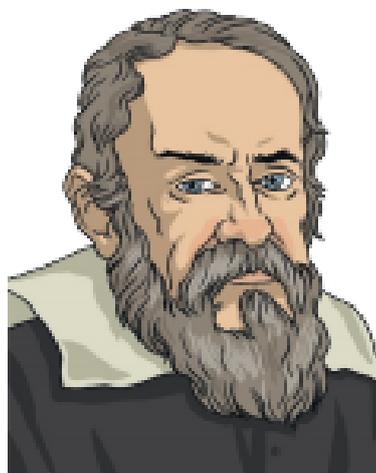


Reading  
Mission:  
30 minutes

Children to read or support them to read the following text.

## Galileo Galilei



Galileo was a brilliant mathematician and astronomer. His scientific observations and inventions changed the way people thought about the world. His ideas and discoveries are still relevant today.

Galileo Galilei was born in Pisa, Italy on 15<sup>th</sup> February 1564. His father was a famous musician and music teacher. At around the age of 10, Galileo and his family moved to Florence where Galileo went to school at a monastery. He was a talented musician and a very able student. Learning in a monastery, at first Galileo believed that he would

become a priest. However, in 1581, he studied medicine at the University of Pisa. He wanted to become a doctor.

Galileo was always curious about the world around him – in particular, space and the planets. In 1585, he left university and got a job as a teacher. At this time, he started to perform scientific experiments.

### The Tower of Pisa Experiment

One famous experiment was the Tower of Pisa experiment. At that time, it was believed that if two objects were dropped from the same height, the heavier one would land first. To test this, Galileo went to the top of the Leaning Tower of Pisa and dropped two balls of different weights. They both landed at the same time. He had disproved the original theory.



### Discovering the Telescope

In 1609, Galileo heard about an invention that could make things that were far away look as if they were much closer. This invention was the telescope. Galileo was fascinated and began to build his own telescope.

His improvements were so good that he was able to use it to view the Sun and other planets in space. This led to his discoveries that Jupiter was orbited by four moons and that the moon was not smooth but was covered in craters.



## Galileo Galilei

### Nicolaus Copernicus

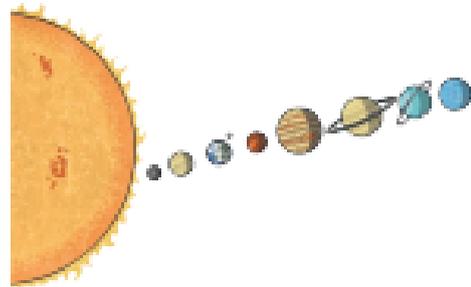
Another belief that Galileo did not just accept was that the Sun travelled around the Earth. In the 1500s, an astronomer called Copernicus came up with the idea that the Sun was at the centre of the universe. Galileo studied Copernicus' work and felt that his scientific observations supported his idea. In 1632, Galileo published his findings in a book called 'Dialogue of the Two Principal Systems of the World'.

Galileo's ideas and findings were not popular at the time as they went against people's traditional beliefs about the world. Galileo was forbidden to write or teach about his work and was sentenced to life in prison. However, his sentence was later changed and he was allowed to live under house arrest. Galileo continued to study and a year before he died, he came up with a pendulum design that could be used for keeping time.

Sadly, Galileo became totally blind in his older years. He died in Florence on 8<sup>th</sup> January, 1642.

### Did You Know...?

In 1979, the Catholic church investigated how Galileo had been treated because of his ideas about the Sun and Earth. They apologised and admitted that his and Copernicus' ideas were actually correct.



After they can answer these questions. These can be verbal answers or they could be written down or typed. Children could even draw their responses. Suggested answers are in italics.

When was Galileo born?

Where did Galileo go to school?

What did Galileo study at university?

What did people think would happen when two objects were dropped from a height **before** Galileo's experiment?

Who first believed the sun travelled around the Earth?

Find and copy a word which means **banned**.

Explain why Galileo spent the later years of his life under house arrest.

By looking at the section titled "Did you know...?" can you infer whose beliefs did not agree with Galileo's findings?

	<p>Do you think Galileo should have kept his findings to himself, if he knew they would get him in trouble?</p> <p>Why would Galileo have been particularly sad about becoming blind when he was older?</p> <p><b><u>Answers are at the end of the timetable.</u></b></p>						
<p><b>Writing Mission:</b> 30 minutes</p>	<p>As part of our learning throughout Year 4, we have done our best to expand our vocabulary and learn lots of interesting new words to improve our writing. Some research shows that a child should hear a new word up to 17 times before it becomes a part of their vocabulary – so it is a good idea to try and use as many new words as you can, a lot of the time!</p> <p>Today we are going to practise using synonyms and antonyms. A <b>synonym</b> is a word that has a similar meaning to another word, and an <b>antonym</b> is a word that means the opposite.</p> <p>E.g.</p> <table data-bbox="209 696 1560 772"> <thead> <tr> <th data-bbox="209 696 678 734"><b><u>Word</u></b></th> <th data-bbox="678 696 1141 734"><b><u>Synonym</u></b></th> <th data-bbox="1141 696 1560 734"><b><u>Antonym</u></b></th> </tr> </thead> <tbody> <tr> <td data-bbox="209 734 678 772">Happy</td> <td data-bbox="678 734 1141 772">cheerful</td> <td data-bbox="1141 734 1560 772">Sad</td> </tr> </tbody> </table> <p>BBC Bitesize has a set of lessons and activities here: <a href="https://www.bbc.co.uk/bitesize/articles/zk23c7h">https://www.bbc.co.uk/bitesize/articles/zk23c7h</a></p> <p>Alternatively, you can complete the following activity:</p>	<b><u>Word</u></b>	<b><u>Synonym</u></b>	<b><u>Antonym</u></b>	Happy	cheerful	Sad
<b><u>Word</u></b>	<b><u>Synonym</u></b>	<b><u>Antonym</u></b>					
Happy	cheerful	Sad					

### Challenge 1

1 Draw a line to link each word with its synonym.

- super
- difficult
- happy
- kind
- walk
- big

- hard
- amble
- fantastic
- large
- joyful
- caring



4 marks

Marks..... /6

### Challenge 2

1 Write the antonym to each word shown. Use each word in the box only once.

**cold    under    noisy    correct    after    far**

- a) quiet    \_\_\_\_\_    b) over    \_\_\_\_\_
- c) near    \_\_\_\_\_    d) before    \_\_\_\_\_
- e) wrong    \_\_\_\_\_    f) hot    \_\_\_\_\_

2 Read each sentence and write the antonym of each word underlined.

- a) They washed in clean water.    \_\_\_\_\_
- b) They could hear a loud noise in the house.    \_\_\_\_\_
- c) The test was very difficult.    \_\_\_\_\_

4 marks

3 marks

Marks..... /6

### Challenge 3

SG

1

Replace the words underlined in these sentences with a synonym from the words below so that each sentence makes sense.



alike

man

close

wrong

over

- a) The school day was finished. \_\_\_\_\_
- b) The young chap looked smart in his suit. \_\_\_\_\_
- c) Most of the answers were incorrect. \_\_\_\_\_
- d) They all looked similar in their school uniform. \_\_\_\_\_
- e) The shop was very near to their house. \_\_\_\_\_

2

Complete the table to show the synonym and antonym for each word. The first line has been done for you.

Word	Synonym	Antonym
pretty	<i>beautiful</i>	<i>ugly</i>
rich		
young		
expensive		
stop		



5 marks



10 marks

Marks..... /15

Total marks ..... /30

How am I doing?



**Maths**  
**Mission:**  
30 minutes

We have decided it would be a good idea to explicitly set some times tables practice every day to help keep us sharp! You could have your own mini-test at the end of week, and send me the results if you like! As a reminder, there are plenty of online games to help practise these as well (e.g. <https://www.topmarks.co.uk/maths-games/hit-the-button>).

Today's times table is the **11 times table**.

One of the aspects of place value that children find trickiest is rounding, so today we are going to round decimals. Remember the rules for rounding:

### The rule for rounding

Always look at the digit to the **right** of the one you're supposed to be rounding to. For example, if you wanted to round to the nearest hundred, you would look at the tens column.



- If the digit is between **0 and 4**, you **round down**.
- If the digit is between **5 and 9**, you **round up**.



If you were rounding 8.4 to the nearest whole number (one) you would look at the tenths column, because it is to the right of the ones column. Because 4 tenths is closer to 8 ones than 9 ones, you would round down to 8.

BBC Bitesize has some lessons and activities here:  
<https://www.bbc.co.uk/bitesize/articles/zwhtwnb>

Alternatively, complete this activity. Write your answers like this. 1) 2.8 → 3

1) Round these to the nearest whole number:

- a) 7.7                      d) 78.4  
b) 0.6                      e) 3.5  
c) 10.9                     f) 63.1

2) For each of the following numbers, write 2 decimals that would round to this number when rounding to the nearest whole number:

- a) 6                      b) 81                      c) 12                      d) 23                      e) 9

3) Circle which numbers could be rounded to the following:

a) 98 - 98.7    80    97.9    97.5    98.4

b) 6 - 6.6    6.5    6.2    5.6    5.9

4) Round these to the nearest whole number:

- a) 3.55                      d) 57.57  
b) 3.49                      e) 39.61  
c) 7.82                      f) 354.76

5) Circle which numbers could be rounded to the following:

a) 43 - 43.78    43.12    43.11    43.3    42.93

b) 12 - 12.13    11.51    11.49    12.51    12.65

c) 685 - 685.99    685.49    684.89    684.12    685.13

## Challenge!

1) Round these to the nearest whole number:

a) 8.378

d) 192.435

b) 92.271

e) 4902.555

c) 392.555

f) 2020.671

2) For each of the following numbers, write 2 decimals with 3 decimal places that would round to this number when rounding to the nearest whole number:

a) 22

b) 89

c) 390

d) 289

e) 891

3) Who Am I?

I am less than 10. I am 10 rounded to the nearest whole. My tenths digit is odd. I have no hundredths digit.

Who am I? Circle the answer.

7.83

10.3

10.12

9.9

8.7

4) Who Am I?

I am larger than 6. To my nearest whole, I round down not up. One of my digits is odd, but my tenths digit is even.

Who am I? Circle the answer.

5.28

8.6

7.24

8.37

7.85

**Topic**  
**Mission:**  
**Day 4**

Some inventions are good, but could they be made even better? Scientists and inventors often start by taking something apart and learning how it works, then finding a way to improve it. In the famous Simpsons episode, Homer improves a chair by putting extra legs on hinges so that it catches him when he falls off it backwards.



You can either choose an item from around your house and design a way to improve it, or design an improvement for your kitchen's oven. You could talk to your mum or dad (or whoever uses it the most) to find out what they wish worked better about it. Other ideas are:

- Easier to keep clean
- Knows when the food is cooked properly
- Cooks faster without losing tastiness
- Makes meals on its own
- Improved hobs
- Other functions that it can't do at the moment

**Reading Mission**

When was Galileo born?

*15<sup>th</sup> February 1564.*

Where did Galileo go to school?

*At a monastery (in Florence)*

What did Galileo study at university?

*medicine*

What did people think would happen when two objects were dropped from a height **before** Galileo's experiment?

*The heavier object would fall faster*

Who first believed the sun travelled around the Earth?

*Copernicus*

Find and copy a word which means **banned**.

*forbidden*

Explain why Galileo spent the later years of his life under house arrest.

*Your child's answer/his findings were not popular with people because they were not how they thought things worked.*

By looking at the section titled "Did you know...?" can you infer whose beliefs did not agree with Galileo's findings?

*The Catholic Church.*

Do you think Galileo should have kept his findings to himself, if he knew they would get him in trouble?

*Your child's answer.*

Why would Galileo have been particularly sad about becoming blind when he was older?

*Your child's answer/he had spent his life being curious and looking at the world around him/he had loved the stars and sun/he had improved the telescope and couldn't use it any more.*