



Topic

Computing – Branching Databases

Theme

Leadership

Year Group

3

### Key Learning

- To sort objects using just 'yes' or 'no' questions.
- To complete a branching database using 2Question.
- To create a branching database of the children's choice.

### Key Resources

**purple  
mash**



2Question

### Key Vocabulary

#### Binary Tree

Another name for a branching database.

#### Database

A collection of data organised in such a way that it can be searched, and information found easily. Database usually refers to data stored on computers.

#### Branching database

Used to classify groups of objects. It is used to help identify the objects by answering questions with either 'yes' or 'no'. Branching databases can also be called binary trees.

#### Data

A collection of information, especially facts or numbers, obtained by observation, questions or measurement to be analysed and used to help decision-making.

#### Debugging

The process of identifying and removing errors from computer hardware or software.

### 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?

A collection of data organised in such a way that it can be searched, and information found easily. Database usually refers to data stored on computers.

#### What is a branching database?

Used to classify groups of objects. It is used to help identify the objects by answering questions with either 'yes' or 'no'. Branching databases can also be called binary trees.



## Key Learning

- To consider what simulations are.
- To explore a simulation.
- To analyse and evaluate a simulation.

## Key Resources

**purple  
mash**



2Simulate

## Key Questions

### What is a computer simulation?

A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.

### What kind of simulations are there?

Some simulations represent dangerous situations for training such as flying in space, carrying out medical operations or piloting an aeroplane. Others simulate activities for fun, such as racing simulations.

### Are there any problems with simulations?

Simulations are often too simple; and unexpected problems can still occur in real life that are difficult to simulate. Simulations can also be very expensive.

## Key Vocabulary

### Analysis

A detailed examination of something.

### Simulation

A program that models a real-life situation. They let you try things out that would be too difficult or dangerous to do in real life.

### Evaluation

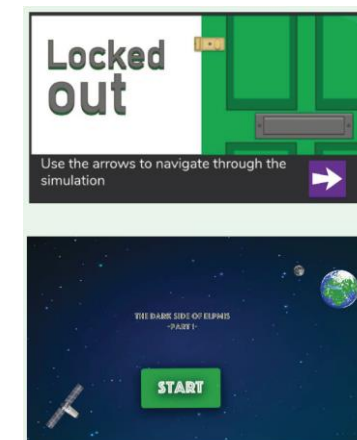
To judge the value, condition or effectiveness of something.

### Modelling

The act of representing something, often on a smaller scale.

### Decision

The act or result of making a choice after careful thought.





Topic

Art - Sculpture and 3D Art

Theme

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**sculptor**

An artist who makes sculptures.

**structure**

Parts arranged in a particular way, like a cardboard model.

### Artist Information

**Anthony Caro**

(March 1924 - October 2013)

- A British artist who made abstract sculptures.
- Used scrap metal and found objects.
- Some of his sculptures are colourful.

**Ruth Asawa**

(January 1926 - August 2013)

- An American sculptor who made wire sculptures.
- She was interested in the shapes created by space between artworks.

**Abstract**



**Figurative**



**Positive space**



**Negative space**



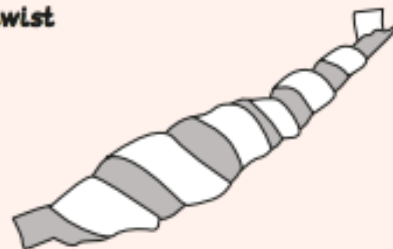


### Techniques for joining shapes

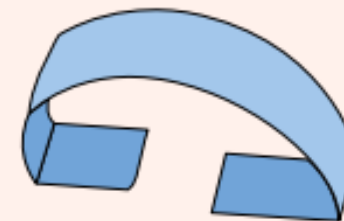
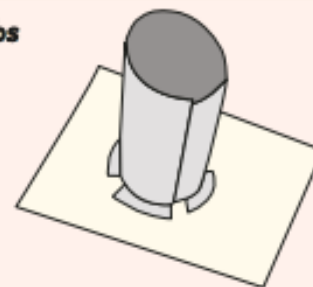
tie



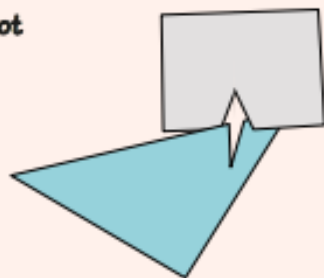
twist



tabs



slot



wrap



balance

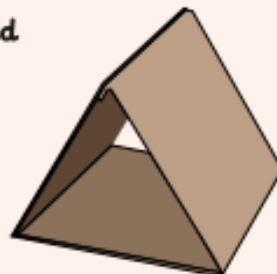


### Techniques for shaping card - from 2D to 3D

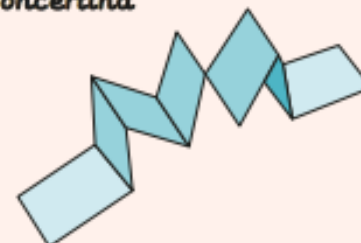
roll



fold



concertina



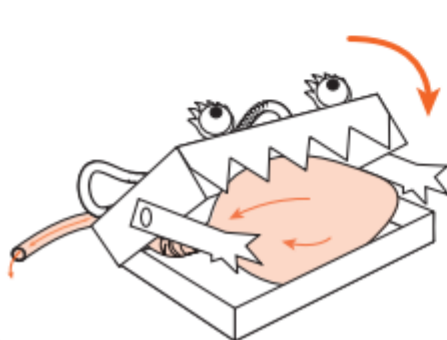




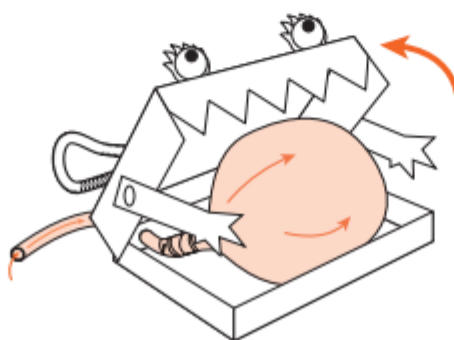
### Mechanical systems - Pneumatic toys

Exploded-diagram	A diagram which shows all of the parts of a product, including the internal and external parts.
Function	How something works.
Input	Input is the motion used to start a mechanism.
Linkage	Lengths of material (for example, metal or card) that are joined together by pivots, so that the links can move as part of a mechanism.
Mechanism	The parts of an object that move together as part of a machine.
Motion	The movement an object makes when controlled by an input or output (e.g. left, right, up, down).
Net	A 2D flat shape, that can become a 3D shape once assembled.
Output	Output is the motion that happens as a result of starting the input.
Pivot	The central point, pin, or shaft on which a mechanism turns or swings.
Pneumatic system	A mechanism that runs on air or compressed gas.
Thumbnail sketch	Small drawings to get ideas down on paper quickly.

When air exits the balloon, the monster's mouth closes.



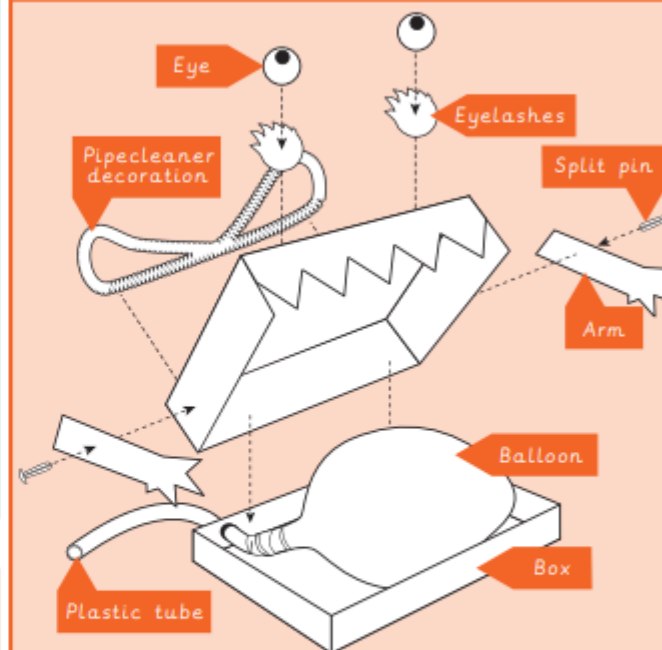
When air enters the balloon, the monster's mouth opens.



### Key facts

Kapow  
Primary

**Exploded-diagrams** allow us to see how a product is put together and the different components inside.



You will need:



**Musical style: Folk music from China**

Traditional folk music of China. As with most folk music, we often do not know who wrote these songs and they have been passed onto generations by people singing them.

**Vocabulary****Crescendo**

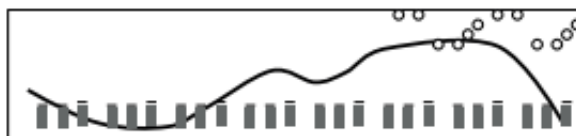
When the music gets gradually louder.

**Pentatonic**

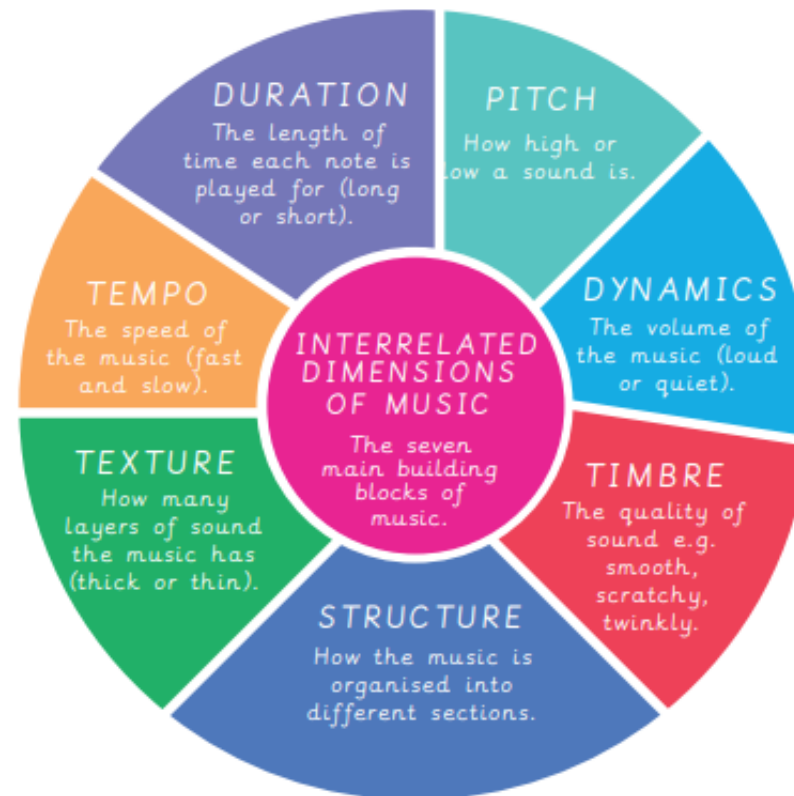
A scale made up of five notes.

**Notation**

The way that music is written so that others can play it.

**Graphic score****Stave and letter notation**

Musical notation helps us to 'write' and 'read' the melodies so they won't be forgotten and can be played by others.

**Tips for improving your performance - FACE****Fluency**

Reducing hesitation.

**Accuracy**

Getting the melody right.

**Control**

Instrumental technique.

**Expression**

Giving a personal response to the music.



## Los instrumentos

**rr**

sound in:

• guitarra

&amp;

**phonics****stress  
placement**

Words that end in a vowel, 'n' or 's' are normally stressed on the second to last syllable like trom-pe-ta, and gui-ta-rra.

**accents**

Accents indicate the vowel is stressed. As seen in vio-lín, cím-balos, tri-án-gulo and bat-er-ía

10 instruments in Spanish.

**vocabulary**

Simple sentences like:

**Toco el violín.***I play the violin.***grammar**

The difference between the 3 determiners for 'the' that we see in this unit:

**el****la****los**

How and when to use the high-frequency regular verb 'I play' in Spanish when saying 'I play an instrument':

**toco***I play*

### What I will learn:

- ☐ Objective 1: I will learn 5 instruments in Spanish with their correct determiner.
- ☐ Objective 2: I will learn 5 more instruments in Spanish with their correct determiner.
- ☐ Objective 3: I will revise all 10 instrument nouns with their determiners in Spanish and start to attempt the spellings.
- ☐ Objective 4: I will explore and understand better the role of the definite article/determiner in Spanish.
- ☐ Objective 5: I will learn how to use the 1<sup>st</sup> person conjugated verb 'toco' (I play) in Spanish.







Topic	History - Romans	Theme	Leadership	Year Group	3
Key Question	What did the Romans do for me?				

## Key Vocabulary

<b>Empire</b>	A group of territories under one rule
<b>Emperor</b>	A man who rules an Empire
<b>Invasion</b>	To enter as an enemy, by force, to take control
<b>Conquest</b>	A military invasion
<b>legionary</b>	A soldier in a Roman legion
<b>legion</b>	A division of 3,000 – 6,000 men and cavalry in a Roman army
<b>Auxiliary soldier</b>	A 'helper' recruited from a non-Roman tribe
<b>Revolt</b>	To rise up and fight against a government
<b>Rebellion</b>	A fight against the ruler
<b>Celts</b>	The people of the Iron Age who occupied Britain
<b>Archaeology</b>	The study of history by looking for things people in the past have left behind.
<b>Evidence</b>	A sign to show something existed or is true
<b>Excavation</b>	To dig out and remove.
<b>Taxes</b>	The way government collects money to pay for things
<b>Barbarian</b>	A person from a different land believed to be inferior

## Key Questions

Why on earth did the Romans leave sunny Italy to invade this cold island on the edge of the empire?

Why did Boudicca stand up to the Romans and what image do we have of her today?

How were the Romans able to keep control over such a vast empire?

How did the Roman way of life contrast with the Celtic lifestyle they found when they arrived and how do we know?

How can we solve the mystery of why this great empire came to an end?

How much of our lives today can possibly be influenced by the Romans who lived here 2,000 years ago?

### The Roman Army



- They used clever tactics
- They had great weapons
- They wore effective armour.
- There was good morale.
- Soldiers were well trained
- Soldiers were very experienced.
- They built good road networks.



### Roman Emperors



**Julius Caesar**  
Popular Roman ruler.  
Invaded Britain twice but failed.



**Claudius**  
Invaded Britain 97 years later and succeeded.

### Historical sources

These can be interpreted in different ways depending on where they came from. (E.g. Romans or Celts)

Statues	Stories	Information books
Buildings	Artefacts	Paintings

### A Roman Town

- A town was laid out in a square or rectangle.
- There were 2 main axes: North to South and East to West.
- 4 main gates protected each entrance.
- Houses were made out of stone or brick.
- Thick town walls were built for protection.
- Aqueducts brought water into the town.
- The Basilica was in the centre and was where the town was run from.
- Amphitheatres were for entertainment.
- Temples were where they worshipped their gods and Emperors.
- Baths were close to the town centre.
- Shops ran along the side of houses.
- A Circus Track ran outside the town for chariot racing.
- Roman villas were for the wealthy and had central heating.

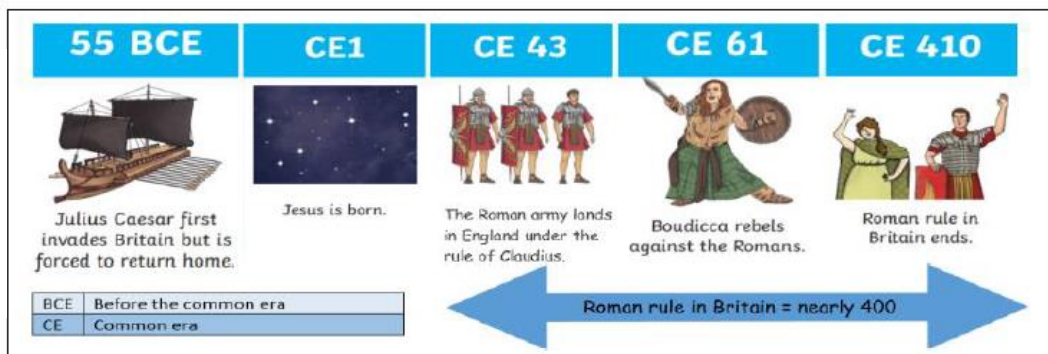


### Queen Boudicca's Rebellion



- Leader of the Iceni tribe.
- Romans stole her land and attacked her family
- She persuaded Celts to join her.
- Defeated Romans in Colchester.
- Eventually her forces were defeated.
- Proved tribes could stand up to Romans.

## Chronology







Topic	RE	Theme	Leadership	Year Group	3
Key Question	Why are festivals important to religious communities?				

### Key Vocabulary

Christmas	The Christian celebration of the birth of Jesus.
Diwali	India's most important celebration of the year. Its name comes from the row (avail) of clay lamps (deepa) that are lit outside homes to symbolise the inner light which protects from spiritual darkness.
Easter	A Christian festival commemorating the resurrection of Jesus from the dead.
Eid	Eid-al-Fitr is the most important date on the Islamic calendar. It celebrates the successful completion of the fasting month Ramadan
Harvest	Christians use the Harvest festival to think about how God loves the world and cares for it. They also show they are followers of Jesus by giving food to those who are less fortunate.
Pentecost	A Christian festival celebrating the descent of the Holy Spirit on the disciples of Jesus after his Ascension. It is held on the seventh Sunday after Easter.
Passover	A major Jewish holiday that celebrates the exodus of the Israelites from slavery in Egypt.
Rosh Hashanah	A special festival which celebrates Jewish New Year.
Yom Kippur	The holiest day in the Jews calendar. Jews observe the day with a day-long-fast, confession and intensive praying.

### Have a think...

Can you retell any of the stories which link to these festivals?



### I should already know:

Why do people pray?

### This will help me in the future:

Ask questions and give ideas about what matters most to believers in festivals ( e.g. Easter, Eid )



Lotus flower symbol in Hinduism



Christian symbol  
The fish and Cross

### Greater Depth Challenge

Suggest how and why religious festivals are valuable to many people.