THE DIGESTIVE SYSTEM

Cut out all the boxes. Match one box from the left column with one box from the right column. Glue the matching boxes onto a large sheet of paper.

DIGESTIVE ORGAN	FUNCTION
SMALL INTESTINE	♦ Produces an alkaline substance which is secreted into the duodenum to neutralise the stomach acid. ♦ Enzymes from the pancreas also break down food chemically in the small intestine.
MOUTH	♦ Storage area for faeces at the end of the large intestine ♦ There is a sphincter surrounding the anus, the hole through which faeces passes on defaecation.
LARGE INTESTINE	♦ Thicker in diameter than the small intestine ♦ Water is absorbed from the remains of undigested food to make faeces ♦ Bacteria produce Vitamin B in the large intestine ♦ Mucus lubricates the faeces
STOMACH	♦ Production of Bile - The liver produces bile which is stored temporarily in the gall bladder, and then is secreted into the duodenum (first part of the small intestine) for the emulsification of lipids. Bile is also alkaline and aids in the neutralisation of stomach acid in the small intestine. ♦ Sugar Conversion - After a meal, excess simple sugars in the bloodstream pass to the liver and are converted and stored as glycogen. However, between meals, the glycogen is converted back to simple sugars and released into the bloodstream. In this way, the blood sugar remains constant.
PHARYNX	♦ Tube between mouth and stomach ♦ A flap called the epiglottis closes over the top of the windpipe or trachea when swallowing, so that food does not enter the respiratory tract ♦ The walls of the digestive tract from the oesophagus to the anus are muscular, and contract rhythmically to move food. The muscular contractions are called peristalsis.
OESOPHAGUS	♦ Ingests food ♦ Teeth physically break down food by chewing ♦ Saliva lubricates food ♦ The enzyme, salivary amylase also called ptyalin, breaks down starch into simple sugar, glucose

LIVER and GALL BLADDER (accessory organs)	♦ 2 circular muscles called sphincters surround the entry and exit of the stomach to control the flow of food ♦ Food remains in the stomach for about 3 hours where it physically broken down by the churning muscular contractions of the stomach wall muscles ♦ Gastric juice contains hydrochloric acid and has a pH of 1 without food, and 3 with food. ♦ Hydrochloric acid helps to kill bacteria, and works in association with the enzyme, pepsin, to partially break down proteins.
RECTUM	♦ Long tube that is about 7 metres long and 2.5 cm in diameter ♦ 3 parts of the small intestine are duodenum, jejunum and ileum ♦ Most of digestion occurs in the small intestine ♦ Bile emulsifies lipids. Amylase breaks starch into simple sugars. Lipase breaks lipids into fatty acids and glycerol. Peptidases and Trypsin break down proteins into amino acids. ♦ After the food into broken into smaller particles, it is absorbed through finger-like projections called villi on the walls of the small intestine into blood capillaries.
PANCREAS (accessory organ)	♦ At the back of the mouth cavity ♦ Both food and air pass through here