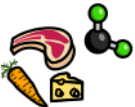

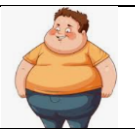
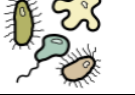

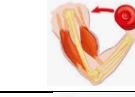






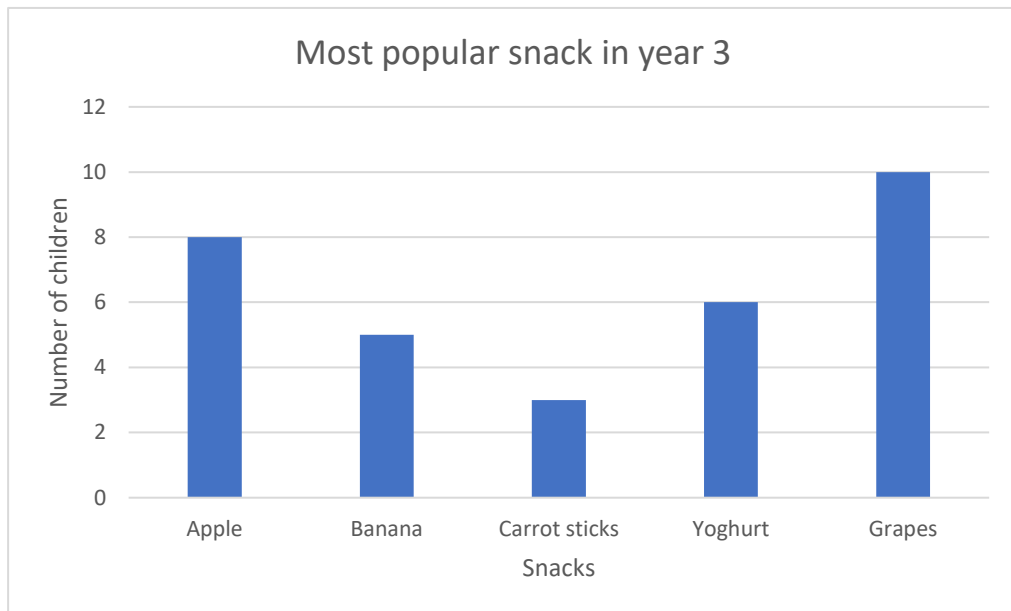
Year 3 Science – Summer 2 – Animals, including Humans

Vocabulary			Knowledge
<b>Nutrients</b>	A substance providing nourishment needed for life and growth.		<p><b>Food groups</b> There are five main food groups. <b>Carbohydrates</b> provide our bodies with energy. Carbohydrates can be found in pasta, rice, cereal bread and potatoes. <b>Proteins</b> are good for growth and repairing our body when we get injured. Our skin, muscles and hair are all made of protein. Foods high in protein include chicken, fish, eggs and nuts. <b>Fruit and vegetables</b> provide the body with vitamins and minerals. It is recommended that we should eat 5 portions of fruit and vegetables every day. Vitamins and minerals help to keep you well. <b>Dairy</b> products are made from the milk of an animal. They contain calcium, which is good for teeth and bones. Yoghurts, cheese and milk are examples of dairy products. <b>Fats</b> can be grouped into healthy and unhealthy fats. Healthy fats provide our body with energy. Unhealthy fats can cause weight gain if eaten too often.</p> <p>It is important to have a <b>balanced diet</b>, a lack of a nutrient or an excess of a food group can cause ill health.</p> <p>A skeleton is made of a living tissue called bone. Its function is to provide support to the muscles, protect the body and help us move.</p> <p>A newborn baby has about <b>300 bones</b>, some of these bones <b>fuse</b>. By adulthood, a person has <b>206 bones</b>.</p> <p>Bones are moved using <b>muscles</b>. Muscles work in pairs. When one muscle contracts the other relaxes. When muscles <b>contract</b>, they get shorter.</p> <p><b>Joints</b> are in places where bones meet. There are different types of joints that allow different movements. <b>Hinge joints</b> can be found at the elbow and the knee. It allows a basic movement in one direction. <b>Ball and socket joints</b> can be found in the shoulders and hips. It allows rotation in more than one direction. <b>Fixed joint</b> found in the skull, are ones that do not allow movement.</p>
<b>Balanced diet</b>	A diet containing a variety of foods, giving required nutrients needed for growth.		
<b>Iron</b>	A mineral you can find in many foods mainly in fruit / vegetables and protein.		
<b>Calcium</b>	A mineral that can be found in many dairy products		
<b>Obesity</b>	To become overweight where it can cause harm to your body		
<b>Disease</b>	A condition that harms the human body		
<b>Cartilage</b>	Flexible connective tissue found in many areas of the body including around joints		
<b>Fuse</b>	When bones join together as we get older		
<b>Contract</b>	Decrease in size and becoming more rigid.		
<b>Relax</b>	To become less rigid.		
<b>Muscle</b>	A group of cells in animals that have the ability to contract, allowing movement.		
<b>Joint</b>	Where two parts of the skeleton are fitted together.		

Quizzing		Quiz at home						
Ask your partner the questions below. Can they find the correct answer on the right-hand side?		Ask your adult to look at the KO.  Quiz them using the vocabulary and knowledge section or the quiz questions.  • Can they beat your score?  • Can they score more than 5? 10?  • Compete with your adult in the elimination quiz. Take it in turn to ask each other questions. The first person to get a question wrong is out.						
Why are proteins important for our bodies?	about 300							
How many bones does a newborn baby have?	hinge joint							
Which food group gives our bodies energy?	5							
What type of joint is found in the elbow and knee?	they help us grow and repair							
How many portions of fruit and vegetables should we eat every day?	carbohydrates							
BIG Questions		Beat the adult						
<ol style="list-style-type: none"> <li>Why is it important to eat a balanced diet from different food groups?</li> <li>How do different food groups help our bodies in different ways?</li> <li>Why do you think babies have more bones than adults?</li> <li>How do our muscles and bones work together to help us move?</li> <li>Why do we need different types of joints for different movements in our body?</li> </ol>		Your teacher can give <b>10 facts</b> in <b>1 minute</b> about this topic.  How many can you give to your partner? 						
Word scramble	Creative Tasks	Challenge						
Unscramble the key vocabulary from this topic below.	Design your own quiz using the information in the knowledge organiser.	Dexter recorded the food he ate for breakfast, lunch and dinner.						
CLMEUS	Create a moving skeleton using split pins and card. Label the important bones and the different joints.	<table border="1"> <thead> <tr> <th>Breakfast</th> <th>Lunch</th> <th>Dinner</th> </tr> </thead> <tbody> <tr> <td>toast</td> <td>egg sandwich crisps</td> <td>fish and chips chocolate</td> </tr> </tbody> </table>	Breakfast	Lunch	Dinner	toast	egg sandwich crisps	fish and chips chocolate
Breakfast	Lunch	Dinner						
toast	egg sandwich crisps	fish and chips chocolate						
JITON	Design a healthy packed lunch that includes all five food groups. Label each food and explain what it does for your body.	What food groups did Dexter eat during each meal?						
CMLCAIU	Invent five superheroes based on the food groups.	What food groups are missing from Dexter's diet?						
TXEALR								
TNUNEITRS								

**Enquiry**  
Using graphs

Year 3 have collected data about the most popular healthy snack.



1. Which snack was the most popular with year 3 children?
2. How many children chose bananas?
3. Which snack was the least popular?
4. How many more children chose grapes than carrot sticks?
5. How many children took part in the data collection?

Can you come up with your own questions about the data?

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Compare the two cereals nutritional information.

Cereal A

Cereal B

	Typical value per 100g	30g serving with 125ml of semi skimmed milk
ENERGY	1606 kJ 379 kcal	733 kJ 173 kcal
PROTEIN	14 g	9 g
CARBOHYDRATE	76 g	29 g
of which sugars	17 g	11 g
starch	59 g	18 g
FAT	1.5 g	2.5 g
of which saturates	0.5 g	1.5 g
FIBRE	2.5 g	0.8 g
SODIUM	0.45 g	0.2 g
SALT	1.15 g	0.5 g
<b>VITAMINS:</b>	<b>(% RDA)</b>	<b>(% RDA)</b>
VITAMIN D	8.3 µg (167)	2.5 µg (50)
VITAMIN C	134 mg (167)	42 mg (52)
THIAMIN (B <sub>1</sub> )	1.8 mg (167)	0.6 mg (55)
RIBOFLAVIN (B <sub>2</sub> )	2.3 mg (167)	1 mg (72)
NIACIN	26.7 mg (167)	8.2 mg (51)
VITAMIN B <sub>6</sub>	2.3 mg (167)	0.8 mg (56)
FOLIC ACID	334 µg (167)	108 µg (54)
VITAMIN B <sub>12</sub>	4.2 µg (167)	1.8 µg (71)
<b>MINERALS:</b>		
IRON	11.6 mg (83)	3.5 mg (25)

	Per 100g	Per 38.5g	Per 38.5g <sup>1</sup> (%*)
Energy	1557 kJ 370 kcal	599 kJ 142 kcal	1070 kJ 254 kcal (13%*)
Fat	7.7 g	3.0 g	7.1 g (10%*)
of which Saturates	1.3 g	0.5 g	3.2 g (16%*)
Carbohydrate	59 g	23 g	34 g
of which Sugars	1.0 g	0.4 g	12 g (13%*)
Fibre	9.0 g	3.5 g	3.5 g
Protein	11 g	4.2 g	12 g
Salt	0 g	0 g	0.27 g (5%*)
Manganese	3.3 mg (163%*)	1.3 mg	1.3 mg (63%*)

Use the words below to complete the table about the functions of different food group. You can use the word more than once.

	fruit and vegetables	carbohydrates	proteins
	provides energy	helps grow and repair	provides vitamins and minerals
Food group			

Create a mind map of all the knowledge from this topic

Knowledge



Complete the gaps in the knowledge

Knowledge

**Carbohydrates** provide our bodies with [redacted]

[redacted] are good for growth and repairing our body when we get injured.

**Fruit and vegetables** provide the body with [redacted]

**Dairy** products are made from the milk of an animal. They contain [redacted] which is good for teeth and bones.

**Fats** can be grouped into [redacted] fats.

It is important to have a [redacted] a lack of a nutrient or an excess of a food group can cause ill health.

A skeleton is made of a living tissue called bone. Its function is to provide support to the muscles, protect the body and help us move.

A newborn baby has about **300 bones**, some of these bones **fuse**. By adulthood, a person has [redacted]

Bones are moved using **muscles**. Muscles work in pairs. When one muscle contracts the other relaxes. When muscles [redacted] they get shorter.

**Joints** are in places where bones [redacted] There are different types of joints that allow different movements.

[redacted] can be found at the elbow and the knee. It allows a basic movement in one direction.

**Ball and socket joints** can be found in the [redacted] and hips. It allows rotation in more than one direction.

**Fixed joint** found in the skull, are ones that do not allow [redacted]

Write the definition for each of the following words

Write the vocabulary word for each definition

Vocabulary

Vocabulary

<b>Nutrients</b>		
<b>Balanced diet</b>		
<b>Iron</b>		
<b>Calcium</b>		
<b>Obesity</b>		
<b>Disease</b>		
<b>Cartilage</b>		
<b>Fuse</b>		
<b>Contract</b>		
<b>Relax</b>		
<b>Muscle</b>		
<b>Joint</b>		

	A substance providing nourishment needed for life and growth.	
	A diet containing a variety of foods, giving required nutrients needed for growth.	
	A mineral you can find in many foods mainly in fruit / vegetables and protein.	
	A mineral that can be found in many dairy products	
	To become overweight where it can cause harm to your body	
	A condition that harms the human body	
	Flexible connective tissue found in many areas of the body including around joints	
	When bones join together as we get older	
	Decrease in size and becoming more rigid.	
	To become less rigid.	
	A group of cells in animals that have the ability to contract, allowing movement.	
	Where two parts of the skeleton are fitted together.	

