Knowledge Organiser • Adaptations • Year 4

Vocabulary		
Organism	Anything that is alive	
Habitat	Natural home of an organism	
Adaptation	The characteristics of an organism that help it to survive in its environment	
Camouflage	An adaptation that allows animals to blend in with their environment.	
Nocturnal	Animals that are active at night.	
Echolocation	A way of finding objects using sound.	

Adaptations of bats to being nocturnal

- 1, Big eyes to help them see in the dark
- 2. Dark colours to camouflage with their surroundings.
- 3. Some bats can use echolocation to find their prey in the dark.



Adaptations of a whale to living under water

- 1. Can dive for a long time before coming up to the surface to breath.
- 2. A streamlined body and fins for swimming.
- 3. Blubber that keeps them warm.
- 4. Can use echolocation to navigate underwater.



Adaptations of a camel to hot climates

- 1. Slit-like nostrils and two rows of eyelashes to keep sand out.
- 2. Can go for a long time without water.
- 3. Large, flat feet to spread their weight on the sand.



Adaptations of a polar bear to cold climates

- 1. a greasy coat that sheds water after swimming.
- 2. large feet with claws to grip on the ice.
- 3. a white colour to camouflage on the ice.
- 4. thick layers of fat and fur for insulation against the cold.



Knowledge organiser

1			
	Timeline of events		
449 CE	Angles and Soxons begin to settle in Britain		
793 CE	Viking attack on Lindisfarne		
865 CE	Great Heathen Army Invades		
878 CE	Battle of Edington – King Alfred defeats Guthrum; Guthrum is then baptised		
927 CE	Athelstan unites the English kingdoms		
991 CE	The English lose a great battle against the Vikings: the Battle of Maldon		
1013 CE	King Sweyn Forkbeard Invades and becomes King of England		
1016 CE	Canute becomes King of England		

Important people		
King Alfred	King of Wessex from 87I to 889 and defended Wessex from the Vikings; Alfred called himself the King of the English	
Aethelflaed	Skillful ruler who defended Mercia against the Vikings, and Alfred's daughter who later married Aethelred	
Edward.	Alfred's eldest son	
Guthrum	Viking King of East Anglia at the time of the treaty with Alfred, and a leader of the Great Heathen Army; later called Aethelstan	
Athelstan	First king to unite (bring together) all of the English kingdoms, in 927	
King Aethelred II (the Unready)	Introduced Danegeld (an official agreement with the Vikings)	
King Canute	King of England, Denmark and Norway; he ruled England from 1016 to 1035	

	Vocabulary
convert	Persuade someone to follow a religion
Danegeld	Money paid to Vikings by the Anglo-Saxors to stop them invading and raiding England (the word means 'Danish payment')
Danelaw	The part of England which King Alfred agreed belonged to the Vikings
enslave	Make someone a slave (someone who is owned by another person and has to do as they're told)
monastery	Building where monks live and worship their god
pagan	A term that Christian churches gave to religions with more than one god
peace treaty	Agreement to stop fighting, which also tries to fix the cause of the conflict
plunder	Take things by force
raid	Attack by surprise, with the aim of stealing things
Vikings	People from Scandinavia (Norway, Sweden and Denmark); they were also called 'Norsemen' (men of the North) or 'Danes' (people from Denmark)

Norse gods		
Odin	Chief god	
Frigg	Chief goddess	
Freya	Goddess of love, fertility, battle and death	
Thor	God of thunder	
Loki	God of cunning and fire	



Purple Mash Computing Scheme of Work: Knowledge Organisers

Unit: 4.6 Animation

Key Learning

- To discuss what makes a good animated film or cartoon.
- To learn how animations are created by hand.
- To find out how animation can be created in a similar way using the computer.
- To learn about onion skinning in animation.
- To add backgrounds and sounds to animations.
- To be introduced to 'stop motion' animation.
- To share animation on the class display board and by blogging.



Key Vocabulary

Animation

The process of adding movement to still objects.

Onion Skinning

A process where the shadow image of the previous frame is present to help you line up the objects of the animation correctly. FPS (Frames Per Second) The number of frames played per second.

Pause To temporarily stop the animation.

Frame

A single image in an animation.

Stop motion

A technique whereby the camera is repeatedly stopped and started, for example to give animated figures the impression of movement.



Purple Mash Computing Scheme of Work: Knowledge Organisers **Unit: 4.6** Animation **Key Images** Add or delete a Switch onion Open, close or Play the animation. share animation. frame from the skinning on or off. animation. Add a background Insert a sound file Number of frames in Insert a photograph picture to the from a webcam into into the animation. the animation. animation. the animation.

What is an animation?

Animation is the process of giving the illusion of movement to drawings, models, or inanimate objects. Animated motion pictures and television shows are highly popular forms of entertainment.

Onion skinning is a 2D computer graphics term

for a technique used in creating animated cartoons and editing movies to see several frames at once.

Key Questions

What is meant by onion

skinning?

What is meant by stop motion animation?

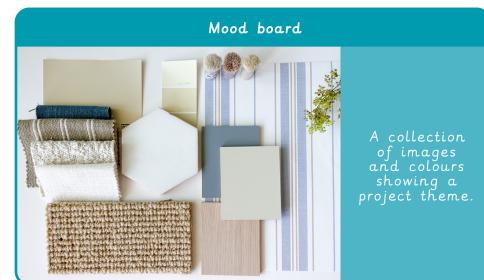
Stop motion animation is a filming technique in which objects (such as clay models) are photographed in a series of slightly different positions so that the objects seem to move.

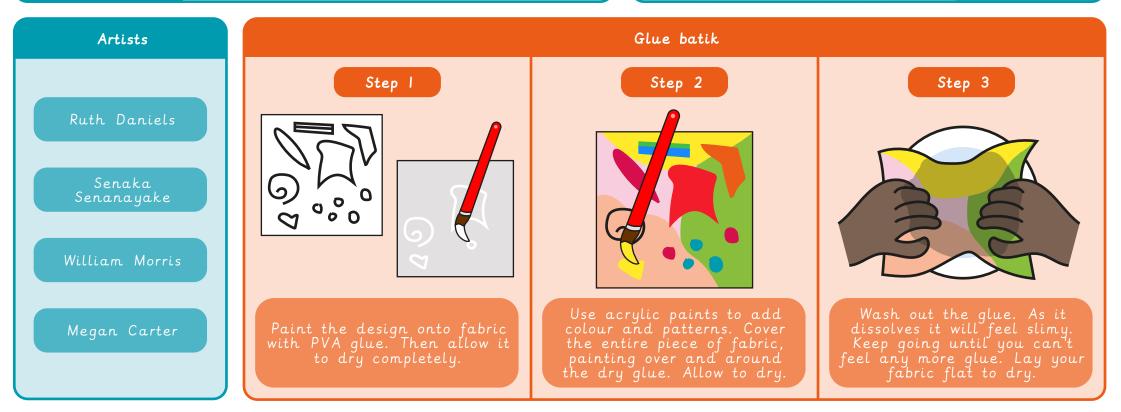


Year 4 - Craft and design



batik	A technique to create patterns on fabric.	
colour palette	A range of colours grouped together to look nice.	
craft	Something creative and useful.	
design	A decorative pattern or drawing of what something might look like.	
industry	Companies and activities that design and make products, sometimes in a factory.	
pattern	A design in which shapes, colours or lines are repeated.	
repeat	When the same thing occurs more than once.	
theme	Similar ideas that work together as a group.	





Year 4: Rock and Roll



Musical style: Rock and Roll

Rock and roll was created in America in the 1950s after the war and was made to depict happiness and a new life. The name comes from the phrase 'rocking and rolling' which was used by mariners to explain the movement of a ship, which influenced the dance steps.



Rock and roll stems from jazz, gospel and blues music and uses the blues structure and chords. It often has a fast tempo with strong vocals, which may use screaming and shouting. Rock and roll formed the basis of our modern day rock music.

Vocabulary

Bass line	The lowest part of the music, played by a bass or bass guitar in rock and roll.
Walking bass	A bass line that moves step by step using pitches that are next to each other.
Notation	The way that music is written so that others can play it.
In time	Playing or singing at the same speed as the music.

Hand jive		
A rock and roll dance where you move your hands a lot!		
In tune	Singing or playing with the correct pitch.	
Tempo	The speed or pace of the music. It can change throughout a piece of music.	
Dynamics	The volume of the notes. This often changes throughout a piece of music.	
Pitch	How high or low a note sounds.	

Instruments



Knowledge Organiser



Year 4 - Being My Best

Key questions

Having Choices and Making Decisions About My Health What choices help to keep me healthy? Why is it important to look after my health now? Why is it important to look after myself in the future? Taking Care of My Environment What different things do I do to look after our environment? Why is it important to look after our environment? How does this affect our future?

Key vocabulary

accident emergency affect balanced diet recycle breathing community repair reduce creative give to others injury exercise choices wound mental health active first aid repair connect future choking reuse wellbeing be mindful

I can ...

I can give a few examples of different things that I do already that help to me keep healthy.

I can give different examples of some of the things that I do already to help look after my environment.