How to model being polite and courteous in different situations and recognise the respectful behaviour they should receive in return
- About the relationship between rights and responsibilities
- About the right to privacy and how to recognise when a confidence or secret should be kept (such as a nice birthday surprise everyone will find out about) or not agreed to and when to tell (e.g. if someone is being upset or hurt)

Sticky Learning

All children have rights:

NSPCC

- You must be allowed to have opinions
- You must be kept safe
- You must be given the chance to learn

Why it is important to protect these rights?

Everyone should feel:

- Included
- respected
- not discriminated against



If you witness or experience exclusion, disrespect or discrimination you must report it to a trusted adult immediately.

This is also true if someone shows you aggressive or inappropriate behaviour (including online and unwanted physical contact).



Did you know?



Have you ever heard of the quote:
"Manners are free".

What do you think this means?

How many times each day do you say, please, thank you and excuse me?

THANK YOU

I'M SORRY

PLEASE

EXCUSE ME

Key Vocabulary-PSHE



respect



disrespect



courteous



human



rights



responsibilities



privacy



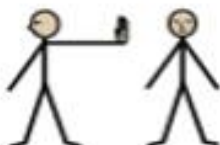
confidence



protect



exclusion



discrimination



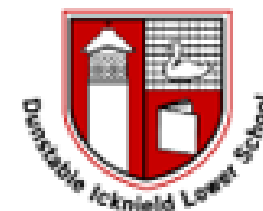
aggressive



inappropriate

Year 4: PE Knowledge Organiser

Autumn 2: Tag Rugby



Prior Learning

When you played Tag Rugby in year 3, you learnt the following words. Describe what each word means:

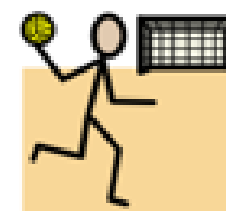
- Possession
- Dodge,
- Try
- Tagging or Tag
- Ball Carrier

Core learning/skills

The unit of work will develop pupils' ability to apply the principles of attack vs defence. Pupils will combine passing and moving to develop ways of creating space to beat an opponent to score a try. Pupils will also develop tagging and to explore different ways the defending team can prevent the attackers from scoring.

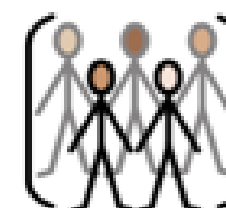
Sticky Learning

To be able to score you need to pass, move to create space, and then try to score.



There is a difference between attack and defence. You need to apply certain skills depending on whether you are attacking or defending. What are these?

When you play Tag Rugby you develop and apply life skills such as trust and cooperation. This is because you collaborate with others and apply the rules of the game.

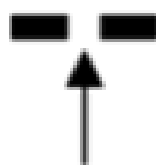


Did you know?

The Webb Ellis Cup or as it is more commonly known the Rugby World Cup is named after the inventor of rugby William Webb Ellis. The first World Cup was held in 1987 and is now played every four years.



Key Vocabulary-PE



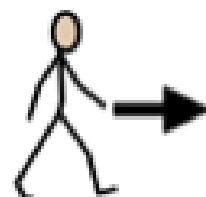
Space



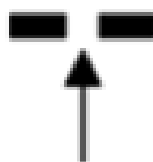
Attacker



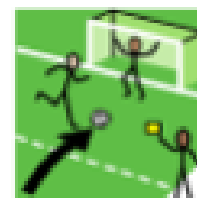
Defender



forward



space



offside

Year 4: Computing Knowledge Organiser

Autumn 2: Creating Media

Prior Learning

- In year 3, you learnt what output and input devices were. Can you give an example of each one?
- Have you ever recorded yourself before? What device did you use?
- Can you give an example of a podcast that either you or someone you know has listened to before?

Core learning/skills

Audio means sound, including music, sound effects, and podcasts.

The process of recording and listening to sound requires input devices (e.g. a microphone) and output devices (e.g. a speaker).

Podcasts are a type of spoken word audio file, that can be downloaded by listeners.

People can have ownership over audio files, and can have the audio copyrighted, so that it can't be copied without permission.

Sticky Learning

Podcasts are a type of spoken word file that can be downloaded by listeners. A user can often choose to download the whole series of podcasts.

Some examples of podcasts are 'Stories Podcast', 'Six Minutes' and 'Brains On! Kids Science Podcast.'

Features of podcasts include:

Sounds: Voices, jingles, background music, sound effects

Information: Presenters' names, name of podcast, introduction, main section, conclusion.



Did you know?

Before you listen to a podcast always check with a trusted adult if it is appropriate for your age. Podcasts should also be chosen from trusted sites.



Top Tips for High-Quality Podcasts

- Speak clearly
- Avoid fillers ('um', 'like')
- Avoid coughing/ sneezing
- Take turns to speak
- Avoid background noise
- Don't touch the microphone
- Choose music carefully

Key Vocabulary-Computing



Audio Input



Output



Microphone



Speaker



Podcast



Waveform



Jingle



Track

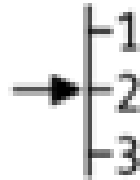


Presenter

Key Vocabulary-Mrs Kenneford



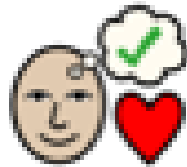
canon



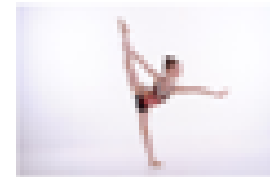
levels



flow



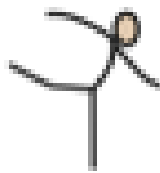
interesting



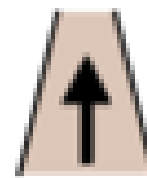
extension



Excellent



gymnastics



direction



unison