

Year 4 Knowledge Map—Lent 2

Geography - Volcanoes, earthquakes and mountains

Science - Animals including humans

Geography



Scan the codes to find out how volcanoes, earthquakes and mountains occur.



Subject Specific Vocabulary

eruption	An explosion of steam or lava from a volcano.
aftershock	A shaking event that follows an earthquake. Sometimes more damaging than the original earthquake.
tsunami	A long, high wave usually caused by an earthquake in the ocean.
magma	Hot fluid or semi-fluid material below or within the Earth's crust from which lava is formed.
lava	Hot, molten or semi-fluid rock erupted from a volcano, or solid rock, resulting from cooling of this.
dormant	A dormant volcano is an active volcano that has not erupted in the past 10,000 years.
fault	Fractures in the Earth's crust where rocks on either side of the crack have slid past each other.
magnitude	If you talk about the magnitude of something, you are talking about its great size.
landslide	A landslide is a collapse of a mass of earth or rock from a mountain or cliff.
tectonic plates	The Earth's outer shell is made up of huge slabs of moving rock called tectonic plates.
saturated	Holding as much water or moisture as can be absorbed; thoroughly soaked.

Sticky Knowledge about natural disasters

- ❑ **Volcanoes** are caused when magma rises to the surface of the Earth, which causes bubbles of gas to appear in it. This gas can cause pressure to build up beneath the surface, and it eventually explodes.
- ❑ **Earthquakes** are usually caused when rock underground suddenly breaks along a fault. This sudden release of energy causes the seismic waves that make the ground shake.



Science

To find out about food chains, scan the code.



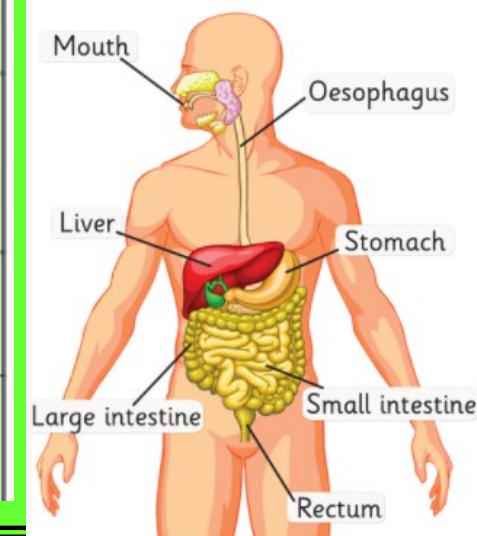
Sticky Knowledge about the digestive system

- ❑ The oesophagus is the food highway that takes your food from your mouth down into your stomach so that digestion can begin.
- ❑ The stomach is filled with powerful acids that break down the food into smaller pieces. It also lets us know when we are hungry.
- ❑ The liver creates different enzymes to help process food nutrients that are collected in the small intestine.
- ❑ 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.
- ❑ 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.
- ❑ The outside of our teeth are covered with enamel and the inside have blood vessels and nerves.
- ❑ The front teeth are called incisors, the four sharp teeth are called canines, the teeth at the back are called molars.

Subject Specific Vocabulary

pancreas	The pancreas produces juices called enzymes which help the body digest food.
oesophagus	The oesophagus is like a stretchy tube that moves food from the back of the throat to the stomach.
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.
organ	The skin is the biggest organ of your body. Other organs include your brain, lungs, heart, liver, stomach, intestines, pancreas, and kidneys, all called internal organs.
molars	Molars are the teeth that are used for chewing and grinding our food.
canine	Canines 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.
food chain	A food chain is a diagram that shows us how animals are linked by what they eat.
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.

Scan the code to discover the journey of your food when you eat.



Maths

Fractions Knowledge Organiser

Key Vocabulary

- numerator
- denominator
- unit fraction
- non-unit fraction
- equivalent
- quantities
- whole
- halves
- thirds
- quarters
- fifths
- sixths
- sevenths
- eighths
- ninths
- tenths
- elevenths
- twelfths
- quantities

Fraction Families

1											
1/2				1/2				1/2			
1/3			1/3			1/3			1/3		
1/4		1/4		1/4		1/4		1/4		1/4	
1/5		1/5		1/5		1/5		1/5		1/5	
1/6		1/6		1/6		1/6		1/6		1/6	
1/7		1/7		1/7		1/7		1/7		1/7	
1/8		1/8		1/8		1/8		1/8		1/8	
1/9		1/9		1/9		1/9		1/9		1/9	
1/10		1/10		1/10		1/10		1/10		1/10	
1/11		1/11		1/11		1/11		1/11		1/11	
1/12		1/12		1/12		1/12		1/12		1/12	

Fractions of Quantities

To find a fraction of a number, divide by the denominator and multiply by numerator.

To find quarters of 20:

20			
5	5	5	5

$\frac{1}{4}$ of 20 = 5 $\frac{2}{4}$ of 20 = 10 $\frac{3}{4}$ of 20 = 15 $\frac{4}{4}$ of 20 = 20

To find eighths of 56:

56							
7	7	7	7	7	7	7	7

$\frac{1}{8}$ of 56 = 7 $\frac{2}{8}$ of 56 = 14 $\frac{3}{8}$ of 56 = 21 $\frac{4}{8}$ of 56 = 28
 $\frac{5}{8}$ of 56 = 35 $\frac{6}{8}$ of 56 = 42 $\frac{7}{8}$ of 56 = 49 $\frac{8}{8}$ of 56 = 56

Fractions Knowledge Organiser

Adding Fractions

Fractions can be added when the denominators are the same.

$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

$\frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$

$\frac{4}{5} + \frac{2}{5} = \frac{6}{5}$ or $1\frac{1}{5}$

Subtracting fractions

Fractions can be subtracted when the denominators are the same.

$\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$

$\frac{8}{6} - \frac{5}{6} = \frac{3}{6}$

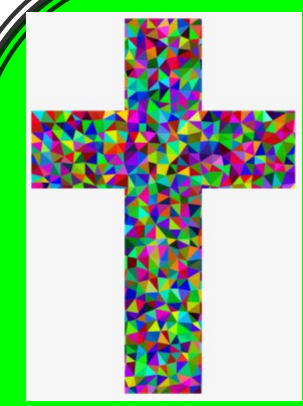
Remember to access your Oxford Owl accounts everyday to read books at your book band level.

English

How many of these words can you spell without looking?

New Curriculum Spelling List Years 3 and 4

accident	century	experiment	interest	particular	remember
accidentally	certain	extreme	island	peculiar	sentence
actual	circle	famous	knowledge	perhaps	separate
actually	complete	favourite	learn	popular	special
address	consider	February	length	position	straight
answer	continue	forwards	library	possess	strange
appear	decide	fruit	material	possession	strength
arrive	describe	grammar	medicine	possible	suppose
believe	different	group	mention	potatoes	surprise
bicycle	difficult	guard	minute	pressure	therefore
breathe	disappear	guide	natural	probably	though
build	early	heard	naughty	promise	although
busy	earth	heart	notice	purpose	thought
business	eight	height	occasion	quarter	through
calendar	eighth	history	occasionally	question	various
caught	enough	imagine	often	recent	weight
centre	exercise	increase	opposite	regular	woman
	experience	important	ordinary	reign	women



Remember this prayer



Lenten Prayer

For forty days of Lent
 To do my best I'll try
 I remember all you suffered, Lord
 And on the cross you died.
 I thank you that on Easter Day
 You rose and came alive
 Be with me Lord throughout this Lent
 Be with me as I strive.
 Be with me as I promise
 To do some good each day
 To keep my resolution
 Please, help me Lord, I pray.