



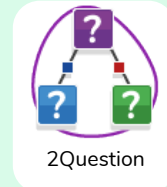
Year 3

Branching Databases

Key Learning

- To understand the concept of using 'Yes' or 'No' questions to sort objects.
- To understand and use a branching database effectively.
- To plan and create a branching database.
- To test and debug branching databases to correct errors.

Key Resources



Key Vocabulary

Binary Choice

A decision between only two distinct options.

Data

A set of facts or information that help us learn something or make decisions.

Debug/Debugging

The process of finding and fixing mistakes (known as bugs) in computer code or a program so that it works the way it's supposed to.

Binary Tree

Another name for a branching database.

Database

A place where data is stored or organised. It helps us find information quickly.

Record

A collection of related data or information that is stored together as a single unit.

Branching Database

A type of database that uses yes or no questions to help sort and identify objects.



Key Images



Add record

Click to add a new record



I'm ready to sort

Click to sort records in the tree



Edit records



Edit tree

Key Questions

What is meant by data?

Facts about something; data can be words, numbers or pictures. For example, the class register contains data about the names, addresses and attendance of the children in the class.

What is a database used for?

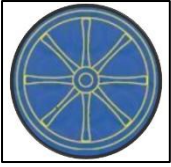
A database is used to store, organise, manage and retrieve data and information quickly and easily.

What is a branching database?

A branching database is used to sort and classify groups of objects. It is used to help identify objects by answering questions with either answer 'yes' or 'no'. Branching databases can also be called binary trees.

What makes a good question on a branching database?

Questions on a branching database should be binary choice, which means they can only have one or two answers. On a branching database, these answers should be 'yes' or 'no'. A good question should split the group roughly in half, with half of the records answering 'yes' and half the records answering 'no'.



Wheelwright Lane Knowledge Organiser for:

Food Technology – Perfect Pizzas



Key questions:

What is your favourite/ least favourite topping?

How could we alter the flavour of this food?

What is a balanced diet?

What is seasonal produce?

What is available at this time of the year to add to our pizza?

What are the different techniques we can use to make pizza dough?

If you made this again, how would you improve it?

What good hygiene measures do we need to follow before/during and after cooking?

Food preparation techniques:

Food Preparation: Buying, storing, preparing and cooking food safely and hygienically are vital for health. Make sure you: Wash your hands and tie back long hair. Remove jewellery and wear an apron. Keep meat and fish in the fridge until you need to use it so it doesn't go off and always check the 'Use by' and 'Best Before End' dates. Wash utensils in warm soapy water and clean surfaces thoroughly.

Key facts:

Food Groups – There are 5 groups Varied Diet

Fruit and Veg - Eat 5 portions per day.

Carbohydrates – Include in every meal.

Proteins – 2-3 portions per day.

Dairy – 2-3 portions per day.

Fats and Sugars – Only eat occasionally.

Seasonality: Some of the food we eat is **seasonal** in the UK. This means it only grows at certain times of the year. In the UK, some food is also grown in glasshouses. This means that the food is available at different times to that grown outside.

Spring (March, April, May)	Summer (June, July, August)	Autumn (September, October, November)	Winter (December, January, February)
			

Let Me Introduce You To...

Raffaele Esposito



Raffaele Esposito was an Italian chef and owner of a tavern called Pizzeria di Pietro e basta così in the 19th century that had been founded in 1780.

According to legend, Queen Margherita summoned Esposito, to bake some local treats. Esposito allegedly created three variations, one of which was topped with mozzarella (white), basil (green), and tomatoes (red) to represent the three colours of the Italian flag. The Queen loved it and Esposito named his pizza after her – which we now know as a Margherita Pizza!

Key vocabulary:

Food hygiene - the measures and conditions necessary to control hazards and to ensure fitness for human consumption of a foodstuff taking into account its intended use'.

Market research - the action or activity of gathering information about consumers' needs and preferences. Asking people about their favourite and least favourite toppings.

Seasonal produce – Seasonal food is fresh food that is ready to eat during its preferred season.

Balanced diet - a diet consisting of a variety of different types of food and providing adequate amounts of the nutrients necessary for good health.

Design criteria – the important goals that you set yourself in order for a project to be successful.

Safety – ensuring safe working practices during the making process.

Hazards - Carrying out practical work in design and technology is hazardous and we should protect ourselves and other people by taking actions to remove or minimise the risks to our health and safety.

Evaluate - the process of deciding if something has been done in the best way and wondering what could be improved.



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Knowledge Organiser for:

Europe -countries and capitals

Key questions:



What is a country?

What is a continent?

What is the largest country in Europe?

What is the smallest country in Europe?

What is different about the smallest country in comparison to other countries in Europe?

What are the two largest seas around Europe?

How is Rome similar to London?

Key facts:



There are 44 countries in Europe. A small number of countries on the continent are trans-continental, meaning they are considered to be a part of both Europe and Asia.

Russia is the largest country in Europe. It stretches across Europe and into Asia.

The smallest country is the Vatican City in Rome.

The Mediterranean is a body

Key Vocabulary

climate	The usual or average weather conditions over a long period of time.
continent	A large area of land divided into countries .
country	An area defined by its people, culture, language, geography and government.
landscapes	An area of land and everything you can see on it.
population	The number of people living in an area.
weather	The specific atmospheric conditions on a given day including temperature and rainfall.



Key vocabulary: country, continent, landscape, population, weather, climate, capital city, city border, ocean, globe, flag, language, currency, cuisine, human landmarks, natural landmarks, northern hemisphere, southern hemisphere.



Wheelwright Lane Knowledge Organiser for:

PE - Swimming & Body Strengthening and Conditioning

Key questions:



Key facts:



Key vocabulary:

Freestyle (Front Crawl): The fastest stroke, swam face-down with alternating arm pulls and a flutter kick.

Backstroke: Swam on your back with alternating arm pulls and a constant flutter kick.

Breaststroke: Swam face down, with circular arm movements and a frog kick.

Butterfly: Swam face down with symmetrical arm movements and a dolphin kick.

Dolphin Kick: A powerful, undulating leg movement used in butterfly and underwaters

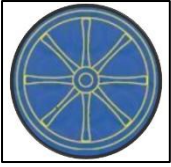
Bilateral Breathing: Breathing on both the right and left sides while swimming freestyle.

What strategies can you use to stay afloat in a pool if you feel difficult? ones and demonstrate improvement.

What helps you get better at holding poses with control?

distances.

Swimming safely includes knowing pool rules, safe entries and exits, and awareness of others in the



Wheelwright Lane Knowledge Organiser for:

Light and Shadows

Key questions:



What is light? Where do we get it from?

What is a shadow?

How are shadows formed?

How does light help us to see?

Does the moon give us light?

How can you keep your eyes safe in the sun?

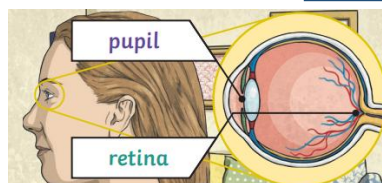
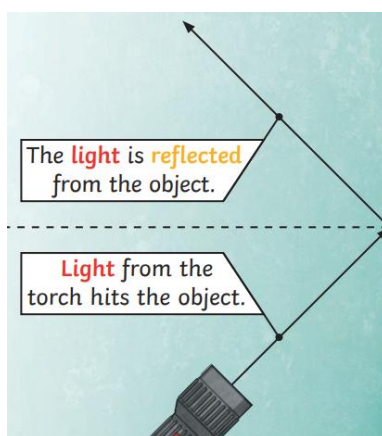
Key facts:



There are many sources of light – candles, electric light, the sun. Light travels in a straight line. When it hits an object, it is reflected or bounced off. If the reflected light rays hits our eyes, we can see the object. The moon does not give us light but acts like a giant mirror, reflecting the rays of the sun.

Shadows are made when light is blocked by an object. You can change the length of a shadow by changing how far away a light source is from an object. Some objects let more light through than others; if an object blocks light it is opaque, if it lets a little light in it is translucent and if it lets lots of light through then it is transparent.

We need light to see and if there is no light, we can't see objects. The pupils in your eye control the amount of light coming in. If too much light enters your eye, it can damage your retina. You can keep your eyes safe by wearing a hat with a brim or some sunglasses.



Key vocabulary: light, shadow, sun, reflection, transparent, translucent, opaque, retina, rays

