





Year 4

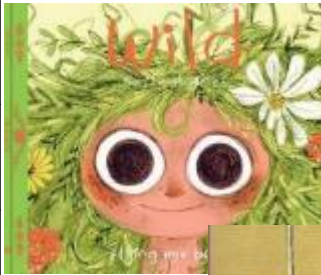

Autumn Term

Knowledge Mats


Animals KS2 Knowledge Mat

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge about animals
fish	A fish is a scaly skinned creature with a spine that swims in water and breathes using gills.		<input type="checkbox"/> The blue whale can produce the loudest sound of any animal. <input type="checkbox"/> Horses and cows sleep while standing up. <input type="checkbox"/> Giant Arctic jellyfish have tentacles that can reach over 36 metres in length. <input type="checkbox"/> Tigers can grow up to a length of 3 metres and weigh up to 300 kilograms when fully developed. <input type="checkbox"/> There are about 400 million+ dogs in the entire world. The average life of a dog depending on the breed can vary from 10 to 14 years. <input type="checkbox"/> Dolphins use whistling, clicking and other sounds to communicate with each other. <input type="checkbox"/> Camels can survive up to six months without water or food due to the fatty tissues stored in their humps. <input type="checkbox"/> The cheetah is the fastest animal to roam the earth with top speeds of 113 km per hour.
amphibians	All amphibians begin their life in water with gills and tails. Examples are frogs and newts.		
reptiles	Are animals that are cold-blooded. Most lay eggs and their skin is covered with hard, dry scales		
birds	Birds have feathers and wings. They lay eggs and are warm-blooded animals.		
		Wild Animals	
mammals	Mammals are also warm blooded animals. They breath air and have a backbone.		
carnivore	A carnivore is a meat-eating animal that gets its food from killing other animals.		
herbivore	A herbivore does not eat food and they eat plants.		
omnivore	An omnivore eats plants and meat.		
tame	Domesticated animals that are not dangerous to or frightened of humans.		
wild	Living in the natural environment and not belonging to humans.		
nocturnal	Animals that tend to be awake during the night time.		

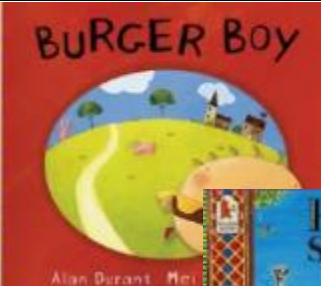

Habitats KS2 Knowledge Mat

Subject Specific Vocabulary		Interesting Books	Sticky Knowledge about habitats
dinosaur	Dinosaurs were the main animals on Earth for more than 150 million years. They were lizard-like reptiles.	 	<input type="checkbox"/> A habitat is a place that an animal lives. It provides the animal with food, water and shelter.
indigenous	Produced, growing, living, or occurring naturally in a particular region or environment.		<input type="checkbox"/> There are many different sorts of habitats around the world from forests to grasslands and from mountain slopes to deserts.
rivers	A river is a flowing, moving stream of water. Usually a river feeds water into an ocean, lake, pond, or even another river.	Important facts to know by the end of the habitats topic: <ul style="list-style-type: none"> • know how a specific habitat provides for the basic needs of things living there • identify and name plants and animals in a range of habitats • match living things to their habitat • know how animals find their food • name some different sources of food for animals 	<input type="checkbox"/> Animals like cockroaches are really important in a habitat - they eat the dead plants and recycle the nutrients back into the soil.
woodland	Woodland is a low-density forest with plenty of sunlight and limited shade.		<input type="checkbox"/> People are causing harm to many habitats. Forests are being burnt down, lakes and rivers polluted and the polar ice caps are melting.
ponds	A pond is a body of water smaller than a lake. Ponds support a very wide range of wildlife.		<input type="checkbox"/> Because resources like water and food may be limited, plant and animal species often compete with each other for food and water.
sea	A sea is part of the ocean partially enclosed by land. Seas are found on the margins of the ocean and are partially enclosed by land.		<input type="checkbox"/> Because the Earth is always changing, habitats are constantly changing.
rainforest	Tropical rainforests are forests with tall trees, warm climates, and lots of rain.		
desert	A desert is any large region that gets very little rain each year. Very few plants or animals live in desert areas.		
species	A group of animals, plants or other living things that all share common characteristics and that are all classified as alike in some manner.		
microhabitats	Microhabitats are the small-scale physical requirements of a particular organism or a community of organisms.		

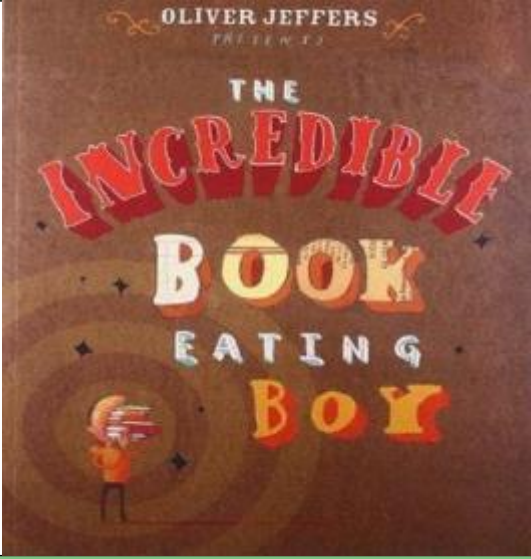
Plants KS2 Knowledge Mat

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge about plants
roots	The root is the part of a plant that typically lies below the surface of the soil.		<input type="checkbox"/> Trees are more than just part of our natural landscape. They provide shelter and food for wildlife.
stem	The stem is the plant axis that bears buds and shoots with leaves.		<input type="checkbox"/> Trees absorb carbon dioxide and produce breathable air.
nutrients	Nutrients are the food the plant wants. Most of the plant's nutrients comes from the soil.		<input type="checkbox"/> A large tree can consume 100 gallons of water out of the ground in one day.
pollination	Pollination is the act of transferring pollen grains from the male anther of a flower to the female stigma.		<input type="checkbox"/> Not only do trees provide shade in the summer, but they serve as a windbreak in the winter too.
		Important facts to know by the end of the plant topic	<input type="checkbox"/> The oldest known living tree is 4,800 years old.
seed dispersal	Seed dispersal is the movement or transport of seeds away from the parent plant.	<ul style="list-style-type: none"> <input type="checkbox"/> Know the function of the different parts of the flowering plant. <input type="checkbox"/> Identify and know the names of: stem; roots; leaves and flowers. <input type="checkbox"/> Know what a plant needs to grow. <input type="checkbox"/> Know that light, air, water, nutrients from soil are all important for plant growth. <input type="checkbox"/> Find out how water is transported within a plant. <input type="checkbox"/> Know the part that flowers play in the life cycle of a flowering plant. <input type="checkbox"/> Know about pollination, seed formation and seed dispersal. 	<input type="checkbox"/> Trees are able to communicate and defend themselves against attacking insects.
fertiliser	Fertilisers are used to increase the rate of a plant's growth.		<input type="checkbox"/> Several centuries ago in Holland, tulips were more valuable than gold.
seed formation	A seed is a small baby plant enclosed in a covering called the seed coat, usually with some stored food.		<input type="checkbox"/> Some plants such as orchids do not need soil to grow-they get all of their nutrients from the air.
stigma	The stigma is usually sticky and receives pollen.		<input type="checkbox"/> Broccoli is actually a flower.
anther	The stamen has a pollen producing structure at the end which is called the anther.		
soil	The soil has water and nutrients that a plant needs to grow healthily.		

Healthy Living KS2 Knowledge Mat

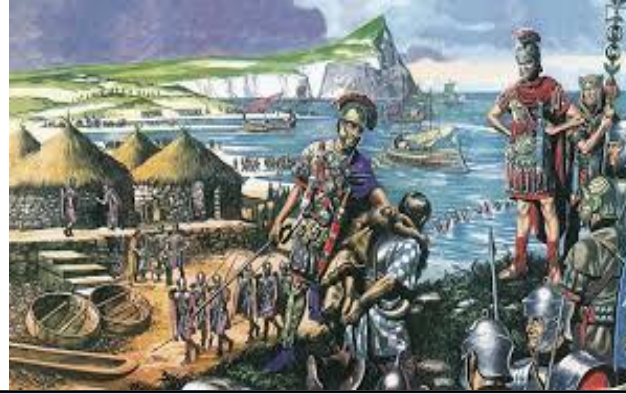
Subject Specific Vocabulary		Interesting Books	Sticky Knowledge about healthy living	
healthy	Keeping healthy means doing things that are good for your body – things like eating nutritious foods, exercising, brushing your teeth and getting enough sleep	 	<input type="checkbox"/> Keeping healthy means caring for your body so you have enough energy to learn, play and grow.	
diet	Eating a balanced diet means choosing foods in the right amounts from each of the food groups.		<input type="checkbox"/> All foods contain nutrients which your body needs to stay active throughout the day. Some foods have more nutrients than others.	
off-spring	You can refer to a person's children or an animal's young as their off-spring.		<input type="checkbox"/> Everyone should have their '5 a day' – this means five portions of fruit and vegetables, to get the right amount of nutrients.	
exercise	Means to keep your body healthy by running, walking and playing. You will need to feel out of breath if you have exercised properly.		Important facts to know by the end of the healthy living topic: <ul style="list-style-type: none"> • Know that animals, including humans, have young animals that look like them. • Know that the babies will grow into adults. • Know what humans need to survive (including food and water). • Know what animals need to survive. • Know why it is important to exercise. • Know why it is important to eat the right amounts of food. • Know why it is important to keep clean and wash regularly. 	<input type="checkbox"/> It's important not to eat too much sugar and salt: sugary foods are bad for your teeth and can be fattening, and salty foods can lead to heart disease.
proteins	Protein is a food group which includes meat, eggs, fish, dairy products, nuts and seeds			<input type="checkbox"/> Keep your mouth happy by brushing and flossing to have healthy teeth and gums.
carbohydrates	Carbohydrates are sugars (such as fructose, glucose, and lactose) and starches, which are found in foods such as starchy vegetables, grains, rice, breads, and cereals.	<input type="checkbox"/> It's important to have 30-60 minutes of exercise every day. This can include running around and playing games with friends.		
fats	Fats are found in meat and other animal products, such as butter and cheese.			
nutrition	Nutrition is the process by which the body nourishes itself by transforming food into energy and body tissues.			
survival	Survive usually means to succeed in keeping alive against odds			
hygiene	Taking care of our body by being clean and making sure we don't smell.			

Digestive System KS2 Knowledge Mat

Subject Specific Vocabulary		Interesting Book	Sticky Knowledge about the digestive system
pancreas	The pancreas produces juices called enzymes which help the body digest food.		<input type="checkbox"/> The oesophagus is the food highway that takes your dinner from your mouth down into your stomach so that digestion can begin.
oesophagus	The oesophagus is like a stretchy tube that moves food from the back of the throat to the stomach.		<input type="checkbox"/> The stomach is filled with powerful acids that break down the food into smaller pieces. It also lets us know when we are hungry.
intestine	The main function of the small intestine is absorption of nutrients and minerals from food. The major function of the large intestine is to absorb water from the remaining indigestible food.		<input type="checkbox"/> The liver creates different enzymes to help process food nutrients that are collected in the small intestine.
organ	The skin is the biggest organ of your body. Other organs include your brain, lungs, heart, liver, stomach, intestines, pancreas, and kidneys, and they're called internal organs.		<input type="checkbox"/> The gallbladder is a storage unit for all of the bile and enzymes created by the liver. It stores them until they are needed for digestion.
molars	Molars are the teeth that are used for chewing and grinding our food.		<input type="checkbox"/> The main job for the small intestine is to absorb nutrients and minerals from food. In fact, 90% of food absorption takes place here, making it our main digestion location.
canine	Canine are the teeth used for ripping and tearing our food. We have two located at the top of our mouth and two at the bottom.		<input type="checkbox"/> The outside of our teeth are covered with enamel and the inside have blood vessels and nerves.
food chain	A food chain is a diagram that shows us how animals are linked by what they eat.		<input type="checkbox"/> The front teeth are called incisors, the four sharp teeth are called canines, the teeth at the back are called molars.
predators	Predators are wild animals that hunt, or prey on, other animals. Predatory animals need the flesh of the animals that they kill to survive.		
prey	The term prey refers to an animal that is sought, captured, and eaten by a predator.		
salivary gland	The salivary glands contain special enzymes that help digest the starches in your food.		
		Important facts to know by the end of the digestive system topic: <ul style="list-style-type: none"> • Know and name the parts of the digestive system. • Know the function of each organ of the digestive system. • Know and identify the different types of teeth in humans. • Know the function of different human teeth. • Use food chains to identify producers, predators and prey. • Construct food chains to identify producers, predators and prey. 	

The Romans KS2 Knowledge Mat

Subject Specific Vocabulary	
centurion	A commander of a group of 100 Roman soldiers.
emperor	The Roman emperor was the ruler of the Roman Empire during the imperial period.
aqueduct	A large system for carrying water from one place to another is called an aqueduct.
gladiator	A gladiator was an armed combatant who entertained audiences in the Roman Republic.
Londinium	This was the Roman name for London.
conquer	To overcome and take control of people or land using military force.
invade	Enter a place or land with the intention of occupying it.
Romanisation	When the countries that the Romans conquered became very much like Rome.
senate	Similar to the Roman version of our parliament.
Roman baths	A number of complex of rooms designed for bathing, relaxing, and socialising, as used in ancient Rome.



Sticky Knowledge about the Romans

- ❑ Julius Caesar was probably the best known Roman leader. He extended the empire through invading other lands.
- ❑ Boudicca was a queen of the British Celtic Iceni Tribe who led an uprising against the occupying forces of the Roman Empire.
- ❑ Rome was created by two brothers, Romulus and Remus who were abandoned after they were born.
- ❑ Romans used to eat food like dormice dipped in honey.
- ❑ Romans occasionally used a spoon, but they would never use a knife and fork. Rich Romans liked to eat exotic food, such as stork, roast parrot and even flamingo!
- ❑ When the Romans came to Britain they helped us by creating roads; a written language (which was Latin); introduced coins and even introduced rabbits to our country.



Exciting Books

Important Places

Colosseum

An oval amphitheatre in the centre of Rome which held up to 50,000 people.

Hadrian's Wall

A long wall built by the Romans across the north of England. It was to keep out the Scots. It is now one of Britain's most famous tourist attractions.

Anglo-Saxon: KS2 Knowledge Mat

Subject Specific Vocabulary	
archaeologist	People who work out our history by looking at artefacts that have been found.
Anglo-Saxon kingdoms	During their time in Britain the Anglo-Saxons formed many kingdoms.
shires	Saxon lands were divided into shires, which helped to make up the counties we have today
Shire reeve	The peace officer of a shire, later known as 'sheriff'.
thane	An important Anglo-Saxon person.
legacy	Anglo-Saxons left a legacy which included the language we speak, culture and politics. Many of the shires are our boundaries for counties today.
Wessex	Known today as Dorset, Hampshire, Somerset and Wiltshire.
Witan or witenagemot	A council that helped the Saxon king rule.
wergild	A fine imposed for stealing or killing.
churl	A lower-class Anglo-Saxon but better than a slave.
Mercia	Known today as East Anglia, Essex, Kent and Sussex.



Sticky Knowledge about the Anglo-Saxons

- The Anglo-Saxons were made up of three tribes: the Angles; Saxons; and, Jutes.
- The name 'Angles' eventually became 'English' and their land became 'England'.
- They came to Britain from across the North Sea in the middle of the 5th Century.
- For a long time, England was not one country, Anglo-Saxon kings ruled lots of small kingdoms across the land.
- The Anglo-Saxons were fierce people who fought many battles, including fighting each other.
- The Anglo-Saxon period ended when the Normans conquered Britain in 1066.

Anglo-Saxon Settlements

