

Class 3 home learning, week beginning 29th June 2020

# Science

## Choice #1

Please choose Challenge 1, 2 or 3.

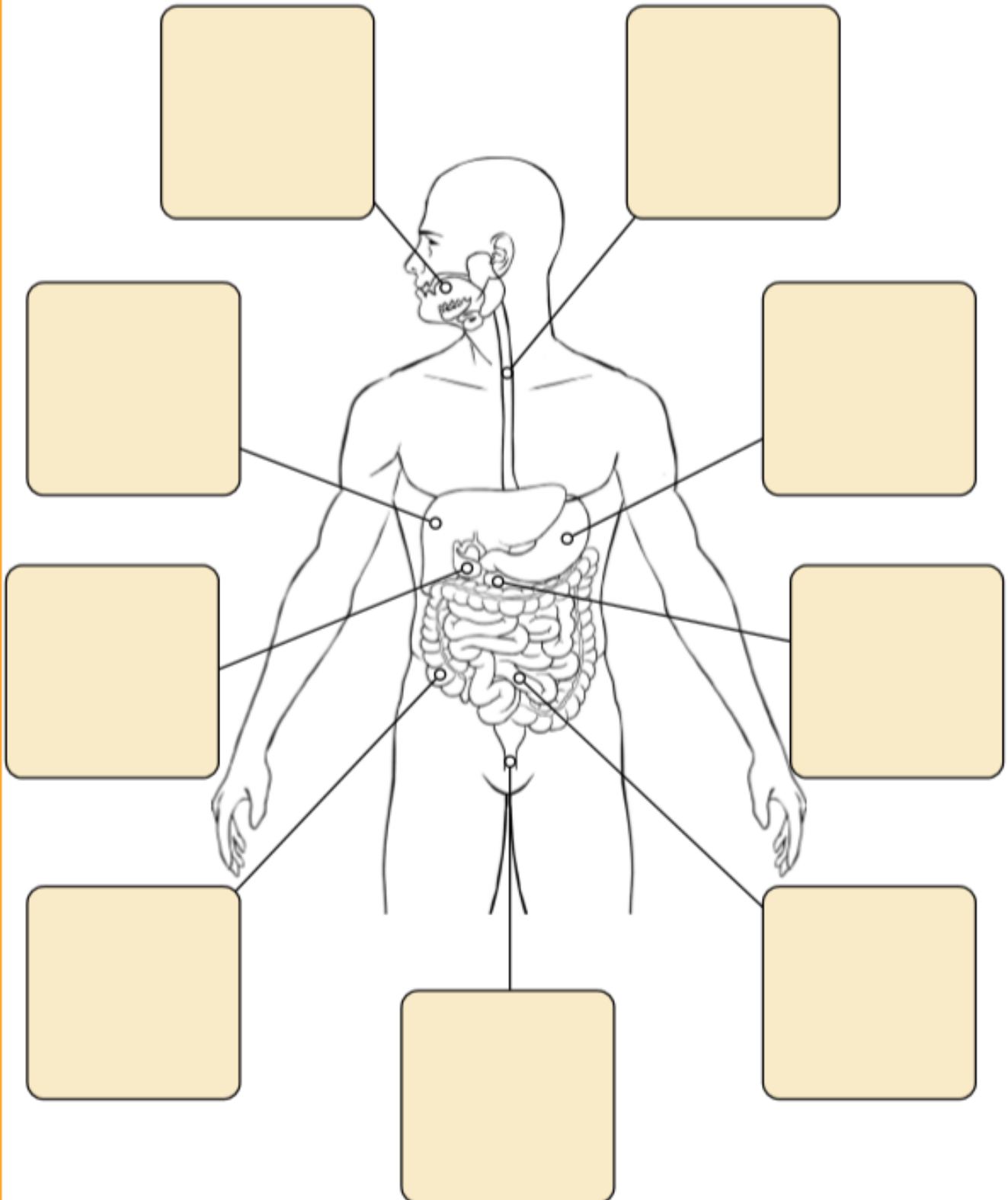
Can I describe the functions of the basic parts of the digestive system?

### Challenge 1



Cut out the Label Cards and stick each one in the correct box to show how your digestive system works.

## The Digestive System



# Eating and Digestion

# Label Cards

Saliva in your **mouth** starts to break down food as it is being chewed. The saliva comes from glands.

The **stomach** is a stretchy sack that breaks food down with acid and by pummelling the food with its muscles.

The **small intestine** absorbs nutrients from the liquid food and passes it into the blood stream.

Any waste the body doesn't need is passed through the **anus** as faeces.

The **gallbladder** stores bile which passes into the small intestine and helps to digest fats.

Muscles in your **oesophagus** (food pipe) transport food from the mouth to the stomach.

The **liver** produces bile to break down fat. It also acts as a filter to remove toxins and other harmful substances.

The **pancreas** creates enzymes which help digest proteins, carbohydrates and fats.

The **large intestine** removes water from the food that is left to make solids. Bacteria and yeast help absorb any remaining nutrients.

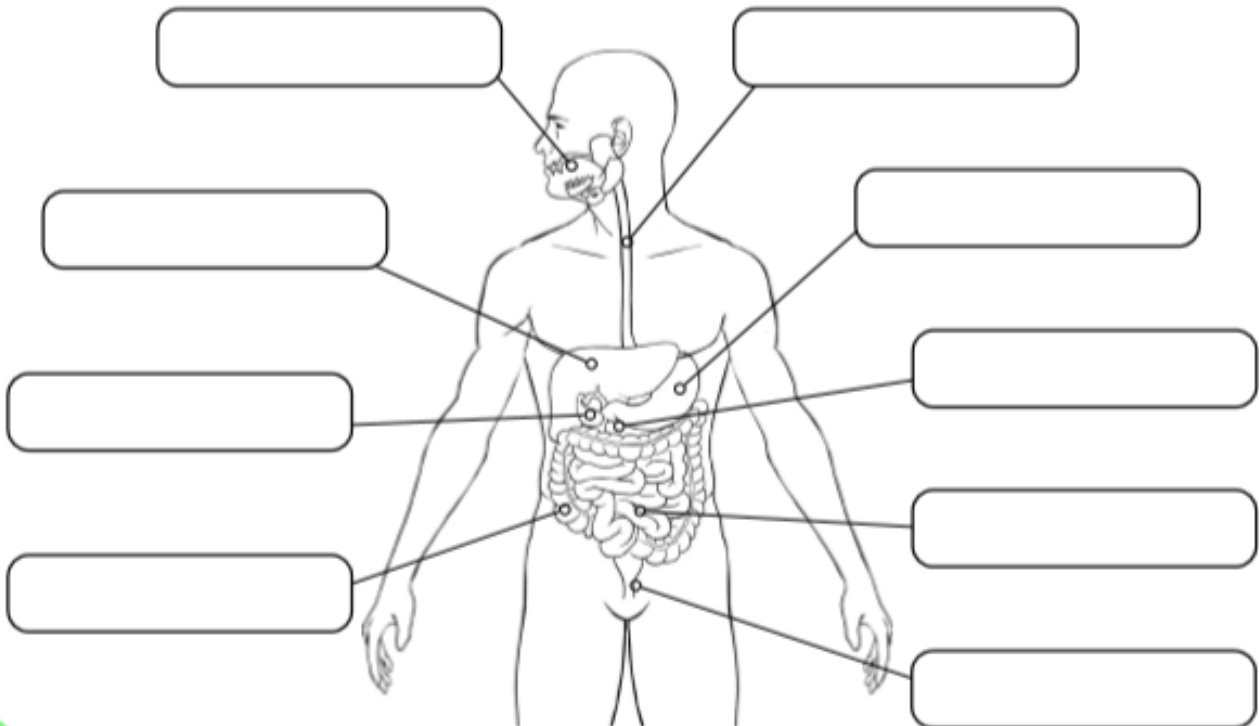
Can I describe the functions of the basic parts of the digestive system?

**Challenge 2** - You could draw this picture in your book and then label it and write the information too.



Label each part of the digestive system using the words below, then match each part to its correct function.

### The Digestive System



<b>mouth</b>
<b>oesophagus</b>
<b>stomach</b>
<b>small intestine</b>
<b>liver</b>
<b>gallbladder</b>
<b>pancreas</b>
<b>large intestine</b>
<b>anus</b>

Contracting muscles and acid break down the food, turning it mostly to liquid.
Any waste that your body doesn't need passes through here when you go to the toilet.
This absorbs nutrients from the liquid food and passes them into the blood stream.
This produces bile to break down fat. It also acts as a filter to remove toxins and other harmful substances.
The tongue, teeth and saliva start to break down the food.
This creates enzymes which help digest proteins, carbohydrates and fats.
Muscles push the food down to the stomach.
This stores bile which helps to digest fats.
This removes water from the food that is left to make solids. Bacteria and yeast help absorb any remaining nutrients.

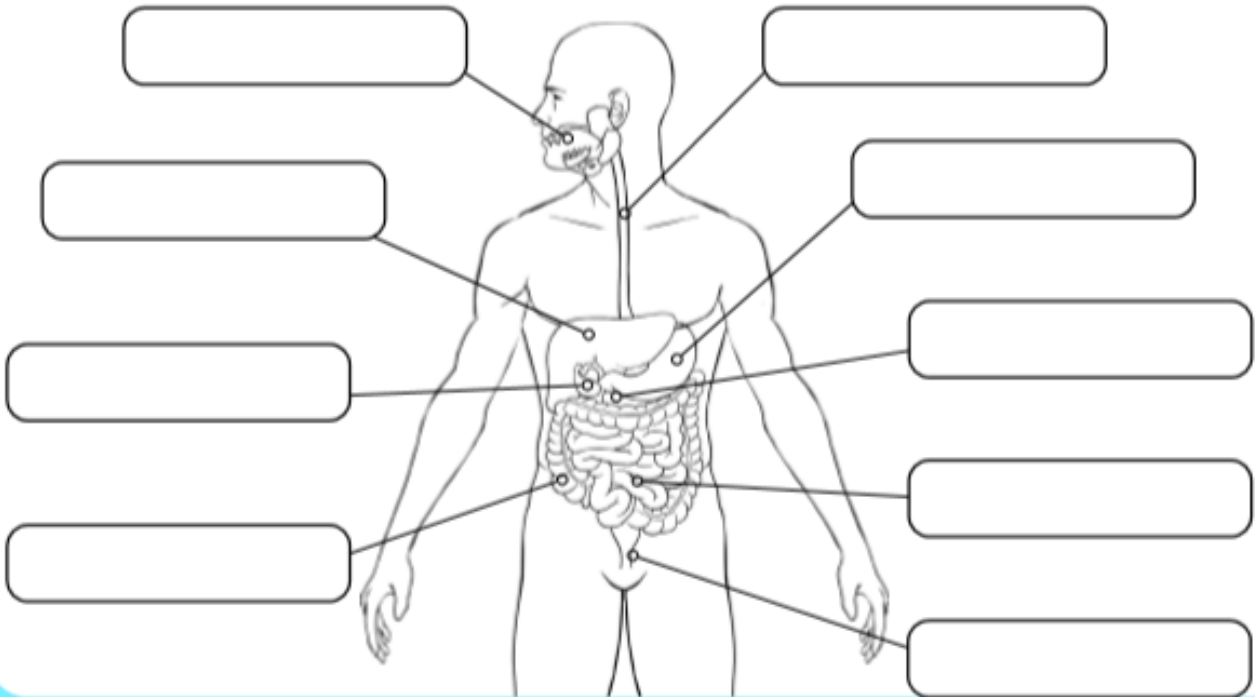
Can I describe the functions of the basic parts of the digestive system?

**Challenge 3** - You could draw this picture in your book and then write the flow diagram in your book.

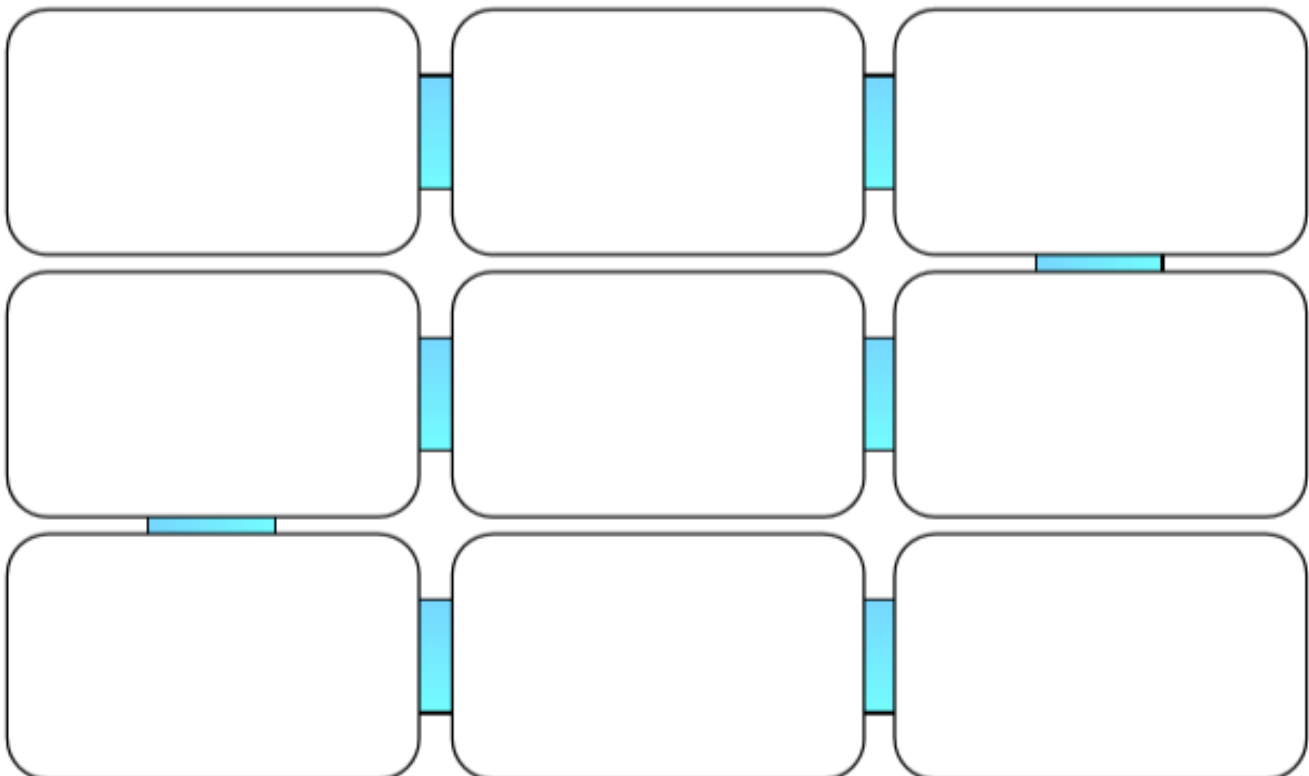


Label each part of the digestive system using the words below, then complete the flow diagram to describe how the digestive system works.

### The Digestive System



small intestine    mouth    anus    pancreas    large intestine    stomach    liver    gallbladder    oesophagus



# Science

## Choice #2

Practical science experiment.

It could get messy!

Our stomach produces acid to help break down food so it can be digested.

- What would happen if this acid wasn't in our stomachs?
- Would food break down if there was just water and the other drinks we drink in our stomachs?
- Does acid break down all foods in the same way?

How can we find out how acid affects the food in our stomachs?



### How could you explore these questions?

One way you could test this would be to put an acid in a sealable bag with some food to see what happens. You could squish the bag as well to mimic the muscles that contract in our stomach to churn the food up.

You could compare this to food put in a sealable bag with water to see if there is a difference in how long it takes for the food to break down.

#### Liquids you could test:

- Vinegar
- Lemon juice
- Cola
- Water
- Squash

#### Foods you could test:

- Crackers
- Bananas
- Bread
- Apples
- Crisps

Choose a question you want to investigate, then plan and carry out your investigation. Remember to make sure it is a fair test!

## My Stomach Investigation

What question will you be investigating?

What equipment will you need?

Describe how you will carry out your investigation:

How will you make sure it is a fair test?

What do you predict your results will show?

Results:

Conclusion: