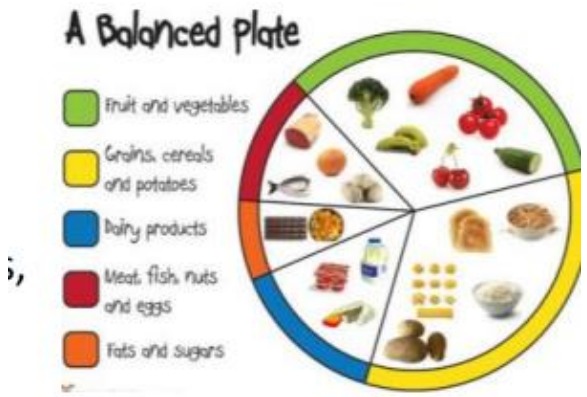
Science: Food and our bodies (Biology) LKS2 Knowledge Mat

Concepts:

Health

Growth



Nourishment

-Unlike plants, animals cannot create their own food. They get nutrition from what they eat.

-This is because animals do not have chlorophyll, or chloroplasts in their cells, like plants do.

-Therefore, plants are called producers and animals are called consumers.

-The different nutrients that animals get depends on their diet. For example, a cheetah gets lots of protein in its diet because it is a carnivore (eats meat).

Types of Nutrition

Carbohydrates

-Carbohydrates give the consumer energy.

-Foods that have lots of carbohydrates in are often called 'starchy' foods.

-Carbohydrate-rich foods include pasta, rice, oats, breads, breakfast cereals and barley.

Protein

-Protein helps the body (especially the muscles) to repair itself.

-Protein-rich foods include meat, eggs & nuts.

Fat

-Fats also give consumers lots of energy. However, too much fat is not healthy!

-Butter, cakes & fast food contain lots of fat.

Fibre

-Fibre helps our digestive systems to work well.

-Fibre is often found in high-carboydrate foods like bread, cereal, potatoes, and some fruits.

Vitamins and Minerals

-There are many different vitamins and minerals that perform hundreds of roles in the body.

Fruit and vegetables are vitamin/mineral-rich.

Skeletons and Muscles

Skeleton

-Humans (and many other animals) have a system of bones called a skeleton.

-Skeletons help to support your body – they give it its shape.

-Skeletons are also important for movement. Muscles are attached to bones.

-Finally, skeletons help to protect important parts of the body. E.g. the ribs protect the heart and lungs.

Muscular System

-Humans (and many other animals) also have a system of muscles in their bodies.

-The main purpose of muscles is for movement. As they contract, muscles move parts of the body around.

-Muscles are also important for maintaining posture, helping humans/ animals to sit, stand, and walk.

-Some muscles (e.g. the heart) move by themselves – they are involuntary.