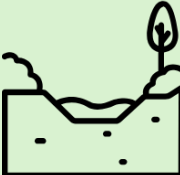


Y5 Knowledge Organiser-**Natural Phenomena** Can a natural disaster ever be prevented?

What do we know already? 			EQ1 – Where in the UK is at risk of flooding and why?			EQ2 – What is a tsunami and where in the world is at risk of these Natural Phenomena?		
Science: In Year 3: I can Identify that animals, including humans, need the right types & amount of nutrition, & that they cannot make their own food. I can Identify that humans & some other animals have skeletons & muscles for support, protection & movement. In Year 4: Understand food chains, identifying producers, predators & prey. I can explore & use classification keys to help group, identify & name a variety of living things in their local & wider environment. Geography: In Year 3: We learnt about how rivers erode (hydraulic action and abrasion) The water cycle is a never-ending loop. Water changes state as it moves. In Year 4: We learnt that the earth’s outer layer is made up of plates. Earthquakes are consequences of the movement of the Earth’s tectonic plates. Earthquakes and volcanoes happen most often on tectonic plate boundaries. The Pacific Ring of Fire is the world’s most active earthquake and volcano zone.	Geography	 The UK is divided into geographical regions. Different regions have a range of topographical features, such as hills, mountains, coasts and rivers. Types of flooding are; river flooding, flash flooding and coastal flooding.	Geography	 A Tsunami is a giant, powerful wall of water that crashes into land. In the Pacific Ocean and its marginal seas, there is much more frequent occurrence of large, destructive tsunamis because of large earthquakes along these margins (Ring of Fire).				
		 Somerset is at high risk of river flooding, due to the fact that most of the region is below sea level. In 2014, the Somerset levels experienced the worst flooding in living memory.		 Japan has the highest recorded number of Tsunamis (21%) In 2011, Japan experienced a devastating Tsunami from an earthquake with a 9.0 magnitude. This was the most expensive natural disaster recorded at 220 billion.				
		 Parts of Yorkshire are at risk of flash flooding, due to heavily urbanised basins and villages nestles in steep valleys. Camborne and Redruth in Cornwall are at risk of coastal flooding due to their hilly terrain and inadequate drainage.		 Indonesia experienced a devastating Tsunami on Boxing Day in 2004, after an earthquake struck the east coast of Sumatra at a magnitude of 9.2-9.3. This is the deadliest recorded Tsunami in history. It is estimated that between 160,000-200,000 lives were lost.				
EQ3 – How can we defend against a tsunami and floods? 			EQ4 – How do plants and animals reproduce?			EQ5 – What is the human life cycle?		
Geography		 Water gate flood barriers are giant, reusable magic shields which unroll like a camping mat. Raised grassy embankments are build along river edges to act like giant bowls that hold extra water.	Science		 A habitat is the natural home or environment of an animal, plant or organism. Fertilisation occurs when a sperm and egg cell join together. Asexual reproduction is where only one parents is needed to create offspring.	Science		 Unborn babies are called foetuses when they are still in the female body. The duration it takes for the foetus to develop is the gestation period. A human’s gestation period is 40 weeks. The gestation period of an elephant is 23 months. The life cycle of a human is baby, child, adolescence, adult, old age.
	 Water barriers: The Thamas barrier is a massive metal gate that closes to stop the sea tide coming into London.	 Mammals reproduce and give birth to live young. Mammals produce milk. The life cycle of an insect is; egg, larva, pupa and adult.		 The umbilical cord is cut when a baby is born. The foetus grows from a embryo (size of a full top) to a baby which is ready to be born. A foetus’s heart starts to beat at 6 weeks old.				
	 Early warning systems have been set up in the sea (Buoys) and satellites in space to detect underwater earthquakes before a Tsunami hits the shore.	 Birds and reptiles lay eggs. An embryo is an unborn or unhatched offspring the process of development. When the egg hatches they will look like their parents.		 During adulthood your skin loses its elasticity. Having a poor diet and lifestyle can make your skin age quicker. As humans age their bones become less dense and can fracture more easily. Eyesight and hearing deteriorate as you grow older.				

region	A large area of land that shares something in common (natural/human features)
topographical	The shape of the Earth's surface and the physical features of an area.
River flooding	When a river gets to full of water.
Flash flooding	A super-fast flood caused by heavy rain
Coastal flooding	When normally dry land, near the ocean, gets covered by sea water.
magnitude	The measurement of the strength of an earthquake.
Ring of fire	A horseshoe shaped area around the Pacific Ocean known for high volcanic and earthquake activity.

Reproduce	To make offspring either sexually or asexually.
Life cycle	The stages of growth
Mammal	An animal that produces live young and produces milk.
adolescent	A mammals young adult offspring
gestation	The period of time an animal is pregnant for.
Umbilical cord	Connection between the mother and the foetus.
embryo	A foetus before it is 10 weeks old.