



**Razorbill Week 14 : Learning Project – Scientists and inventors  
Online**

**Age Range: Y4/5**

**Weekly English/Topic Tasks**

**Monday-**

This week we are looking at scientists and inventors further back in history.

Firstly Archimedes. Use online research to answer these questions. This is also part of your Google classroom homework this week.

1. Where was Archimedes born?
2. Where did Archimedes study?
3. Which other scientists did Archimedes study with?
4. What was Archimedes interested in?
5. What two discoveries is Archimedes most famous for?
6. How is it said that Archimedes discovered the law of buoyancy?
7. What does Archimedes' screw pump consist of?
8. What is the purpose of the screw pump?
9. Describe an example of Archimedes' Principle in action.
- 10.** How did Archimedes die?

### **Tuesday-**

Leonardo da Vinci is another famous scientist and inventor. Watch these videos that explore some of his most famous works. Out of all of his inventions which is your favourite? Use persuasive language to explain your choice.

<https://www.youtube.com/watch?v=PwOIIGGDVjE>

<https://www.youtube.com/watch?v=Rm0qszPJnc8>

**Wednesday-** One of Leonardo da Vinci's most famous paintings is the Mona Lisa. Research the painting creating a fact file. Include how it was painted, how long it took and where it is now displayed.



## Thursday- SPaG

Below are some tasks on past and present tense. This is a recap of previous learning in the Spring term. This link will help you remember if you are stuck.

<https://www.bbc.co.uk/bitesize/articles/zh4thbk>

Can you turn these whole sentences from the past tense into the present tense?

1. I stuck my arm out and felt a paperclip ping off the back of my costume.

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2. I looked into my Dad's calm, brown eyes and my chin went wobbly.

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3. My lines were clear, like printed words in my head.

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4. I blinked until my eyes stopped stinging.

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Now, see if you can write this whole paragraph in the past tense.

My fingers are so sweaty that I think that the mic is going to slip from my hand. As I shuffle in front of the Merry Men, my knees jiggle and my teeth chatter. The music gallops along and my heart gallops with it. Any second, I will have to start singing. But the lights are too bright and the crowd is too big. Too late, I remember that I'm supposed to strike a dashing pose. I stick my arm out and feel a paperclip ping off the back of my costume.

## Friday-

Using your fact file about the Mona Lisa and your recap of past tense, create a back story for why 'Lisa' was painted. It could be information taken from your research or you could completely invent a back story for her. Why is she being painted? Why does she have that look on her face? Did she get painted at Leonardo's house or at hers? Be as factual or as imaginative as you like.

## Weekly Maths Tasks- Yr5

### Monday-

#### Place Value

[Reveal answer](#)

Write four hundred and nineteen thousand, two hundred and ten in numerals.



#### + and -

[Reveal answer](#)

$$52\,800 + 600 =$$



[Reveal answer](#)

$$13\,700 - 2900 =$$



#### × and ÷

[Reveal answer](#)

Use a written method to solve this calculation:

$$4425 \times 4 =$$



#### Fractions

[Reveal answer](#)

What number is hidden in these equivalent fractions?

$$\frac{7}{8} = \frac{\text{?}}{24}$$



#### Problem Solving

[Reveal answer](#)

Write three numbers that are multiples of both 3 and 8.



#### Reasoning

2 is the only even prime number.

Is Harry correct? Explain your reasoning.



## Weekly Maths Tasks- Yr4

### Monday-

#### + and -

$$5640 + 200 =$$



[Reveal answer](#)

$$7000 - 101 =$$



[Reveal answer](#)

#### × and ÷

$$6 \times 8 \times 9 =$$



[Reveal answer](#)

$$21 \div 4 =$$

[Reveal answer](#)



#### Place Value

[Reveal answer](#)

Write seven thousand and fifteen in numerals.



#### Problem Solving

[Reveal answer](#)

Saniya has 4 coins in her purse, with a value of £1.72. What value are each of the 4 coins?



#### Reasoning

3 and 5 are the only factor pairs of 15.

Is Jamil correct?

Explain your reasoning.



### Tuesday-

Create a poster explaining how to find the angles of 2 intersecting lines. Refer back to the work you completed last week to help explain the process include examples and diagrams in your explanation.

### Tuesday-

Create a poster explaining how you identify different types of angle. Refer back to the work you completed last week to help explain the process include examples and diagrams explain the differences between Obtuse, Acute and Right angles.

## Wednesday-

### Place Value

Reveal answer

Round 4.04 to the nearest tenth.



### + and -

Reveal answer

$$42\ 080 + 8000 =$$



Reveal answer

$$20\ 000 - 800 =$$



### × and ÷

Reveal answer

Use a written method to solve this calculation:

$$9662 \times 9 =$$



### Fractions

Reveal answer

Convert this mixed number into an improper fraction:

$$5\frac{3}{4} =$$



### Problem Solving

Reveal answer

Complete this calculation:

$$18 \times 9 = 200 -$$



### Reasoning

The sum of an acute angle and an obtuse angle could be a right angle.

Is Harry correct?  
Explain your reasoning.



## Wednesday-

### + and -

$$73 + 127 =$$



Reveal answer

$$900 - 340 =$$



Reveal answer

### × and ÷

$$5 \times 6 \times 4 =$$



Reveal answer

$$43 \div 5 =$$

Reveal answer



### Place Value

Reveal answer

Use the symbol < or > to compare these decimals:

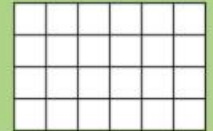
$$45.82 \quad \square \quad 45.28$$



### Problem Solving

Reveal answer

Write 4 multiplication and division calculations represented by this rectangle.



### Reasoning

All triangles have at least one line of symmetry.

Is Jamil correct?

Explain your reasoning.





### Thursday- 4 Quadrant Co-ordinates

When using 4 quadrant co-ordinates remember that your first number is your X axis (horizontal line) and your second number is the Y axis (vertical line).

Take a look at these videos <https://www.bbc.co.uk/bitesize/articles/zjvbgwx> and try the activities.

### Thursday- Co-ordinates

Watch through these clips about how to plot co-ordinates.

<https://www.bbc.co.uk/bitesize/topics/zs7mn39/articles/zvfhhbk>

<https://www.bbc.co.uk/bitesize/topics/zbt34j/articles/z6hxrj6>

Using squared paper, draw a map of a room in your house or your garden adding your X and Y axis. Plot key features of the room or garden on your map listing them with their co0ordinates.

### Friday-

#### Place Value

Reveal answer

Which symbol completes this number sentence?

102 201



102 210

#### + and -

Reveal answer

278 100 + 12 000 =



72 090 - 50 000 =



#### × and ÷

Reveal answer

Use a written method to solve this calculation:

33 × 26 =



#### Fractions

Reveal answer

Add these fractions:

$$\frac{2}{5} + \frac{3}{10} =$$



#### Problem Solving

Reveal answer

How many quarters is the total of  $\frac{1}{8}$  and  $\frac{5}{8}$ ?



#### Reasoning

This hexagon is regular because all sides are equal.

Is Harry correct?  
Explain your reasoning.



### Friday-

#### + and -

2180 + 900 =



Reveal answer

6380 - 2000 =



Reveal answer

#### × and ÷

4 × 5 × 5 =



Reveal answer

29 ÷ 7 =

Reveal answer



#### Place Value

Reveal answer

What are the next three numbers in this sequence?

17 000

18 000

19 000



#### Problem Solving

Reveal answer

How many acute and obtuse angles are there in this triangle?



#### Reasoning



I need to colour in three more parts to show  $\frac{3}{4}$ .

Is Jamil correct?

Explain your reasoning.



Science/DT  
Weekly project

Ask a member of your house hold to pose in the style of the Mona Lisa. Can you draw them in the style of Leonardo da Vinci?

**Additional learning resources parents may wish to engage with**

- [CODE Maths Hub Daily Fluency Activities](#) -
- <https://www.topmarks.co.uk/maths-games/daily10> - arithmetic challenges
- [BBC Bitesize](#) - Lots of videos and learning opportunities for all subjects.
- <https://www.thenational.academy/> A large selection of video lessons and learning resources. These cover a range of subjects including maths, English, art and languages.
- [Classroom Secrets Learning Packs](#) - Reading, writing and maths activities for different ages.
- [Twinkl](#) - Click on the link and sign up using your email address and creating a password. Use the offer code UKTWINKLHELPS.

## YR5 answers

### Place Value

Write four hundred and nineteen thousand, two hundred and ten in numerals.



419 210

### + and -

$$52\ 800 + 600 = 53\ 400$$

$$13\ 700 - 2900 = 10\ 800$$

### × and ÷

Use a written method to solve this calculation:

$$4425 \times 4 = 17\ 700$$

### Fractions

What number is hidden in these equivalent fractions?

$$\frac{7}{8} = \frac{21}{24}$$

### Problem Solving

Write three numbers that are multiples of both 3 and 8.



### Reasoning

2 is the only even prime number.

Is Harry correct? Explain your reasoning.



## YR4 answers

### + and -

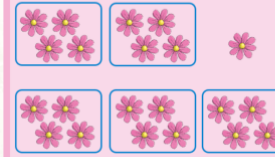
$$5640 + 200 = 5840$$

$$7000 - 101 = 6899$$

### × and ÷

$$6 \times 8 \times 9 = 432$$

$$21 \div 4 = 5 \text{ remainder } 1$$



### Place Value

Write seven thousand and fifteen in numerals.

7015

### Problem Solving

Saniya has 4 coins in her purse, with a value of £1.72. What value are each of the 4 coins?

£1, 50p, 20p, 2p



### Reasoning

3 and 5 are the only factor pairs of 15.

Is Jamil correct?

Explain your reasoning.



### Place Value

Round 4.04 to the nearest tenth.



4

### + and -

$$42\ 080 + 8000 = 50\ 080$$

$$20\ 000 - 800 = 19\ 200$$

### × and ÷

Use a written method to solve this calculation:

$$9662 \times 9 = 86\ 958$$

### Fractions

Convert this mixed number into an improper fraction:

$$5\frac{3}{4} = \frac{23}{4}$$

### Problem Solving

Complete this calculation:

$$18 \times 9 = 200 - 38$$

### Reasoning

The sum of an acute angle and an obtuse angle could be a right angle.

Is Harry correct? Explain your reasoning.



### + and -

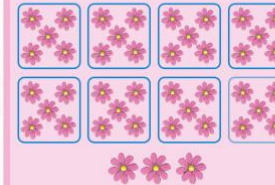
$$73 + 127 = 200$$

$$900 - 340 = 560$$

### × and ÷

$$5 \times 6 \times 4 = 120$$

$$43 \div 5 =$$



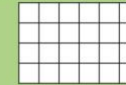
### Place Value

Use the symbol < or > to compare these decimals:

$$45.82 > 45.28$$

### Problem Solving

Write 4 multiplication and division calculations represented by this rectangle.



### Reasoning

All triangles have at least one line of symmetry.

Is Jamil correct?

Explain your reasoning.



### Place Value

Which symbol completes this number sentence?

$$102\ 201 < 102\ 210$$

### + and -

$$278\ 100 + 12\ 000 = 290\ 100$$

$$72\ 090 - 50\ 000 = 22\ 090$$

### × and ÷

Use a written method to solve this calculation:

$$33 \times 26 = 858$$

### Fractions

Add these fractions:

$$\frac{2}{5} + \frac{3}{10} = \frac{7}{10}$$

### Problem Solving

How many quarters is the total of  $\frac{1}{5}$  and  $\frac{5}{8}$ ?

$\frac{3}{4}$

### Reasoning

This hexagon is regular because all sides are equal.

Is Harry correct? Explain your reasoning.



### + and -

$$2180 + 900 = 3080$$

$$6380 - 2000 = 4380$$

### × and ÷

$$4 \times 5 \times 5 = 100$$

$$29 \div 7 = 4 \text{ remainder } 1$$



### Place Value

What are the next three numbers in this sequence?



### Problem Solving

How many acute and obtuse angles are there in this triangle?

2 acute and 1 obtuse



### Reasoning

I need to colour in three more parts to show  $\frac{3}{4}$ .

Is Jamil correct?

Explain your reasoning.

