

**NATIONAL CURRICULUM:**

**IDENTIFY THE DIFFERENT TYPES OF TEETH IN HUMANS AND THEIR SIMPLE FUNCTIONS**

**WORKING SCIENTIFICALLY:**

**PUPILS MIGHT WORK SCIENTIFICALLY BY: COMPARING THE TEETH OF CARNIVORES AND HERBIVORES, AND SUGGESTING REASONS FOR DIFFERENCES; FINDING OUT WHAT DAMAGES TEETH AND HOW TO LOOK AFTER THEM. THEY MIGHT DRAW AND DISCUSS THEIR IDEAS ABOUT THE DIGESTIVE SYSTEM AND COMPARE THEM WITH MODELS OR IMAGES.**

- **ASKING RELEVANT QUESTIONS AND USING DIFFERENT TYPES OF SCIENTIFIC ENQUIRIES TO ANSWER THEM**
- **SETTING UP SIMPLE PRACTICAL ENQUIRIES, COMPARATIVE AND FAIR TESTS**
- **MAKING SYSTEMATIC AND CAREFUL OBSERVATIONS AND, WHERE APPROPRIATE, TAKING ACCURATE MEASUREMENTS USING STANDARD UNITS, USING A RANGE OF EQUIPMENT, INCLUDING THERMOMETERS AND DATA LOGGERS**
- **GATHERING, RECORDING, CLASSIFYING AND PRESENTING DATA IN A VARIETY OF WAYS TO HELP IN ANSWERING QUESTIONS**
- **RECORDING FINDINGS USING SIMPLE SCIENTIFIC LANGUAGE, DRAWINGS, LABELLED DIAGRAMS, KEYS, BAR CHARTS, AND TABLES**
- **REPORTING ON FINDINGS FROM ENQUIRIES, INCLUDING ORAL AND WRITTEN EXPLANATIONS, DISPLAYS OR PRESENTATIONS OF RESULTS AND CONCLUSIONS**
- **USING RESULTS TO DRAW SIMPLE CONCLUSIONS, MAKE PREDICTIONS FOR NEW VALUES, SUGGEST IMPROVEMENTS AND RAISE FURTHER QUESTIONS**
- **IDENTIFYING DIFFERENCES, SIMILARITIES OR CHANGES RELATED TO SIMPLE SCIENTIFIC IDEAS AND PROCESSES**
- **USING STRAIGHTFORWARD SCIENTIFIC EVIDENCE TO ANSWER QUESTIONS OR TO SUPPORT THEM FINDINGS.**

**KEY VOCABULARY:**

1. **DIGESTION** THE PROCESS OF BREAKING DOWN FOOD INTO SIMPLE CHEMICALS FOR THE BODY TO ABSORB
2. **INCISOR** CUTTING TEETH
3. **LARGE INTESTINES** WHERE WATER IS ABSORBED INTO THE BLOOD
4. **MOLARS** GRINDING TEETH
5. **OESOPHAGUS** FOOD AND WATER PIPE
6. **PERISTALSIS** MUSCULAR ACTION TO MOVE FOOD ALONG THE DIGESTIVE TUBES
7. **SALIVA** A LUBRICATING DIGESTIVE JUICE PRODUCED IN THE MOUTH
8. **SMALL INTESTINES** WHERE FOOD IS BROKEN DOWN AND NUTRIENTS ARE ABSORBED INTO THE BLOOD
9. **STOMACH** A ROUNDED VESSEL IN THE BODY WHERE ACID AND DIGESTIVE JUICES BREAK DOWN FOOD

## **CONTEXT**

**LIKE MOST OF SHAKESPEARE'S PLAYS, HAMLET IS NOT SET IN A SPECIFIC YEAR OR EVEN DECADE. SHAKESPEARE DOES NOT SPECIFY IN THE TEXT, AND THERE ARE FEW CONTEXT CLUES. GENERALLY, HAMLET IS THOUGHT TO BE SET SOME TIME IN THE 1300S OR 1400S.**

**HAMLET WAS WRITTEN AND PERFORMED IN THE FINAL YEARS OF QUEEN ELIZABETH I'S REIGN. JUST AS THE PLAY ENDS WITH THE DEATH OF THE HAMLET LINE, ELIZABETH WAS THE LAST OF THE TUDORS AND SHE WAS DYING WITHOUT AN HEIR.**

**THERE IS A COMMON MISCONCEPTION THAT MEDIEVAL PEOPLE HAD BASIC, PRIMITIVE IDEAS OF DENTAL HYGIENE, BUT THAT COULDN'T BE FURTHER FROM THE TRUTH. MEDIEVAL PEOPLE BATHED REGULARLY, BRUSHED THEIR HAIR, DID THEIR LAUNDRY, AND ACTUALLY ESTABLISHED THE HYGIENE ROUTINES THAT WE STILL FOLLOW TO THIS DAY. THE EASTERN MEDIEVAL WORLD WAS THE FIRST TO POPULARIZE TEETH BRUSHING. USING A STICK CALLED A "MISWAK", PEOPLE WOULD SCRUB THEIR TEETH UNTIL THEY FELT CLEAN. THIS FORM OF PERSONAL HYGIENE CAUGHT ON, AND BEFORE LONG IT HAD REACHED WESTERN EUROPE, WHERE EMPHASIS ON PERSONAL CLEANLINESS BOOMED. THE ONLY PEOPLE EXEMPT FROM CLEANING THEIR TEETH WERE CERTAIN TYPES OF MONKS, WHO HAD CHOSEN TO FORGO LIFE'S LUXURIES AND LIVE AS NATURE INTENDED. FOR THE MOST PART, MEN, WOMEN AND CHILDREN BRUSHED THEIR TEETH DAILY, EITHER WITH A MISWAK, A CLOTH, THEIR FINGERS OR LEAVES.**

**DURING THE SHAKESPEAREAN ERA IT WAS RECOMMENDED THAT PEOPLE KEEP THEIR TEETH WHITE BY RUBBING THEIR TEETH WITH POWDERED FISH BONES AND THEN RINSING THEIR MOUTHS OUT WITH A MIXTURE OF VINEGAR AND SULPHURIC ACID! MANY PEOPLE OFTEN USED THEIR FINGERS OR SIMPLE TOOLS SUCH AS TOOTHPLICKS OR SHARPENED QUILLS TO CLEAN THEIR TEETH. IT IS HARDLY SURPRISING THAT THIS RESULTED IN POOR DENTAL HYGIENE. TOOTHACHE AND GUM DISEASE WERE THEREFORE VERY COMMON AT THIS TIME.**



**LESSON 1 I CAN NAME THE BASIC PARTS OF THE DIGESTIVE SYSTEM AND DESCRIBE THEIR FUNCTIONS.**

**ACTIVITY 1 AT THE START OF THIS TOPIC, COMPLETE THE KWL GRID. ASK THE CHILDREN WHAT DO THEY ALREADY KNOW ABOUT TEETH AND THE DIGESTIVE SYSTEM?**

**ASK KEY QUESTIONS *WHAT HAPPENS WHEN WE EAT FOOD? HOW DOES IT GET FROM FOOD TO POO?***

**INTRODUCE THE TERM 'DIGESTIVE SYSTEM' AND WATCH THE VIDEO BELOW.**

**[HTTPS://WWW.BBC.CO.UK/BITESIZE/ARTICLES/Z9BNTRD](https://www.bbc.co.uk/bitesize/articles/z9bntrd)**

**INTRODUCE THE WORD CARDS AND COMPLETE THE INTERACTIVE GAME TOGETHER.**

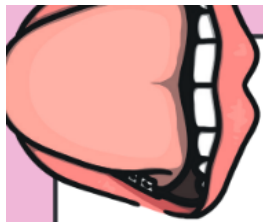
**[HTTPS://WWW.BBC.CO.UK/BITESIZE/ARTICLES/ZM7Y62P](https://www.bbc.co.uk/bitesize/articles/zm7y62p)**

**ACTIVITY 2 WHILE COMPLETING THE GAME, COMPLETE LABELLING THE DIGESTIVE SYSTEM TOGETHER.**


**ACTIVITY 3 THEN COMPLETE THE FUNCTION AND ORGAN SHEET.**

**PLENARY CHN TO PICK A CARD AND TO DESCRIBE THE FUNCTION. CHN ARE TO GUESS THE ORGAN.**

**[HTTPS://WWW.YOUTUBE.COM/WATCH?V NSGG\\_6tGE\\_A](https://www.youtube.com/watch?v=NSGG_6tGE_A) WATCH THE DIGESTIVE SYSTEM SONG.**



K What I know	W What I want to know	L What I learned



Activity 1

**mouth**

**large  
intestine**

**oesophagus**

**teeth**

**tongue**

**stomach**

**rectum**

**small  
intestine**

**anus**

**liver**

**pancreas**

**salivary  
glands**

**Anus** - the opening at the end of the digestive system from which faeces (poo) leaves the body.

**Oesophagus** - the long tube between the mouth and the stomach.

**Gall bladder** - a small sac below the liver. It stores and releases bile into the small intestine.

**Large intestine** - the shorter wider tube that follows the small intestine.

**Liver** - a large organ which makes bile that neutralises stomach acid.

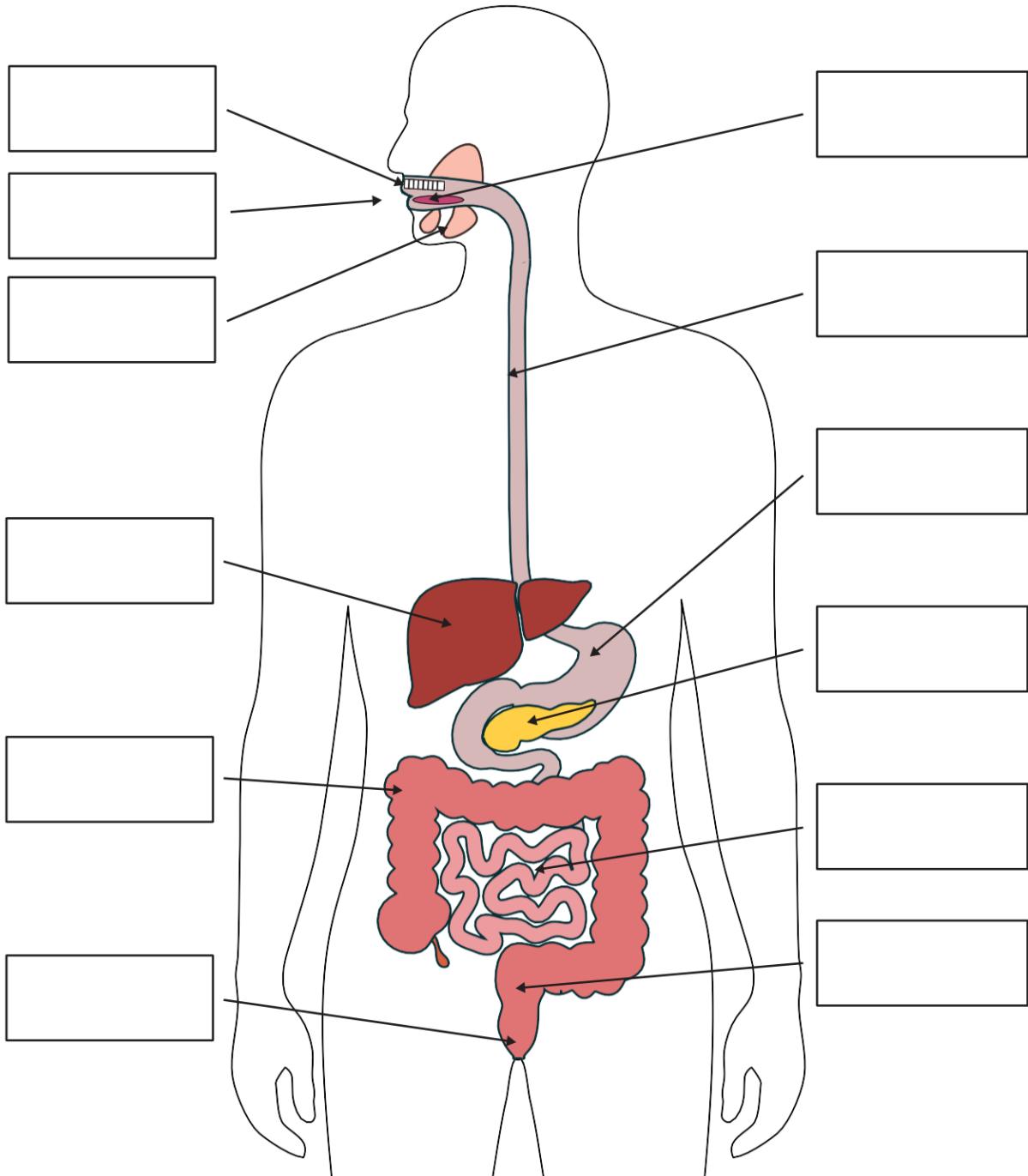
**Mouth** - the first part of the digestive system, where food enters the body.

**Pancreas** - a gland below the stomach which makes lots of chemicals called enzymes that help break down food.

**Rectum** - the lower part of the large intestine, where faeces (poo) is stored before it leaves the body.

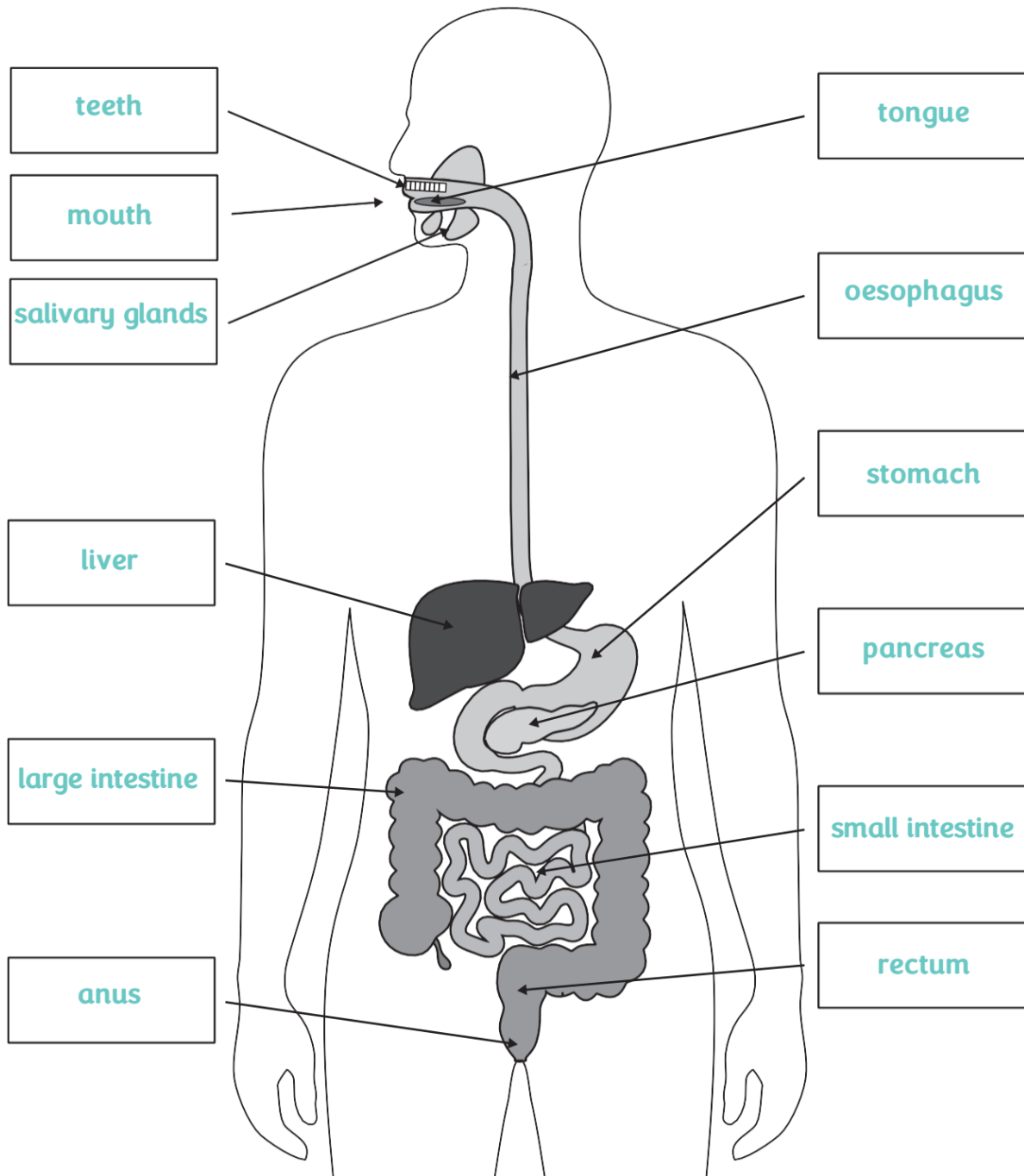
**Small intestine** - the long, thin winding tube that food goes through after it leaves the stomach.

**Stomach** - a sack-like, muscular organ that is attached to the oesophagus. When food enters the stomach, it is churned with lots of acid.



**Keywords**

pancreas, liver, small intestine, stomach, oesophagus, anus, salivary glands, rectum, mouth, large intestine, tongue, teeth





Function	Organ
tear, rip and chew food	teeth
mix with acid and enzymes to turn food into a paste	stomach
holds the stool until you go to the toilet	rectum
produces bile to break down fat	liver
moves the food into a bolus and pushes it to the oesophagus	tongue
where the stool is released	anus
helps absorb water from the food	large intestine
produces enzymes which break down fats, proteins and carbohydrates	pancreas
absorbs nutrients from the food	small intestine
produce saliva	salivary glands
where food enters the digestive system	mouth
a muscular tube which uses contractions to move the bolus from the mouth to the stomach	oesophagus

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**LESSON 2 I CAN IDENTIFY THE DIFFERENT TEETH AND DESCRIBE THEIR FUNCTIONS.**

**LAST LESSON RECAP ASK THE CHILDREN TO WRITE THE TWELVE ESSENTIAL PARTS OF THE DIGESTIVE SYSTEM ON THEIR WHITEBOARDS.**

Who can name all 12 parts of the digestive system?

1. mouth
2. teeth
3. salivary glands
4. tongue
5. oesophagus
6. stomach
7. small intestine
8. liver
9. pancreas
10. large intestine
11. rectum
12. anus

**SONG A OR SONG B**

<https://www.youtube.com/watch?v=NSGG6tGEA>

<https://www.youtube.com/watch?v=C1KFTCDG6o>

**EXPLAIN THAT IN THIS LESSON, WE ARE GOING TO BE THINKING ABOUT TEETH. WE HAVE ALREADY LEARNT THAT TEETH ARE IMPORTANT AS THEY TEAR AND CHEW FOOD TO MAKE IT EASIER TO SWALLOW.**

**TASK 1 ASK THE CHILDREN TO USE A MIRROR TO LOOK AT THEIR TEETH. ARE THEY ALL THE SAME SHAPE? HOW MANY DO THEY HAVE? WHAT COULD BE THE REASON THAT YOU HAVE MORE THAN 20 TEETH? WHY MIGHT THE FIRST SET OF TEETH BE CALLED MILK TEETH? BECAUSE THE BABIES' DIET IS PREDOMINATELY MILK WHEN THE FIRST SET OF TEETH START TO COME THROUGH .**

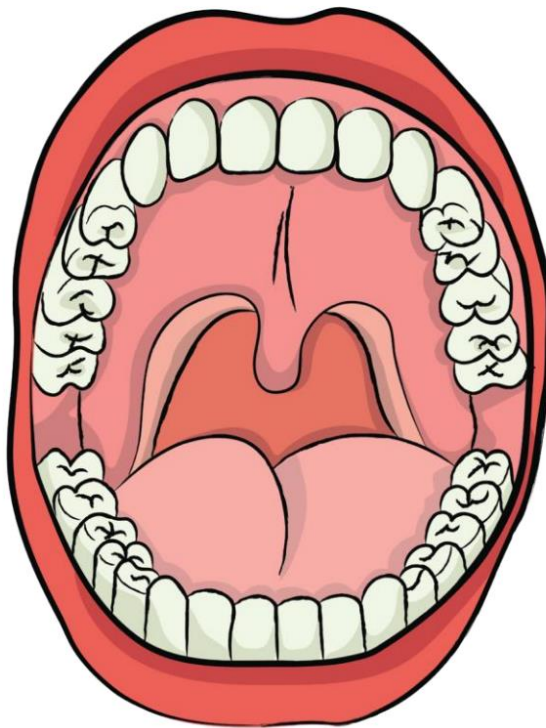
**EXPLAIN THAT JUST LIKE DIFFERENT PARTS OF THE DIGESTIVE SYSTEM, DO SPECIFIC JOBS; OUR TEETH ARE DIFFERENT SHAPES AS THEY HAVE SPECIFIC JOBS. IN THIS LESSON, WE WILL BE LEARNING THE NAMES OF THE DIFFERENT SHAPED TEETH AND THE FUNCTION OF EACH TYPE OF TOOTH.**

<https://www.bbc.co.uk/bitesize/articles/zsp76yc>

**ACTIVITY 1 CHILDREN LABEL/COLOUR A DIAGRAM OF TEETH AND MATCH THE FUNCTION.**

**PLENARY USING THE MIRROR CHN TO NAME THEIR DIFFERENT TEETH.**

1. Colour the teeth in the correct colours.



Key

-  incisors
-  premolars
-  molars
-  canines
-  wisdom

2. Match the teeth to their correct function.

incisors

canines

premolars

molars

wisdom

tearing and ripping food


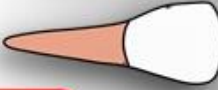
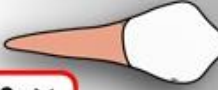


holding and crushing food


act as extra molars

biting and cutting food

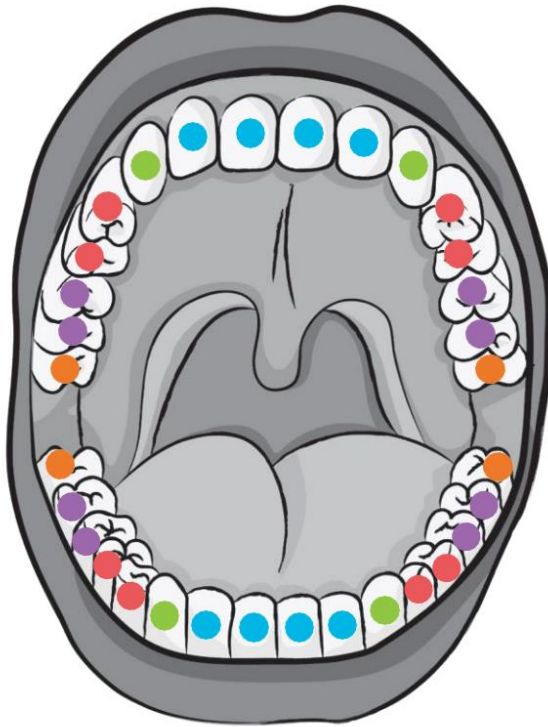
grinding food

# Types of Human Teeth






				
<b>Position in mouth</b>	<b>incisor</b>	<b>canine</b>	<b>premolar</b>	<b>molar</b>
<b>Description</b>	sharp, chisel-shaped teeth	sharp and pointy teeth	flat, ridged teeth	largest flat, ridged teeth
<b>Function</b>	chopping and cutting food	tearing and ripping food	holding and crushing food	chewing and grinding food
	<b>X 8</b> adult	<b>X 4</b> adult	<b>X 8</b> adult	<b>X 12</b> adult
	front	either side of incisors	behind canine	back

Knight Owl Teaching Resources 

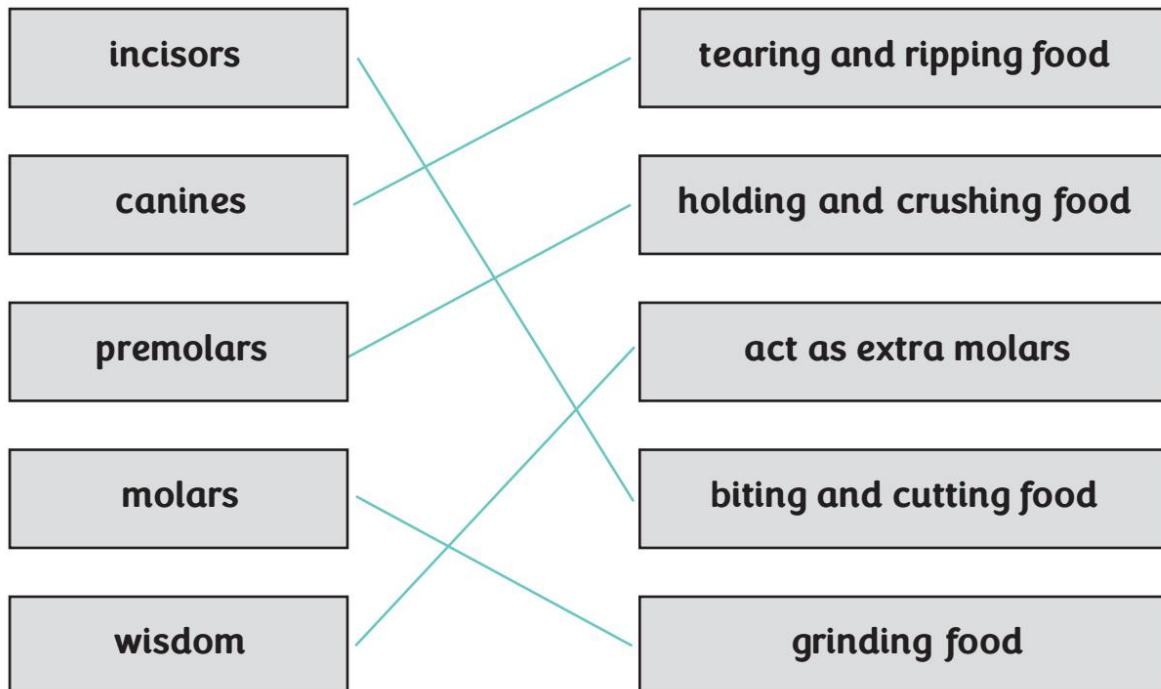
1. Colour the teeth in the correct colours.



**Key**

-  incisors
-  premolars
-  molars
-  canines
-  wisdom

2. Match the teeth to their correct function.



**LESSON 3 I CAN PLAN AND CARRY OUT AN INVESTIGATION.**

Today, we will **investigate** which drink causes the most decay to our teeth.

We can't use real teeth for this investigation, so we will use **hard-boiled eggs** and put them in different liquids to see what happens. This is because the shell of an egg is similar to the enamel on our teeth.

**WHAT DID PEOPLE DRINK IN THE 1300S?**

**ALL CLASSES COMMONLY DRANK ALE, BEER AND WATER. MILK WAS ALSO AVAILABLE, BUT USUALLY RESERVED FOR YOUNGER PEOPLE. JUICE/WINE WAS IMPORTED FROM FRANCE AND ITALY FOR THOSE WITH MONEY.**

**ACTIVITY 1 POUR EACH LIQUID INTO A GLASS ON THE TABLE. CHN TO DISCUSS THE DIFFERENT LIQUIDS.**

**BEER OR CIDER**

**WATER**

**MILK**

**JUICE**

**ACTIVITY 2 COMPLETE THE INVESTIGATION SHEET.**

**ACTIVITY 3 COMPLETE THE EXPERIMENT AND CLEARLY MARK EACH BOILED EGG. CHN TO DRAW THE RESULTS. CHN TO WRITE DOWN THEIR FINDINGS.**



**Question** – (What do we want to find out?)

**Equipment:**

**Variables** – (What are we going to change each time?)

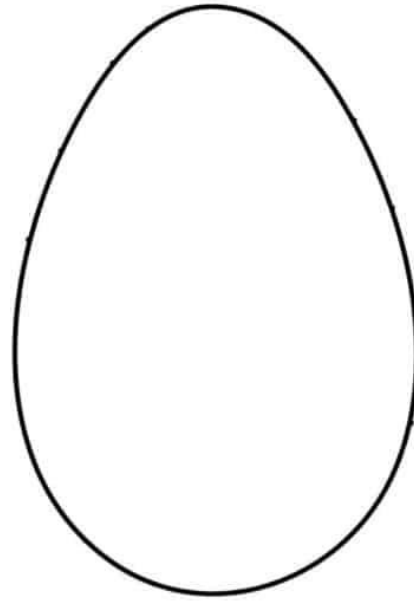
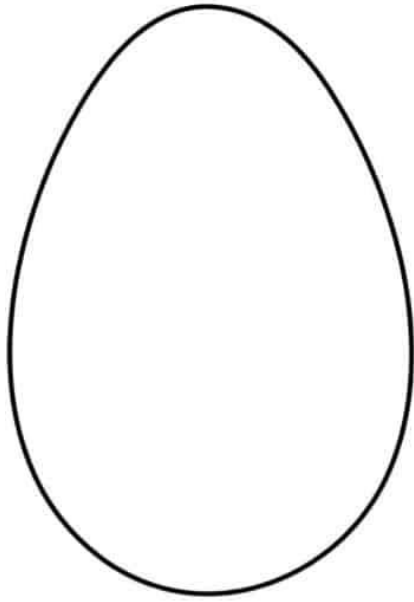
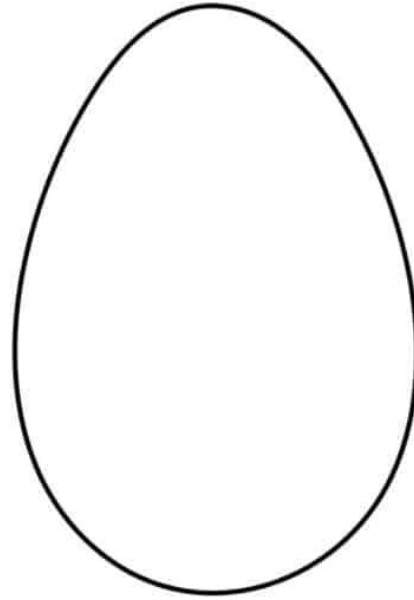
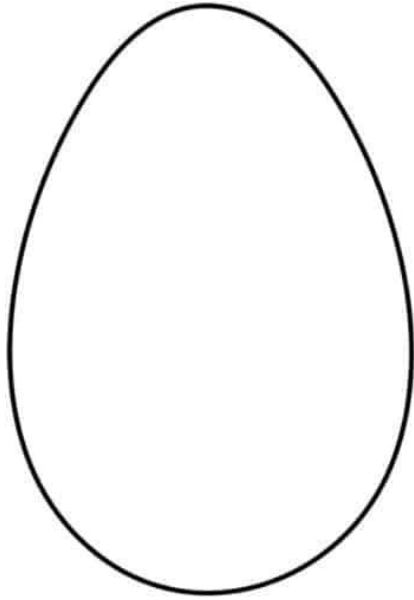
**Fair test** – (What will we keep the same?)

**Method:**

**Measure** – (How are we going to record our results?)

**Prediction:**





**FINDINGS:**

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