











# Building Things : Year 1 : Autumn 2

## Key words

<b>Material</b>	A substance that an object is made of.
<b>Object</b>	An object is made out of a suitable material.
<b>Property</b>	What a material is like
<b>Mixture</b>	Made by combining two or more materials e.g. sand + water
<b>Length</b>	How long something is
<b>Height</b>	how tall something is
<b>Weight</b>	how heavy or light something is
<b>Design</b>	A plan of the shapes, sizes, colours and building materials needed to create something
<b>Model</b>	A small copy of a structure

## Properties of materials

<b>Hard:</b> Difficult to squash 	<b>Waterproof:</b> Do not let water pass through 
<b>Flexible:</b> Able to bend easily without breaking 	<b>Transparent:</b> Objects which look clear and see through 
<b>Soft:</b> Easy to mould, nice quality to touch 	<b>Opaque:</b> Not able to see through 
<b>Brittle:</b> Easy to break 	<b>Smooth:</b> Flat surface, no bumps or lumps 
<b>Translucent:</b> Lets some light through, but not clear 	<b>Shiny:</b> Something with a glossy surface, you may see your reflection in it! 





### Hard Materials

Glass 	Brick 
Wood 	Metal 
Ceramic 	Stone 

### Soft Materials

Wool 	Leaves 
Cotton 	Rubber 
Toilet Roll 	Cardboard 

### Flexible Materials

Leather 	Plastic 
Paper 	Cork 
Metal 	Rubber 

### Waterproof Materials

Metal 	Plastic 
Rubber 	Glass 
Ceramic 	Stone 

## Structures - Constructing a windmill

Client	The person who you are designing something for.
Design	To make, draw or write plans for something.
Design criteria	A set of rules to help you with your ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Stable	Object does not easily topple over.
Strong	It doesn't break easily.
Structure	Something that has been made and put together. For example, a building, bridge, chair, table.
Test	To find out whether something works as it should.
Weak	It breaks easily.
Windmill	A structure with sails that are moved by wind.
Windmill axle	The point from which the turbine or sails move.
Windmill structure	The part that makes the windmill stand up.
Windmill turbine	The parts that move in the wind.

## Key facts

The three main parts of a windmill:

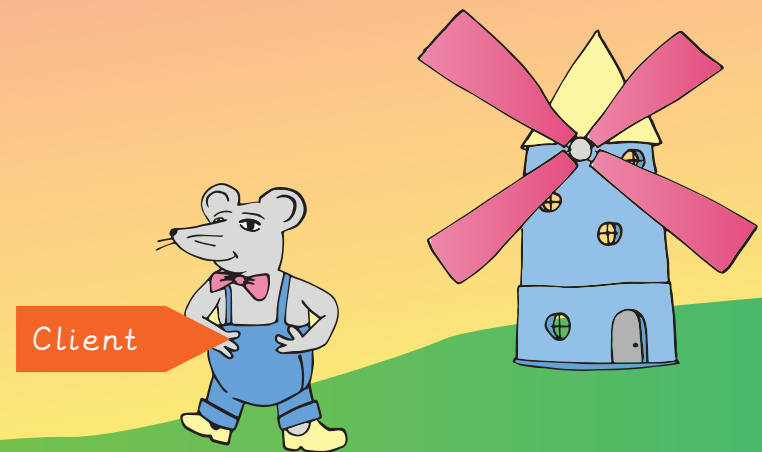


Remember to think about what your client, the mouse, will like! He will be living in the windmill and will need to be happy.

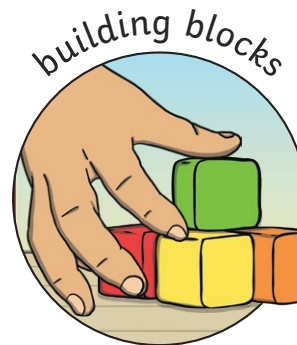
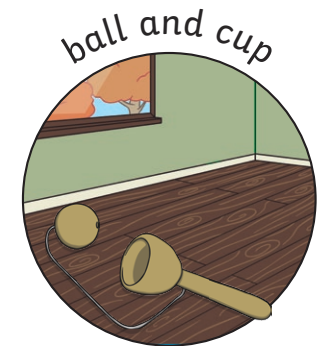
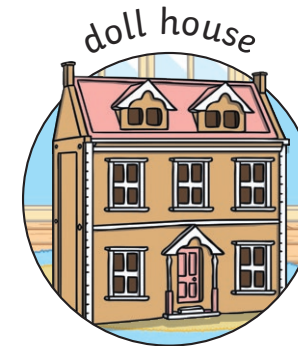
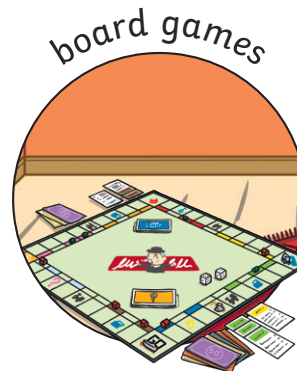
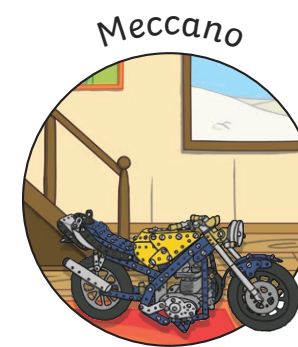
There are lots of different types of windmill around Britain.



Have you seen any of these before?



Key Facts	
How long have toys existed?	Toys have existed for thousands of years. They were made out of the materials that were available at the time. Even stones and string have been made into toys.
What were toys made of during the Victorian age?	Toys were mainly made of wood, paper and metal during the <b>Victorian</b> age.
What toys did Victorian children play with?	Rich <b>Victorian</b> children played with toys such as clockwork trains, rocking horses, tea sets and dolls. Poorer children played with homemade toys such as peg dolls, wooden boats and rags stuffed with sawdust to make balls or toy animals.
What are modern toys made of?	Modern toys are mainly made of plastic. This is because it is usually safer and easier to make things with.
How are modern toys different?	Many modern toys use electricity to work. Computers and consoles were invented in the <b>20<sup>th</sup> century</b> .



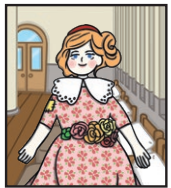
To look at all the planning resources linked to the Toys unit, [click here](#).

## Key Vocabulary

<b>Victorian</b>	The time of Queen Victoria's reign. 1837-1901.
<b>20<sup>th</sup> century</b>	The <b>20<sup>th</sup> century</b> was 1900-1999.
<b>21<sup>st</sup> century</b>	We are in the <b>21<sup>st</sup> century</b> . It started in the year 2000 and will end in 2099.
<b>wooden toys</b>	Lots of toys were made of wood. Boats, train sets and cup and ball were all made of wood. Some toys are still made of wood.
<b>paper toys</b>	Some toys, like paper windmills, were made out of paper.
<b>metal toys</b>	Toy soldiers and some spinning tops were made out of metal.
<b>plastic toys</b>	Most modern toys are made of plastic. Toy soldiers, dolls and ride-on cars are usually made of plastic.
<b>modern</b>	Things made now or recently.
<b>the past</b>	Objects and things that happened before now.

**19<sup>th</sup> century**

Toys: wooden dolls, wooden doll houses, tea sets, ball and cup, spinning top, toys soldiers, leather footballs.

**21<sup>st</sup> century**


Toys: handheld games consoles, virtual reality.

**20<sup>th</sup> century**

Toys: teddy bears, Barbie dolls, Action Man, electronic toys, computers, games consoles.



## Key Vocabulary

<b>Christmas</b>	Christmas is the time when Christians remember and celebrate the birth of Jesus, the son of God.	
<b>Christmas Day</b>	Christmas Day is celebrated by Christians all over the world on 25th December every year. It is a special holiday when most offices, shops and all schools are closed.	
<b>Nativity</b>	A play that tells the story of the birth of Jesus.	

## The Nativity Story

The Angel Gabriel visited Mary and told her she was going to have a baby called Jesus and that he would be God's son.

Mary and Joseph had to travel to Bethlehem. A kind innkeeper in Bethlehem let Mary and Joseph stay in his stable for the night and Jesus was born there.



An angel appeared to some shepherds and told them that the son of God had been born in Bethlehem. The shepherds walked to Bethlehem to visit the baby Jesus.

Some Wise Men saw a star in the sky and knew that it meant a king had been born. They followed the star. They went past the palace of King Herod who asked the men to tell him where the baby was. The Wise Men found baby Jesus but they received a message from God warning them not to tell Herod so they didn't.

Herod began to search for Jesus. He ordered that all baby boys in Bethlehem be killed. However, after a warning in a dream, Mary and Joseph travelled to Egypt with Jesus and he was safe.

## Christmas Traditions

The story of the birth of Jesus is very important to Christians. Many believe he was a gift from God.

People celebrate **Christmas** in lots of different ways and these include acting out a **nativity**, carol singing, putting up and decorating **Christmas** trees and hanging wreaths. Many families get together for a special meal on **Christmas Day**.

Many Christians give gifts at **Christmas** to show their love for one another. After his birth, the Wise Men gave Jesus special gifts of gold, frankincense and myrrh. They were the kinds of gifts given to kings at that time. They were very valuable and were probably the first **Christmas** presents.



## Key Vocabulary

<b>Eid Al-Fitr</b>	Eid Al-Fitr is a special festival which celebrates the end of Ramadan. It lasts for three days.
<b>Eid Mubarak</b>	'Have a blessed Eid.'
<b>fasting</b>	Fasting is a period of time when you do not eat or drink.
<b>Qur'an</b>	The Muslim holy book.
<b>Ramadan</b>	A holy month for many Muslims. It is often marked by fasting.
<b>Zakat Al-Fitr</b>	A type of charity which many Muslims give either during Ramadan or Eid Al-Fitr.

## Ramadan

**Ramadan** is a very special time for many Muslims. It celebrates the time when the **Qur'an** was revealed to the Prophet Muhammad (Peace Be Upon Him). It is celebrated at a different time every year because Islam uses a lunar calendar, which is based on the cycles of the moon.

During **Ramadan**, many Muslims **fast** during daylight hours. Often, they go to the mosque to read the **Qur'an**.

Many Muslims **fast** during Ramadan because it reminds them of people in the world who have less than they do.

People who are young, elderly or ill don't have to **fast**.

Muslims will often have a meal called Suhur before sunrise and another called Iftar after sunset.

**Zakat Al-Fitr** is often given at this time. Many Muslims give food or money to help those in need.

## Eid Al-Fitr

**Eid Al-Fitr** is the time when many Muslims celebrate the end of **Ramadan**. It lasts for three days and is a very special time.

During **Eid Al-Fitr**, Muslims may give thanks to Allah (God) for giving them the strength to **fast** during **Ramadan**.

It is also a time for many Muslims to think about others.

**Eid Al-Fitr** is celebrated in lots of different ways. Many families go to the mosque to pray. Gifts are often given and are usually opened after the morning prayer and people can exchange cards that say '**Eid Mubarak!**'



## Year 1 - Valuing Difference

### Key questions

#### Recognising, Valuing and Celebrating Difference

How are people different?

How are people similar?

What is good about people being different?

#### Developing Tolerance

What is fair?

What is unfair?

Do things sometimes seem unfair, even though they are not?

Why do some people see something as unfair and other people see it as fair?

### Key vocabulary

respect feelings different

safe bully fair

rules special people

tease similar same kind

### I can ...

I can say ways in which people are similar as well as different.

I can say why things sometimes seem unfair, even if they are not.