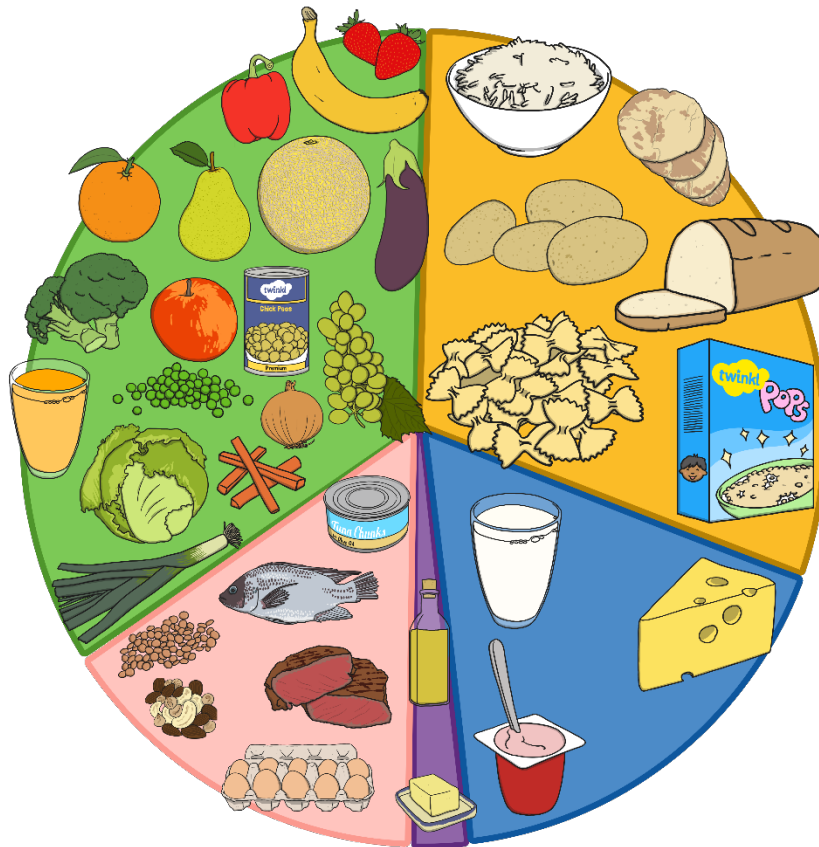


This term, we will be starting a new Science topic all about **animals and humans**. Don't worry, we will be continuing with our forces and magnets topic as soon as we are back together in school. That way, we can do some fun experiments with magnets.

Our first lesson on our new animals and humans topic is all about the **different types of nutrients** (basically what is inside our food).

Human Food

What kind of foods do humans need?



Food is commonly divided into **five** food groups.

How many of the food groups can you name?

Have a look closely at the picture. If you aren't sure, the answers are on the next slide 😊

What kind of foods do humans need?

Fruit and Vegetables

Aim to eat 5 a day! Dried, frozen and tinned fruit and vegetables count as well as fruit juices. Important as sources of vitamins and minerals which reduce your risk of disease and keep you healthy. Limit fruit juice and/or smoothies to 150ml a day.

Meat, Fish, Eggs, Beans and Other Non-Dairy Sources of Protein

These are very important for helping us grow and build muscles. Try to eat 2 portions of fish a week, and try to reduce intake of red and processed meat.

Oil and Spreads

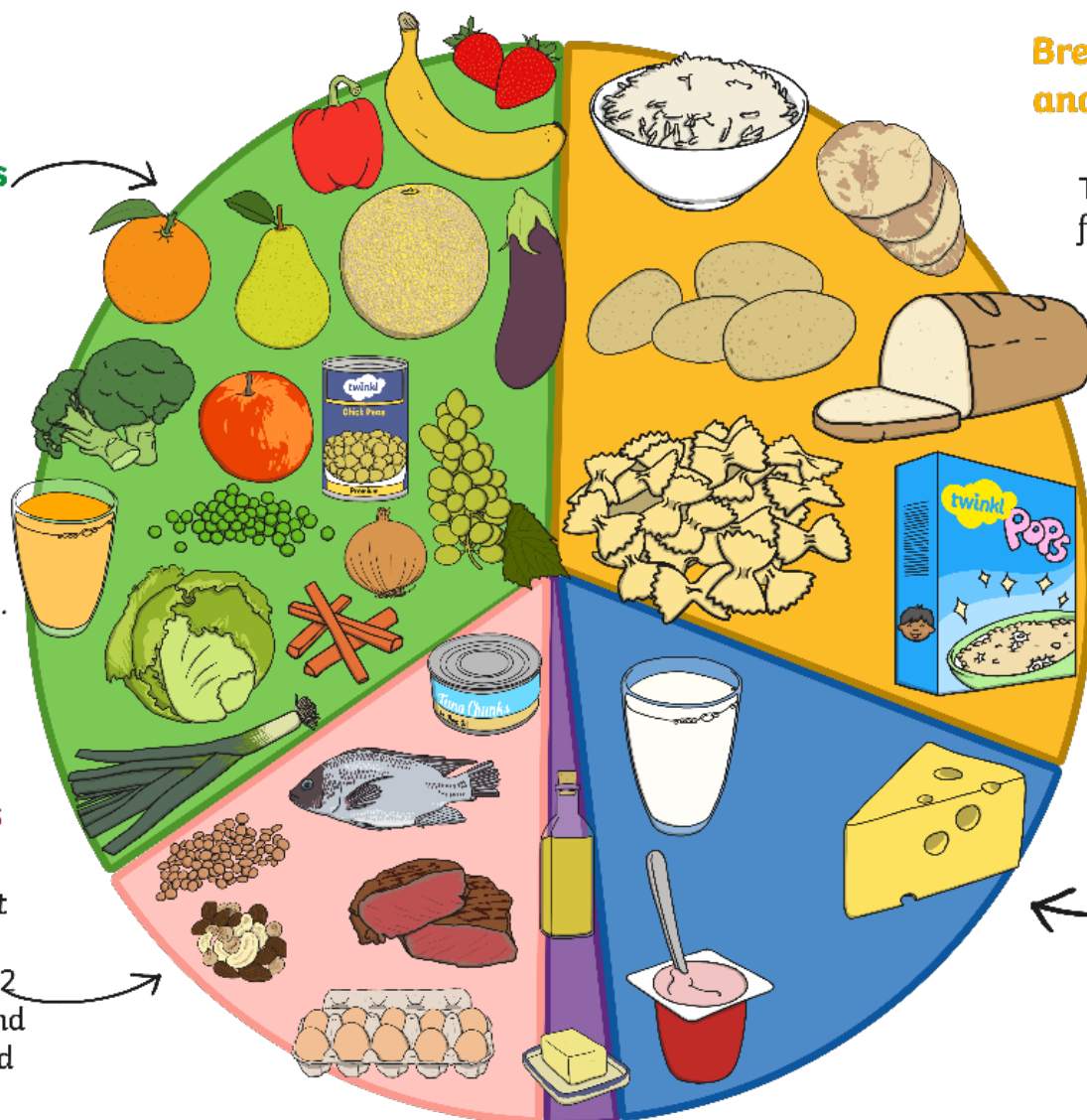
Choose unsaturated oils and use in small amounts.

Bread, Rice, Potatoes and Pasta and Other Starchy Foods

These are important for giving us energy.

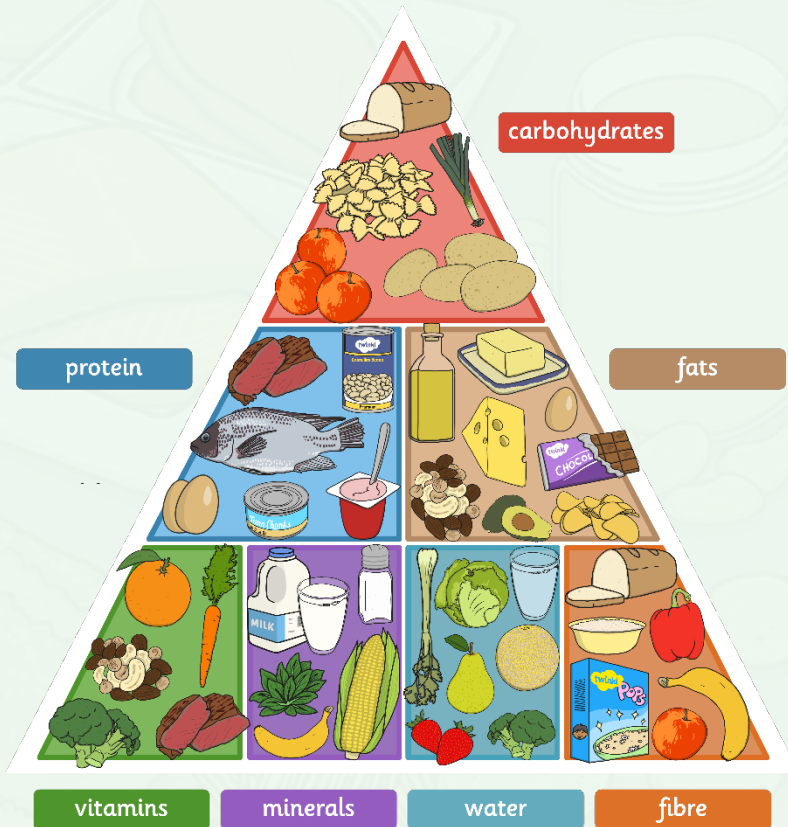
Milk and Dairy Foods

These are important for strong teeth and bones.



The Nutrient Pyramid

What is the difference between food groups and types of nutrients?
Nutrients are the substances (things) in our food that our bodies process to enable it to function (work properly).



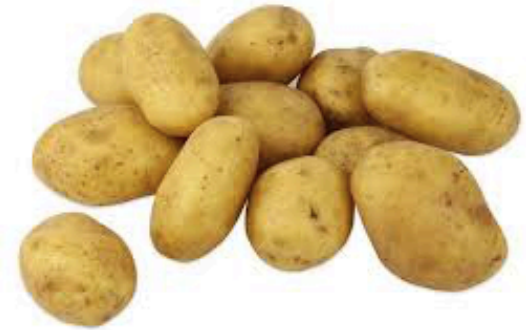
There are **7** types of nutrients.

Most foods contain more than one type of nutrient.

For example:

Cereal contains fibre, carbohydrates and vitamins. However it is included in the fibre group because this is main nutrient you get from eating it.

Did you know that vegetables contain water? However, we eat them because they are high in vitamins and minerals.



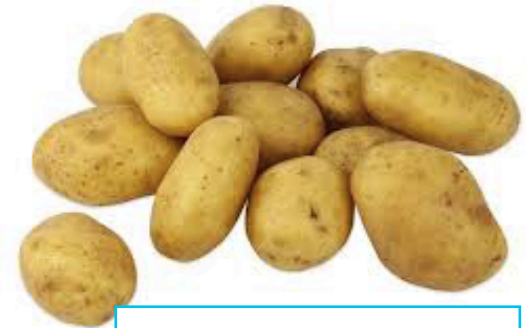
What nutrients do these foods contain?
Look back at the previous slide to help you.
Answers are on the next slide 😊



protein



carbohydrates



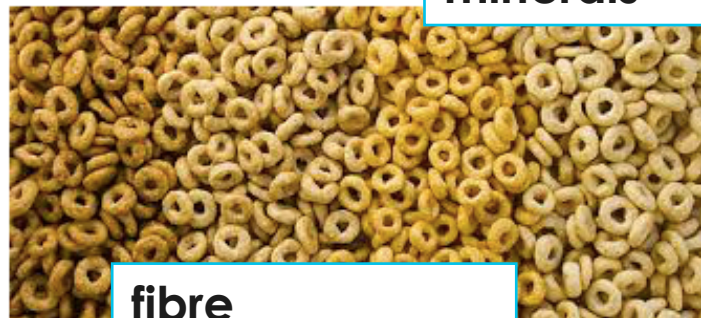
carbohydrates



fats



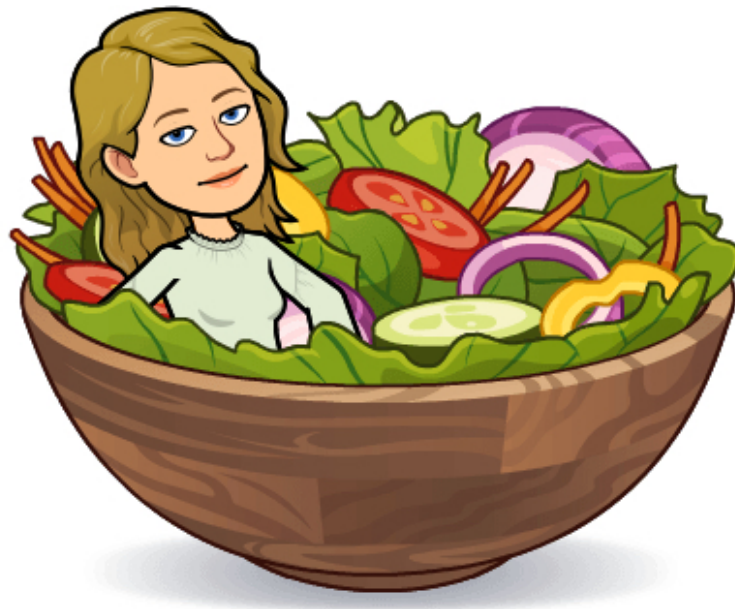
**vitamins and
minerals**



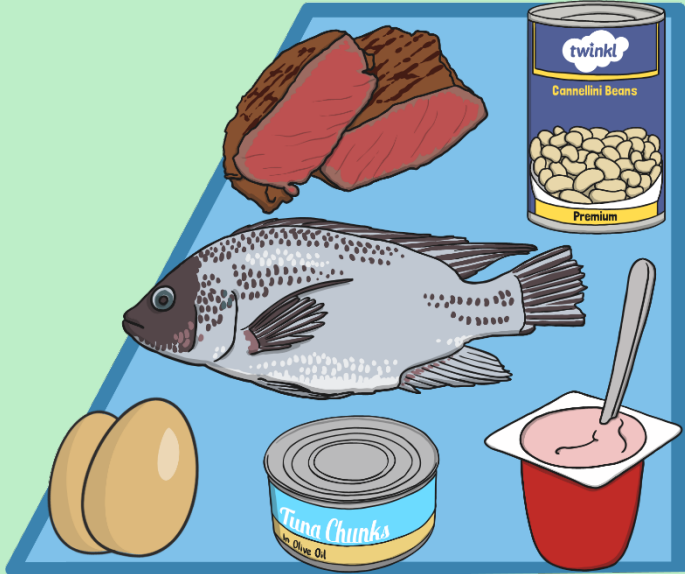
fibre

What nutrients do these foods contain?
How did you do?

Now, let's look and see what each of the different **nutrients** does.



Types of Nutrients - Proteins

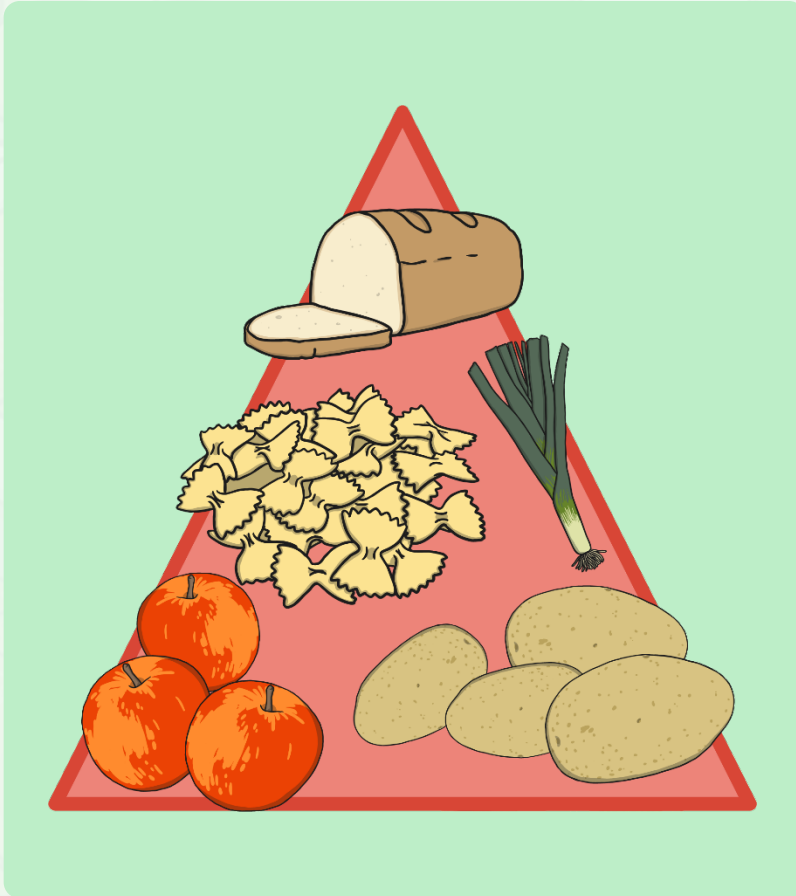


Proteins help your body
to grow and repair
itself.

Foods high in protein
include:

Red Meat
Fish
Beans
Yoghurt

Types of Nutrients - Carbohydrates



Carbohydrates give you energy.

Foods high in carbohydrates include:

Bread
Pasta
Fruit
Potatoes

Types of Nutrients - Fats

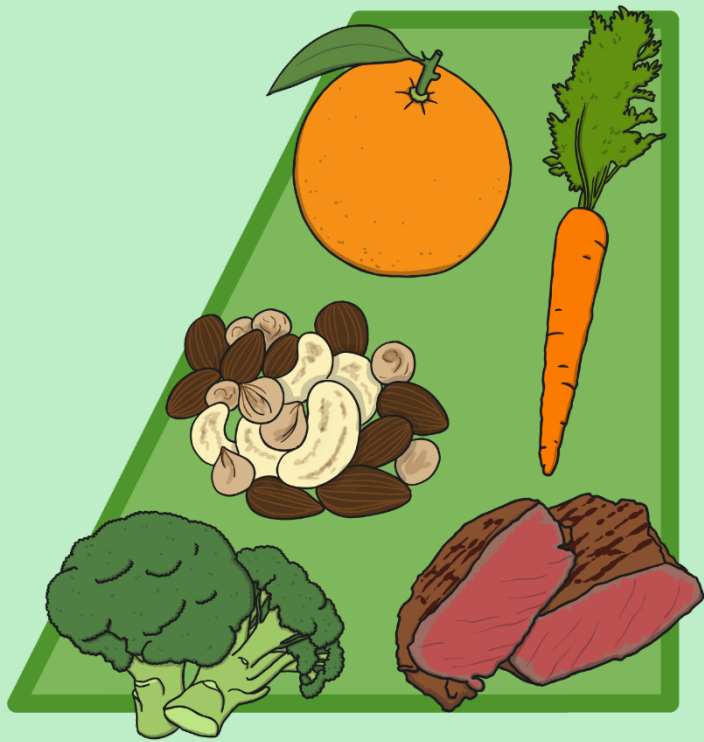


Fats give you energy.

Foods high in fats
include:

Nuts
Oils
Avocados
Butter

Types of Nutrients - Vitamins



**Vitamins keep your
body healthy.**

Foods high in vitamins
include:

Oranges
Carrots
Beef
Nuts

Types of Nutrients - Minerals



**Minerals keep your
body healthy.**

Foods high in minerals
include:

Milk
Spinach
Salt
Sweetcorn

Types of Nutrients - Water

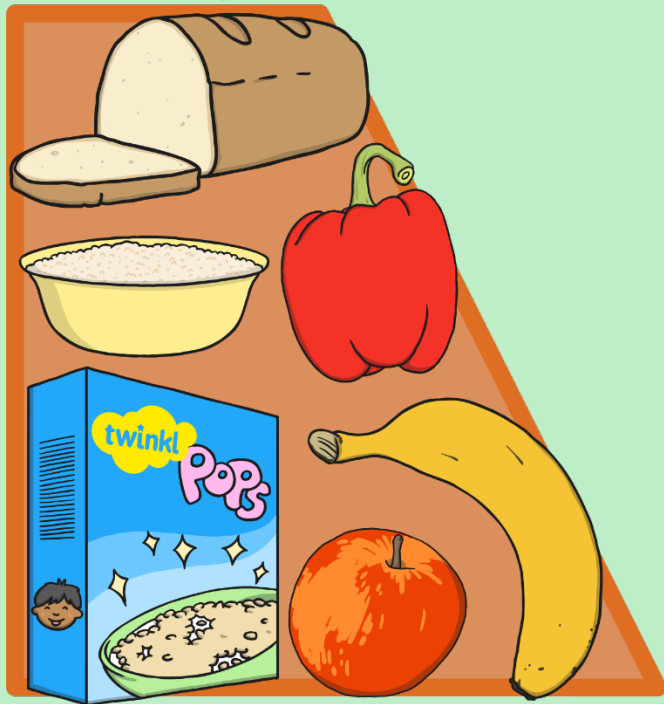


Water helps to move nutrients in your body and get rid of waste that you don't need. It is an essential nutrient for our survival. While it is really important to drink plenty of water, it is also important to remember that many foods contain water also.

Foods high in water include:

Tomatoes
Cucumbers
Lettuce
Strawberries

Types of Nutrients - Fibre



Fibre helps you to digest the food that you have eaten.

Foods high in fibre include:

Cereal
Apples
Wholegrain bread
Lentils

Your task:

Complete the table on the next slide.

Think about the different nutrients, what foods provide them and why do our bodies need them?

Please don't worry if you don't have a printer, just copy the table into your book. Use the slides in the PowerPoint to help you with the answers 😊

You might like to draw a picture of the foods too.

Miss Robertson's example:

Nutrient type:	Foods that provide the nutrient:	Why do we need it?
Proteins	Red meat, fish and beans	It helps your body to grow and repair itself.

Nutrient type:	Foods that provide the nutrient:	Why do we need it?
Proteins		
Carbohydrates		
Fats		
Vitamins		
Minerals		
Water		
Fibre		

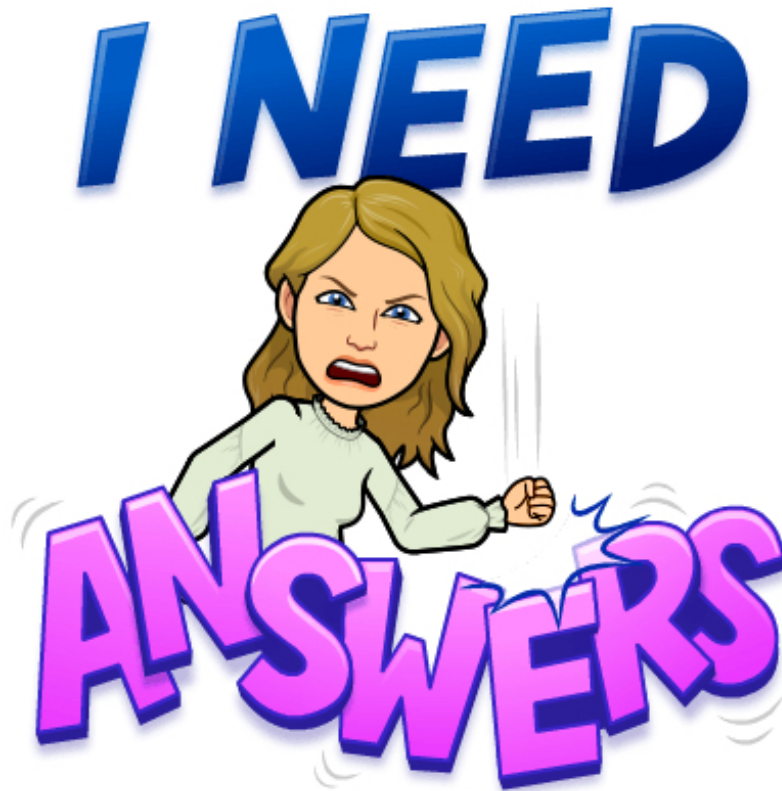
Challenge:

1. Ben is finding it difficult to digest (break down) his food. Name a food that he could eat more of to help his indigestion. Explain why.

2. Mrs Cheslin does a lot of sport but often suffers from a lack of energy. Name a food that she could eat more of to improve her energy levels. Explain why.



challenge
yourself



Answers are on the next slide 😊

Nutrient type:	Foods that provide the nutrient:	Why do we need it?
Proteins	Red meat, fish, beans	It helps your body to grow and repair
Carbohydrates	Bread, pasta, potatoes	It gives you energy.
Fats	Nuts, oils, avocado, butter	Fats give you energy.
Vitamins	Oranges, carrots, nuts	Keeps your body healthy.
Minerals	Milk	Keep your body healthy.
Water	Tomatoes, cucumber, lettuce	Helps to move nutrients in your body
Fibre	Cereals, wholegrain	Helps to digest food.

Challenge:

1. Ben is finding it difficult to digest (break down) his food. Name a food that he could eat more of to help his indigestion. Explain why.

Ben could eat more foods that are high in fibre like cereal and whole grain bread. Fibre is good to help your body digest (break down) food.

2. Mrs Cheslin does a lot of sport but often suffers from a lack of energy. Name a food that she could eat more of to improve her energy levels. Explain why.

Mrs Cheslin could eat more pasta or potatoes. These foods are high in carbohydrates that give you energy.

Optional extra task 😊

- Keep a food diary of the different foods that you eat this week. What nutrients do the foods have in them? What do these nutrients do for your body? There is a template on the website to help you with this or just make your own food diary on paper 😊

Monday				
Draw or write what you ate and drank today				
Breakfast	Lunch	Dinner	Snacks	Drinks
Write down which food gave you the following types of nutrients:				
carbohydrates:				
protein:				
fats:				
vitamins:				
minerals:				
fibre:				
water:				

Food diary example



Thank you for working so hard.
You are all superstars 😊
Please send you work into
yearthree@st-jo-st.dudley.sch.uk