



# Aim

- I can compare and group animals by their diet.

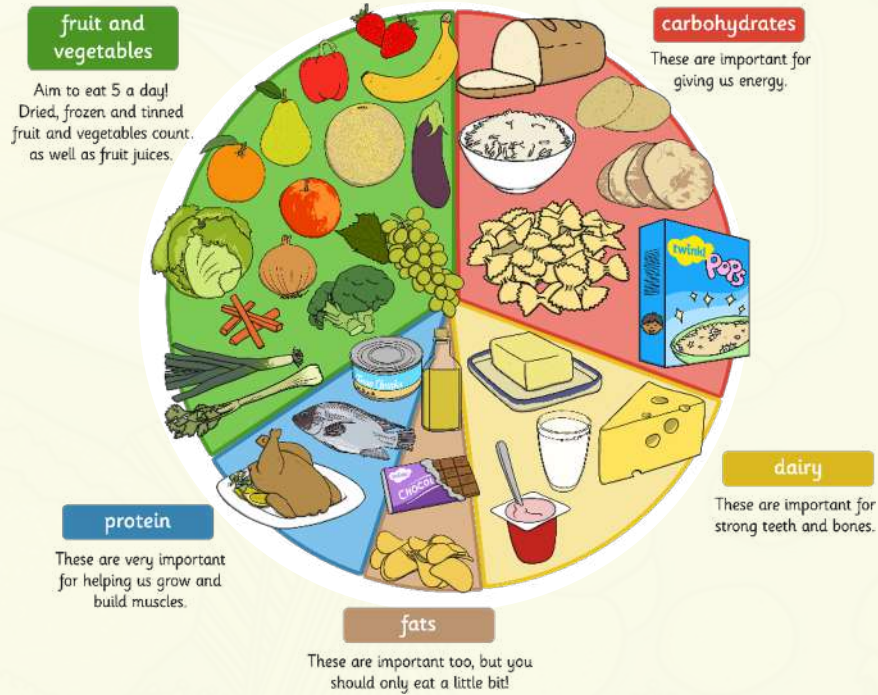
# Success Criteria

- I can explain what the right amount of nutrients are.
- I can explain at least one consequence of eating the wrong amount of nutrients.
- I can identify similarities and differences related to scientific processes.



# Food Groups vs Types of Nutrients

## Food Groups



## Types of Nutrients



# Drinking Water



To keep healthy you need as much water as your body loses each day.

On average adults need up to 2.5 litres of water a day!

Children need to drink between 1.3 and 2.1 litres of water a day.

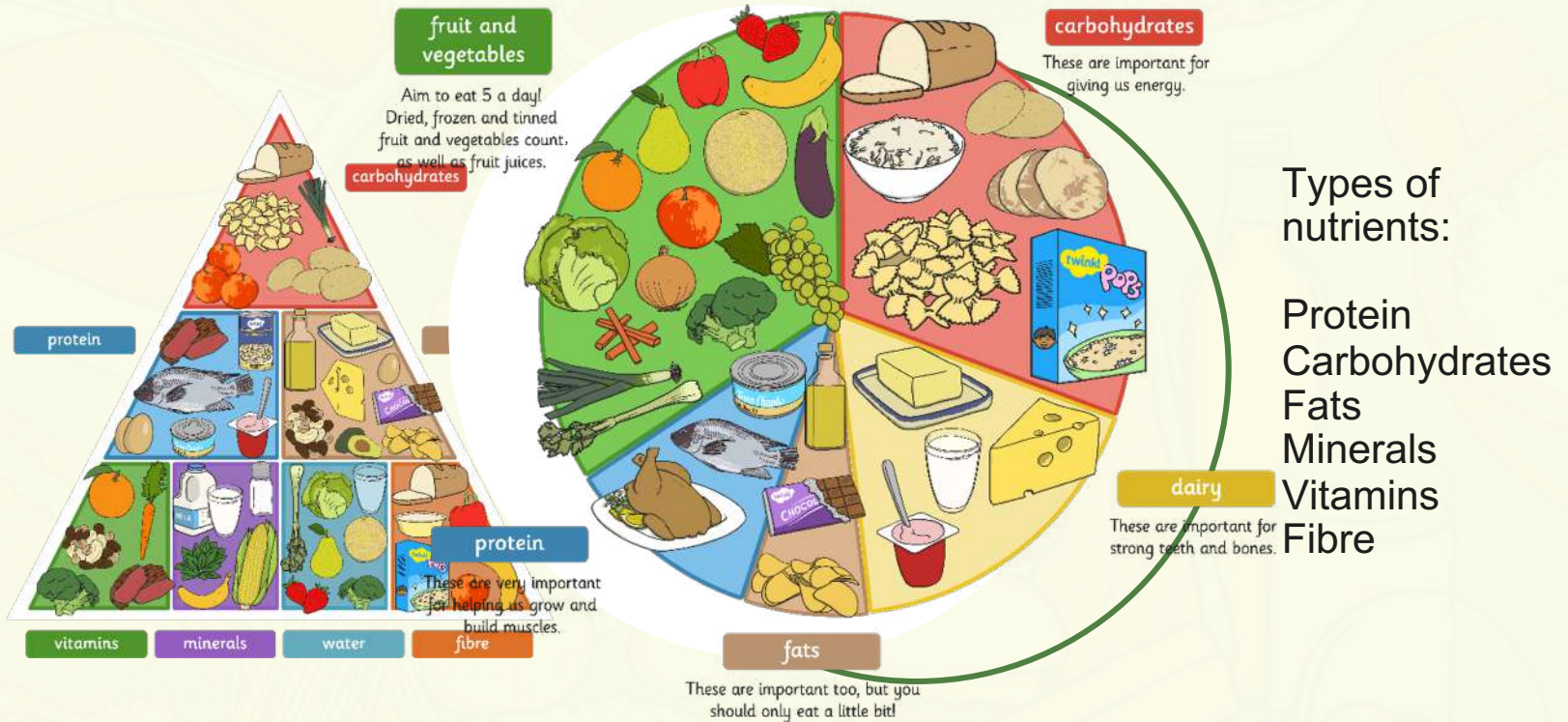
The total amount of water you need is made up of the water contained in foods that you eat and water that you drink.

You cannot rely on food to make up the water that you need each day. You must make sure that you drink plenty of water throughout the day.

# Nutrients Needed by Humans

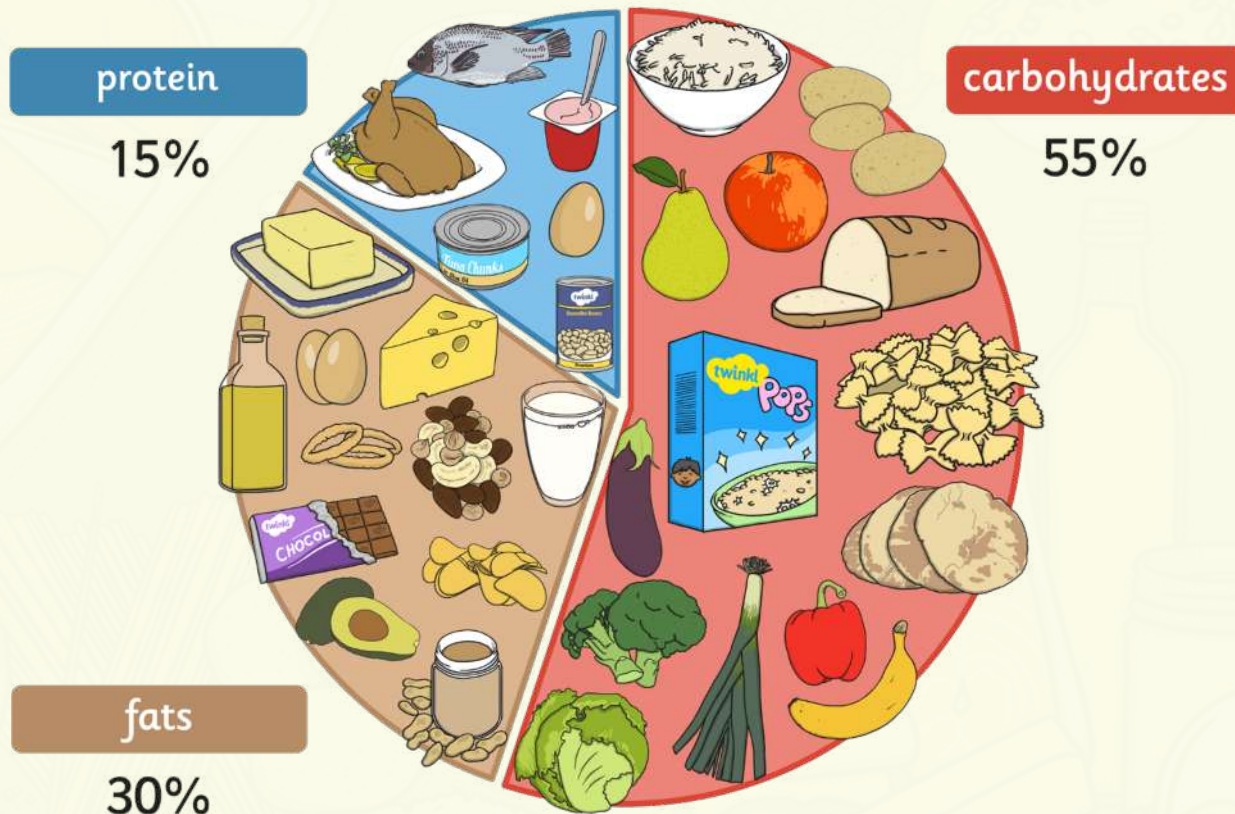


What do you think the picture of nutrients we need from food should look like? What do you think the picture of nutrients we need from food should look like?



- Types of nutrients:
- Protein
  - Carbohydrates
  - Fats
  - Minerals
  - Vitamins
  - Fibre

# Right Amount of Nutrients for Humans



# What About Vitamins, Minerals and Fibre?



Only small amounts of vitamins, minerals and fibre are needed.

However, we need to ensure that we eat food containing these each day. Without these nutrients our bodies can not stay healthy.

That is why eating foods containing a range of nutrients is better for us.

For example – apples contain carbohydrates, fibre, vitamins A and C and minerals such as iron and calcium.

On the other hand a cake may only contain carbohydrate and fats.

# We Need to Eat Lots of Fat!

Not quite!!!

The body needs fat for energy, keeping parts of the body healthy and for vitamins and minerals.

## BUT

The type of fats that we eat are important and the amount we eat of the different fats can make a huge difference to how healthy we are.

The two types of fats are saturated and unsaturated.





# Saturated and Unsaturated Fats

## Saturated Fats

Eaten in small amounts, they can help keep parts of the body such as your brain, liver and lungs healthy.

However, too much saturated fat will cause health problems and can lead to obesity and heart problems.



## Unsaturated Fats

There should be more unsaturated than saturated fat in your diet.

These fats give you energy, vitamins and minerals.

Unsaturated fats actually help keep your heart healthy.



In the UK, people eat too much saturated fat and not enough unsaturated fat. It is important to read the labels on food showing you what nutrients it contains so you can get the right type and amount of fat in your diet.

# Sort Saturated and Unsaturated Fats



Sort the following foods based on the types of fat they contain.



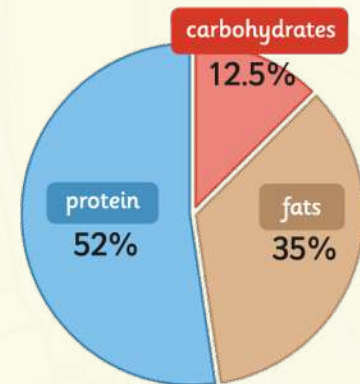
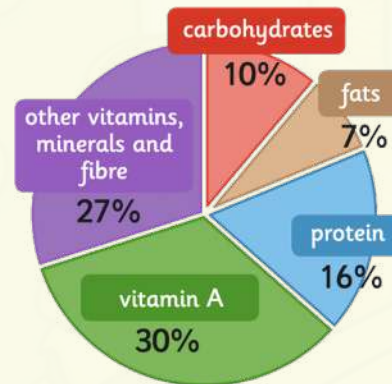
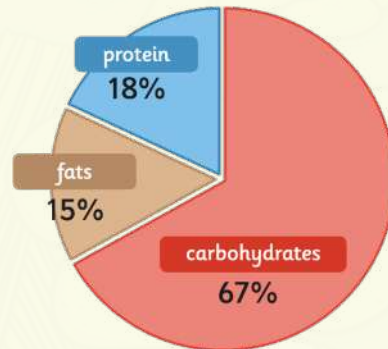
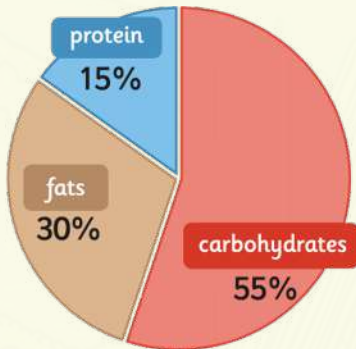
Unsaturated Fat

Saturated Fat

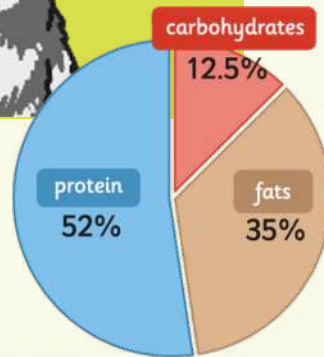
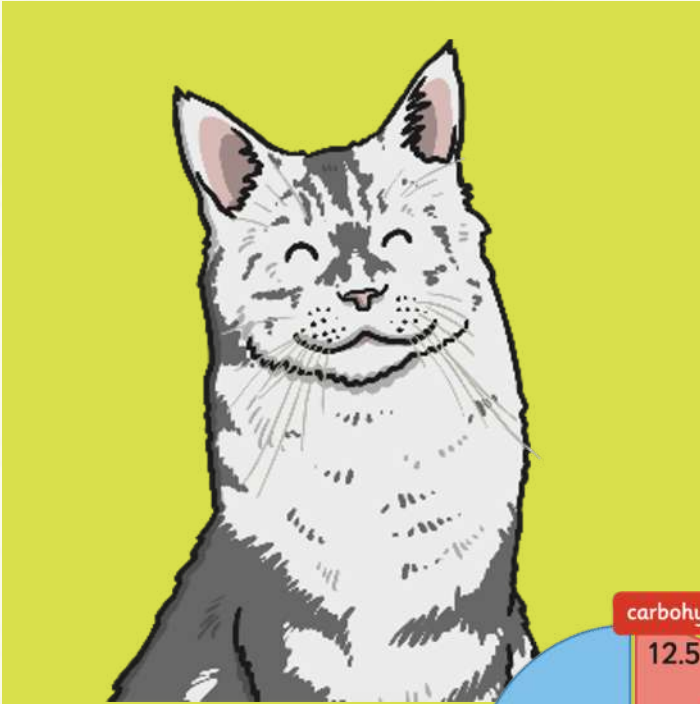
# Same or Different Amounts of Nutrients



Match the animal with the pie chart showing the right amount of nutrients they need.



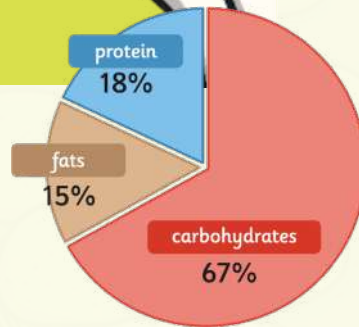
# Cats



Cats need a high percentage of protein because otherwise they can suffer health issues like blindness and heart problems. Cats' bodies break down protein quicker than other animals, so they need more in their diet.

Fat is necessary for healthy fur and skin, and to help their wounds heal quickly.

# Dogs



Dogs need food with a fairly high percentage of carbohydrates because they have an energetic lifestyle. Carbohydrates also break down into sugars, which helps with brain function.

Protein helps with the development of skin, hair, nails and muscles, and protects dogs from some illnesses.

Fats prevent dogs getting dry, itchy skin and a dull coat, and prevent them getting heart disease and diabetes.

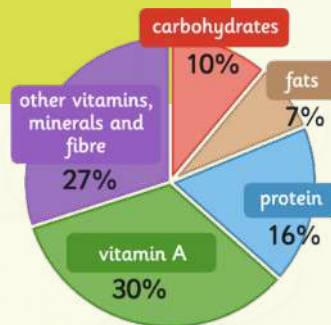
Fats provide more energy for a dog than carbohydrates too!

# Parrots



Parrots need high levels of Vitamin A because it helps the growth and repair of their bodies, feathers and claws. It is also vital for the healthy function of their eyes, hearing, skin and bones. It is found in fruit and vegetables, not seeds, so they need a varied diet.

They need low levels of fat because otherwise they can suffer from malnutrition and low amounts of the nutrients that they actually need.



# Nutrient Needs



**Nutrient Needs**

Cut out and sort the foods into the different types of nutrients.

**Nutrient Needs**

Compare the pie charts showing the amounts of nutrients needed by a human and a dog. Answer the questions below.

Nutrient	Humans	Dogs
protein	15%	18%
fats	30%	15%
carbohydrates	55%	67%

- Who needs 30% fat in their diet? \_\_\_\_\_
- Which animal needs the more protein? \_\_\_\_\_
- What is the percentage difference between the amount of carbohydrates needed by humans and dogs? \_\_\_\_\_
- Name two animals that you think would eat more protein than either a dog or a human: \_\_\_\_\_ and \_\_\_\_\_
- What would happen to a dog if it ate the same amount of nutrients as a human? \_\_\_\_\_

**Nutrient Needs**

Compare the amounts of nutrients needed by a human, a cat and a parrot.

Nutrient	Cats	Parrots
carbohydrates	12.5%	10%
fats	35%	7%
protein	16%	16%
vitamin A	-	30%
other vitamins, minerals and fibre	-	27%

1. Who needs more protein than a cat? \_\_\_\_\_ and \_\_\_\_\_

2. Who needs more fat than a parrot? \_\_\_\_\_

3. Who needs more carbohydrates than a human? \_\_\_\_\_

4. Who needs more protein than a human? \_\_\_\_\_

5. Who needs more vitamin A than a human? \_\_\_\_\_

6. Who needs more fibre than a human? \_\_\_\_\_

7. Who needs more other vitamins, minerals and fibre than a human? \_\_\_\_\_

8. Who needs more fat than a human? \_\_\_\_\_

9. Who needs more carbohydrates than a human? \_\_\_\_\_

10. Who needs more protein than a human? \_\_\_\_\_

11. Who needs more vitamin A than a human? \_\_\_\_\_

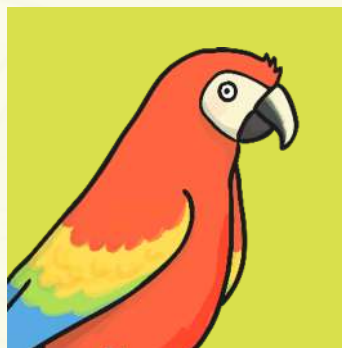
12. Who needs more other vitamins, minerals and fibre than a human? \_\_\_\_\_



# Parrot Diet?



Could you be healthy eating the same diet as a parrot?



Yes	No

