

This free resource has been put together by the Trustees of the Filby Bells Restoration project.

Its aim is to support families trying to home educate their children by offering a resource that can be completed by KS1 and KS2 students with their parents/carers that requires no prior knowledge.



Filby Bells Project



There are lots of tricky words involved with church bells, starting with **campanology**, which is the study of bells, how they are made and rung.

To help us with some of these tricky words, try this word search first...

A	R	L	C	T	R	F	E	C	T	U	M	O	E
O	E	E	L	T	T	A	O	G	A	O	I	L	C
G	P	K	O	K	G	H	C	U	M	O	N	L	A
N	P	L	R	E	E	E	G	C	N	C	L	E	M
K	A	A	T	E	C	E	A	N	D	D	D	B	P
C	L	P	O	N	I	O	I	C	O	B	R	T	A
O	C	R	R	N	A	O	I	I	R	H	Y	Y	N
T	C	R	A	C	L	N	O	R	D	S	C	G	O
S	L	P	I	T	O	N	S	C	M	G	M	N	L
D	I	N	N	N	T	M	G	L	N	D	C	G	O
A	C	O	L	G	G	R	Y	E	N	H	D	C	G
E	E	G	H	P	I	I	E	S	I	E	C	O	Y
H	G	S	O	Y	E	L	N	M	E	P	P	G	F
L	N	H	E	M	H	A	E	G	E	G	E	N	H

RINGING  
CIRCLE  
FOUNDRY  
CAMPANOLOGY  
BELL  
CHIME  
CLAPPER  
HEADSTOCK  
TONS

### GENIUS POINTS



Research task: Use the internet to find out what a foundry is and why it is important in the world of bells.

### GENIUS POINTS



Research task: Use the internet to find out the meaning of all of the words in the word search and draw pictures of any you can.

## A History of Bells

Almost everyone in Britain can now hear bells from their house, but it hasn't always been like this...

Around 400 AD, a Bishop in a part of Italy called Campania began putting bells into Christian churches. Before this, hand bells were used to call people to come to church. Over the next two hundred years, bells were put into churches across France and Italy and then Great Britain.

By 750 AD, there were enough church bells that priests across England were told to ring their bell at certain times.

In the 1500s, when some Christians disagreed with Catholic religious beliefs, many churches and abbeys were destroyed and many bells were lost or broken.

In the 1600s, as many churches were rebuilt, bells were hung again but on wheels (sometimes half or quarter wheels), which allowed more control over ringing.

Before this, it was only priests and other members of the clergy who rang the bells but, as wheels made ringing easier, more people from outside the clergy began to be interested in bell ringing.

During the reign of King James II (1633-1688), bell ringing became fashionable with the rich, and in rural churches, people had competitions to see which band had the best ringers. They often gave a glove to the best ringer!

The first true 'peal' of bells (where there are over 5000 bongs!) was on 2nd May 1715 at the St Peter Mancroft in Norwich. This would have taken around 3 hours.

Around this time, many people felt that bell ringing was becoming separated from people attending church services and that it was just being used as a chance to meet friends and have fun. The Church wasn't very happy about this.

In 1839, a national review of churches began and church leaders tried to get bell ringers to be part of the church and its services again. One of the things they did was to make the bell ropes longer so ringers had to stand and perform in front of the people attending a church service.

In the 1900s 'Tower Captains' were paid to make bell ringers behave properly and to fine them for bad ringing.

After World War I, fewer people went to church which meant there were fewer bell ringers needed.

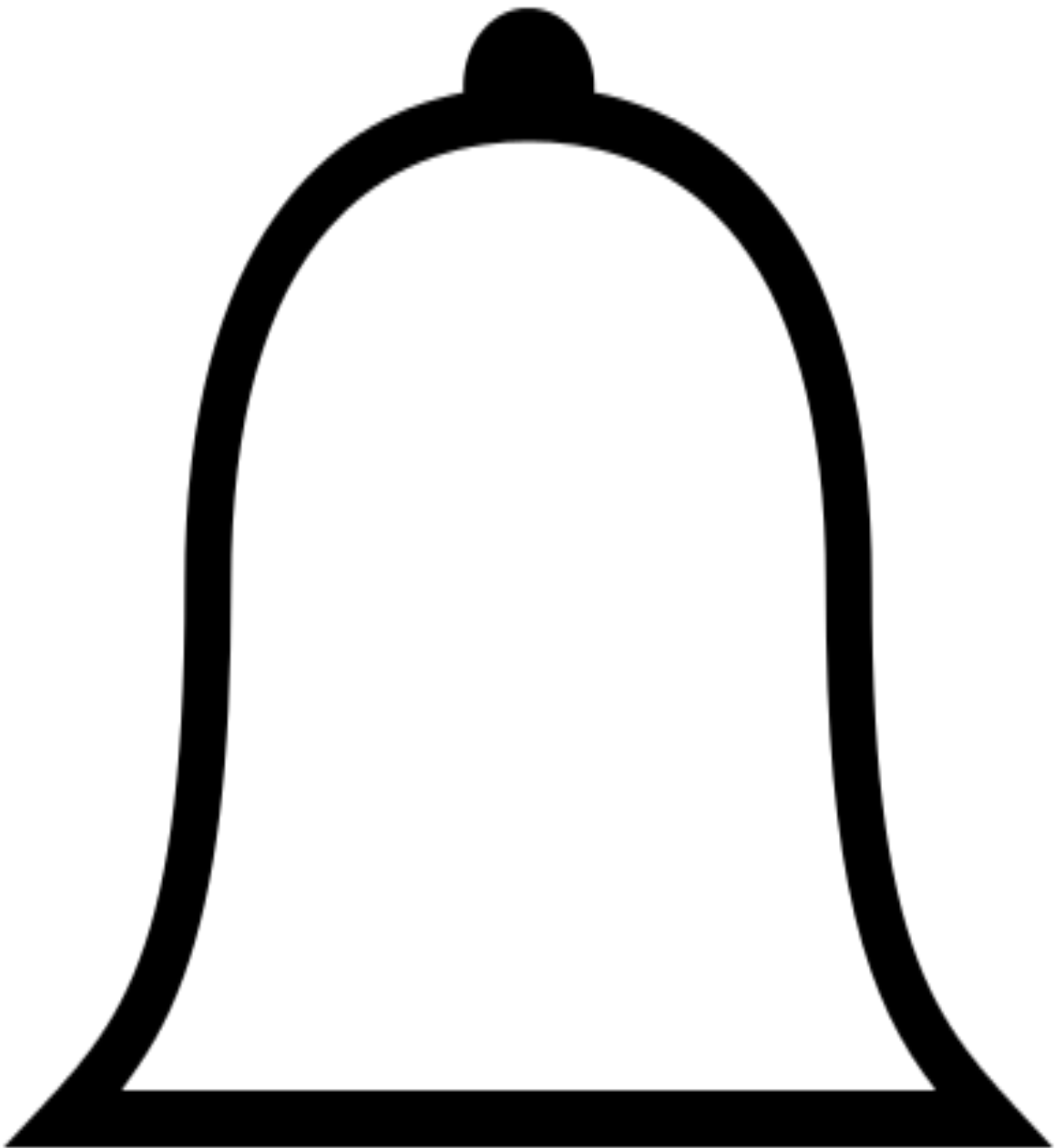
During World War II, no church bells rang except to let people know if there were enemy troops invading the country. After the war, bell ringing became popular again, and the standard improved.

In 1997, the National Lottery spent £3M on 150 different projects to improve bells.

Since then, bells and bell ringing have been used to mark lots of big occasions such as the Olympic Games in London in 2012 and the Queen's Diamond Jubilee (60 years as Queen of England).

Bell makers took great pride in making their bells and often decorated them with words and patterns.

Pretend you are a founder (a person who makes metal objects like bells) and decorate your own bell below.



**Can you answer these questions about the passage you have just read?**

- 1) Before 400AD, how were people called to come to church?
- 2) In the 1600s, what was given as a prize to the best ringer in a rural bell-ringing group?
- 3) How were church bells used during the second World War?

**Some tougher ones...**

- 4) Why did bell-ringing become more popular in the 1600s?
- 5) Why were Tower Captains brought into churches?

**GENIUS POINTS**



Research task: Use the internet to find out what the reformation of churches was from 1517.

A Timeline of the History of Church Bells

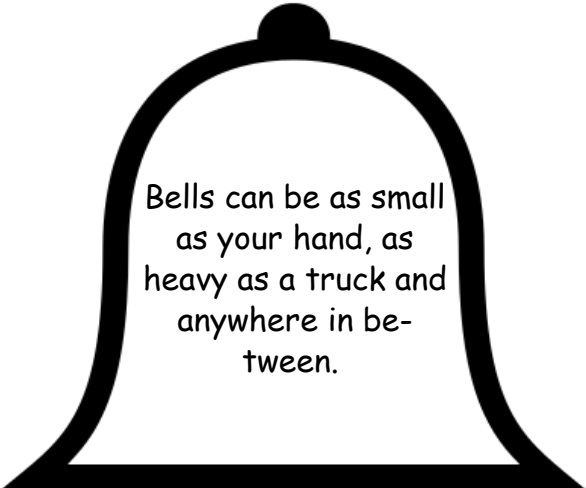
Summarise the information on page 3 onto a timeline above starting with the earliest date on the left of the line. You can add other information and dates as well if you like!

How accurately can you draw St Peter Mancroft church in Norwich in the space below?

Remember, this was the first church whose bells were rung in a full peal in 1715.



## Did you know?




Bells can be as small as your hand, as heavy as a truck and anywhere in between.



There are over 5000 churches in Britain with a ring of bells, and no two rings of bells are the same.



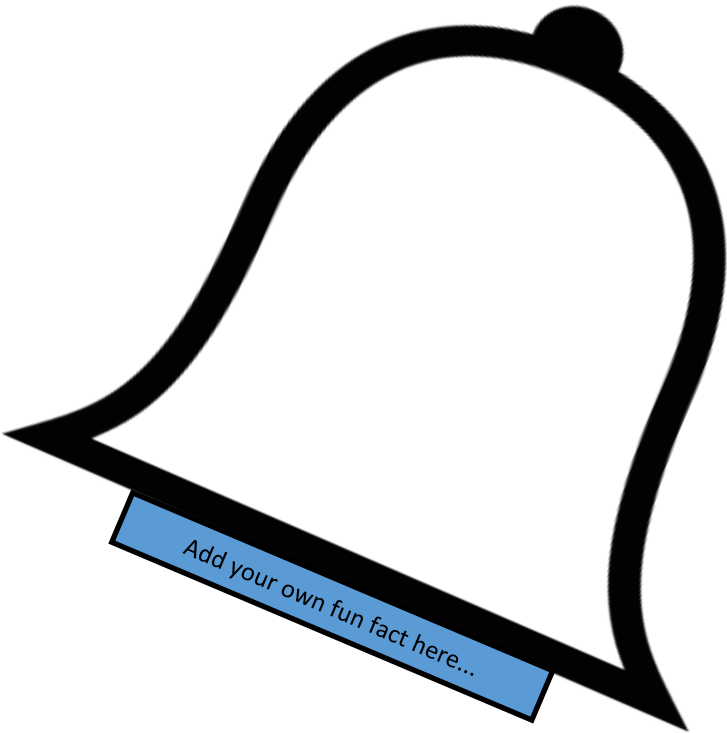
Church bells are the loudest musical instrument in the world – the original heavy metal band!



Bell ringing doesn't just happen on Sundays. There are clubs and groups who practise during the week and evenings.



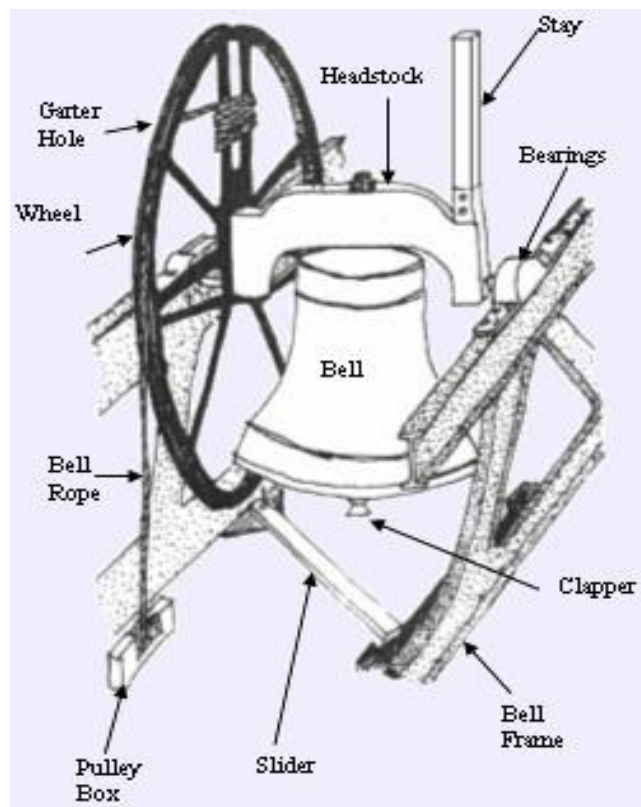
When the German composer George Handel came to London he called England 'the ringing isle' because wherever he went he heard bells ringing.



Add your own fun fact here...

## How are church bells rung?

- ♦ Christian church bells, like the one in this picture, are cup-shaped and cast in metal with a thicker rim. Inside, a clapper is hung on a pivot from its centre.
- ♦ The bell is hung from a headstock which can swing on bearings.
- ♦ A rope is tied to a wheel or lever on the headstock, for the bell ringer to pull.
- ♦ To ring the bell, the ringer pulls on the rope, swinging the bell. This causes the clapper to hit the inside of the bell rim as it swings, sounding the bell.
- ♦ Some bells have full-circle wheels, which is used to swing the bell through a larger arc, this is 'full-circle ringing'.
- ♦ A church may have a single bell, or a collection of bells which are tuned to make them sound nice (you can see bells being rung at [https://www.youtube.com/watch?v=d9h8BujG\\_uE](https://www.youtube.com/watch?v=d9h8BujG_uE)).
- ♦ Bells which are not swung are "chimed". This means they are struck by a hammer, or by a rope attached to the internal clapper (so the rope is swung instead of the bell). This is traditional in Russia.
- ♦ Bells in churches are rung for lots of reasons including to celebrate wedding and christenings, to call people to services, to signal time or for fun!



### **Comprehension Questions:**

1. What is the thickest part of a bell?
2. What causes a bell to make a sound?
3. How does a bell ringer make the bell move?
4. Why do people ring church bells?

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#### Challenge task:

What is full-circle ringing and what is the difference between full-circle bell ringing and chiming a bell?

## How do bells ring?

Sounds are created when something vibrates (shakes back and forth), sending waves of vibrations into the ears of the listener.

When a bell is struck by the clapper, the metal vibrates.

The vibrations travel through the air as sound waves.

When these waves reach our ears, they make our eardrums vibrate, and we hear the sound of the bell ringing.

Sound always needs to travel through something.

Church bells are hung high in church towers so the air around can carry the vibrations a long distance to the villages around.



## How do bells ring?

Use the information on the previous page to draw a comic strip showing how the striking of a bell is heard by people in the villages nearby. The first one is done for you.



The bell ringer pulls a rope

### GENIUS POINTS



#### Research task:

What is tintinnabulation? What other words can you find with similar word stems? Are they related?

The Bells at Filby All Saints Church

Filby Church has 5 bells, each of which are hundreds of years old.

This table shows details of the 5 bells:



Bell number	Weight (in cwt)	Musical note	Date made	Made by	Bell diameter (inches)
1	5	C#	1722	John Stephens	28.50
2	6	B	1676	Edward Tooke	30.50
3	7	A#	1658	John II Brend	33.50
4	8	G#	1607	William and Alice Brend	37.00
5	10	F#	1675	Edward Tooke	40.75

Questions:

- 1) Which number bell is the oldest?
- 2) Which number bell is the youngest?
- 3) Which is the heaviest?

**GENIUS POINTS**Challenge task:

Describe and explain the relationship between the weight of these bells and their diameter (the measurement across the middle of the bottom of the bell)?

## The Bells at Filby All Saints Church



The tenor bell (the biggest one) in Filby's tower, is famous in the bellringing world as it is the largest bell ever cast by Edward Tooke at his foundry (where bells are made) in Norwich—it has the words "*Edw: Tooke made me 1675.*" on it.

### The Filby Bells Project:

We are a group of people who are hoping to restore the five bells that are currently in Filby Church (they are not in good condition at the moment so it's impossible to ring them).



As part of this project the bells will need to be removed and professionally restored and a new metal frame with new fittings will be put into the tower. As well as this, we will put a sixth bell in to complete the set. This will allow the bells to be played in full circle for the first time in decades.

This is not a religious project, bell ringing is part of our history as a country. It offers challenges and requires skills which, with practise, most people can achieve. A band of ringers is part of the social life of a village. It brings together people of all age groups, genders and ethnicities to participate in an absorbing and fascinating hobby.

If you would like to know more about our project or how you can become involved, please visit our website: <http://www.filbybells.org.uk/home/>

We hope you have enjoyed this educational resource.

