

For science this week, choose one of the activities to complete.

We would have been doing these in school.

**WARNING: Option 2 has the potential to be messy!**

If you do not have the resources, watch the video clip on option 2 and complete the activity to go with it.

### Option 1

#### Tooth decay experiment with egg shells.

We can't experiment on our own teeth so we will be using eggs to represent them, as the shell of an egg is made of a similar substance to tooth enamel.

You may need to do some research on tooth decay before completing this experiment so you understand the experiment.

#### You will need:

- Eggs x 4 (or 5 for the **extra** part)
- Jars/cups that can be covered x 4 (or 5 for the **extra** part)
- Water
- Tea/coffee
- Fizzy flavoured drink
- Vinegar
- Toothpaste for the **extra** part

More ideas for science experiments and investigations can be found [here](#).

#### Instructions

1. Pour the same amount of fizzy drink, vinegar, water and tea/coffee into separate jars/cups.
2. Add one whole raw egg (still in its shell) to each jar/cup.
3. If you are doing the **extra**, cover the extra egg in toothpaste and place into another jar/cup of tea/coffee.
4. Leave for approximately 3 days.
5. Remove the eggs.
6. Rinse the egg kept in vinegar and rub gently until the shell comes away.

Now write about what has happened to each egg and explain why that has happened.

Explain what this shows us about tooth decay.

## **Option 2**

### **Creating a model of the digestive system.**

We have been learning about the parts and their functions of the digestive system.

Watch the video clip [here](#) to see the experiment in action.

#### **You will need:**

- A clear plastic bag that can be sealed (for example a sandwich bag) which will be the stomach.
- Orange juice which will represent the stomach acid.
- Water which will represent the saliva.
- 3 plain biscuits or crackers
- A banana
- One leg of a pair of tights (PLEASE ASK FIRST!) which will be the small intestine.
- Tea towel which represents the large intestine.
- Bowl x 2

#### **Instructions**

1. Put the food (biscuits/crackers and banana (cut up)) in to the plastic bag.
2. Pour in a cup of orange juice (stomach acid) and a cup of water (saliva).
3. Squeeze, squash and churn the contents in the bag like the stomach muscles would. Keep doing this for a few minutes until the majority of the food has been broken down.
4. Pour the contents of the bag into one leg of a pair of tights (you could either snip a corner off the bag or create a funnel with a plastic cup to help pour).
5. Squeeze the food to the end of the tights (towards the toes), catching any liquid in a bowl. This is what happens in the small intestines.
6. Use the tea towel to squeeze the rest of the liquid from the tights into a bowl (like the large intestines).
7. Snip a small hole in the tights and gently push the mixture through into another bowl. This represents the rectum and the anus.

#### **The choose:**

- Screen shot the video or take pictures of your digestive system at each stage. Put them in order and explain what is happening in each stage using the key vocabulary.

OR

- Draw and label each stage, writing an explanation of what is happening in each picture.