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| **Alkaline** | **Carbohydrates** |
| **Which food group gives us lots of energy?** | **What is term given to the minimum amount of energy required for a reaction to occur?** |
| **Activation energy** | **Long chains of amino acids** |
| **What are enzymes made up of?** | **What is the name of the area on the enzyme to which the substrate attaches?** |
| **Active site** | **Amylase** |
| **What is the name of the enzyme that breaks down starch?** | **High temperatures can......** |
| **.... denature an enzyme** | **Glucose and oxygen** |
| **What are the reactants involved in respiration?** | **Where does the majority of aerobic respiration occur?** |
| **In the mitochondria** | **To increase the surface area. This increases the rate of reaction** |
| **Why do mitochondria have folded inner membranes?** | **What is the name of the enzymes which break down carbohydrates?** |
| **Carbohydrases** | **Carbon dioxide, water and energy** |
| **What are the products produced during respiration?** | **How much acid is produced by your stomach every day?** |
| **About 3 litres** | **Proteases** |
| **What is the name of the enzymes which break down proteins?** | **What does bile do?** |
| **It emulsifies fats in your food** | **... oxygen and water** |
| **Hydrogen peroxide breaks down to form...** | **What is the name of the enzymes which digests fats?** |
| **Lipases** | **20 - 40ºC** |
| **What is the optimum temperature range for most enzymes?** | **Proteases break proteins down into...** |
| **... amino acids** | **In your salivary glands** |
| **Where is amylase produced?** | **Where is bile stored until it is needed?** |
| **In the gall bladder** | **The small intestine** |
| **Where does your food travel to after the stomach?** | **Lipase breaks fat down into...** |
| **Fatty acids and glycerol** | **Large droplets of fat are broken down into smaller droplets** |
| **What does emulsify mean?** | **Where are protease enzymes produced?** |
| **In your stomach, pancreas and small intestine** | **Acidic** |
| **Under what conditions will pepsin work best?** | **Why does your stomach produce a thick layer of mucus?** |
| **To protect it from being digested by the acid and enzymes** | **In the liver** |
| **Where is bile produced?** | **What is another name for the process of breaking up larger molecules of food?** |
| **Digestion** | **It increases** |
| **What happens to the activity of most enzymes as the temperature increases to 40ºC?** | **Under what conditions will lipases work best?** |