Knowledge organiser for Year 3 Science Topic: Dinosaurs and their environment

Key Ideas:

- Recognise the environment that dinosaurs lived in.
- Understand the theories of dinosaur extinction.
- Explore the three different types of rocks, understand how they are formed and how they are used.
- Discover how fossils are formed.
- Investigate the importance of nutrition.

Key Vocabulary:	
Rocks	A natural substance, made up of one or more materials.
Fossils	A trace or remains of an ancient living thing.
Peat	Is formed when a plant material does not fully breakdown in acidic conditions,
	with no air.
Tyrannosaurus Rex	Species of dinosaur that lived throughout what is now western North America.
	A fun fact about the T-Rex is that its closest living relatives include the chicken
	and the ostrich who have T-Rex protein contents within their bloodstreams.
Pterodactyl	These dinosaurs were the first creatures to be identified as a flying reptile.
	They were carnivores who most likely ate small fish and other small animals.
	Their wings were made of skin and muscle membranes.
Triceratops	These dinosaurs are giant herbivores who were famous for their gigantic horns
	and neck frills. They were about the same size of an elephant.
Permeable	Allows liquids or gases to pass through it.
Igneous	Rock made solid from lava or magma.
Metamorphic	A rock that has undergone transformation by heat, pressure, or other natural
	agencies, e.g. in the folding of strata or the nearby intrusion of igneous rocks.
Sedimentary	A rock that has formed from sediment deposited by water or air.
Mesozoic	The Mesozoic Era is a time period that indicates what Earth was like 252 to 66
	million years ago. It is also called the Age of Reptiles and the Age of Conifers.
Cretaceous	The Cretaceous is a time period and system that spans from the end of the
	Jurassic Period 145 million years ago to the beginning of the Paleogene Period
	66 million years ago.
Late Jurassic	The Late Jurassic is the end of the era of the Jurassic period, and it spans the
	geologic time from 163 to 145 million years ago.

Characteristics of dinosaurs		
Hunters	Dinosaurs of all shapes and sizes were hunters. If we apply out knowledge of how modern-day animals hunted, then we can analyse how dinosaurs would have. Some even hunted in packs.	
Carnivores	Meat-eating dinosaurs had different features that supported their ability to tear up their prey. This included claws, shaped teeth and even beaks.	
Herbivores	Plant-eating dinosaurs varied in size. The largest being sauropods. They were also the longest and heaviest of all the dinosaurs to roam the earth.	
Protection	Dinosaurs had features they could use to either defend themselves, attack fellow dinosaurs or protect vital parts. These include horns, claws and neck frills. An example of this includes the Pentaceratops who had a 3m long skull which include a neck frill that protected its neck.	
Flight	Pterodactyls are probably the most famous flying dinosaurs. They were able to hang upside down just like bats.	

Marine life	Under-water dinosaurs have been found in Peterborough! Their remains live at Peterborough Museum. They include the Plesiosaur and the Jurassic Marine
	Crocodile.
Adaption to habitats	Through the millions of years that dinosaurs roamed the earth, they learned to adapt to their habitats they were forever changing as they evolved. This
	included volcanic areas as well as deep jungles.

