



## Cormorant Week 13: Learning Project – Heroes and Villains

**Age Range: Y3/4**

### Weekly English/Topic Tasks

**Monday-** Today's task is to research famous historic heroes such as Florence Nightingale, Amelia Earhart, Mother Teresa and Mary Seacole. Make a small mind map of each person with facts and information. You could include information about the dates they lived, how they made an impact on the world, the reasons they have been remembered and, finally, the heroic acts that lead to their fame.

**Tuesday-** Yesterday, you researched four very famous historic heroes. I would like you to write a fact file about two of these heroes. Imagine that you are giving this fact file to someone who has never heard of the person. It must include as much vital information as possible. You can use bullet points to layout your fact file.

**Wednesday-** Today I would like you to research a very controversial figure, Henry VIII. Your task for today is research why this man is famous and why. You can create a mind map if it helps you.

**Thursday-** Yesterday you researched Henry VIII and the reasons for his fame. Today I would like you to answer the following question.  
Was Henry VIII a hero or a villain in his own time?  
When you have made your decision, you need to compose an argument for your decision. This argument needs to be backed up by evidence.

**Friday-** Complete the comprehension paper attached. Remember to answer your questions in full sentences or else they will not be correct.

Weekly Maths Tasks- Yr3  
Answers below

Monday-

Menu

Summer 3 Monday

Place Value

Write 843 in words.



Reveal answer

Problem Solving

How much money in total?



£13 and 94 pence

Reveal answer

+ and -

$$296 + 30 =$$

Reveal answer

$$442 - 50 =$$

Reveal answer

× and ÷

$$60 \times 3 =$$

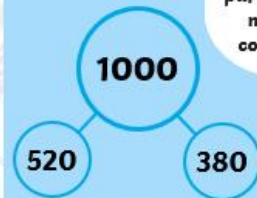
Reveal answer

$$48 \div 4 =$$

Reveal answer

Reasoning

Is my  
part-whole  
model  
correct?



Explain why.



Weekly Maths Tasks- Yr4  
Answers below

Monday-

Menu

Summer 3 Monday

+ and -

$$2800 + 400 =$$

Reveal answer

$$6030 - 700 =$$

Reveal answer

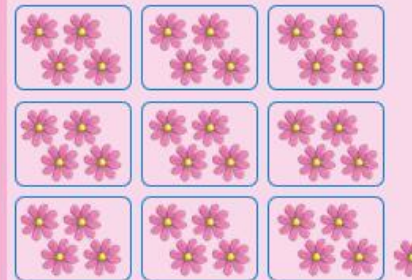
× and ÷

$$3 \times 4 \times 7 =$$

Reveal answer

$$37 \div 4 = 9 \text{ remainder } 1$$

Reveal answer



Place Value

Reveal answer

Write four thousand and  
thirty-six in numbers.



Problem Solving

Reveal answer

Alison buys a book for £3.75 and pays  
with a £5 note. With which coins could  
she receive her change?

£1, 20p, 5p or any combination  
with a total of £1.25

Reasoning

Is my part-whole  
model correct?



Is Jamil correct?

Explain your reasoning.



Tuesday-

## Horizontal & Vertical

### Notes and Guidance

Children identify and find horizontal and vertical lines in a range of contexts.

They identify horizontal and vertical lines of symmetry in shapes and symbols.

### Mathematical Talk

What can you use to help you remember what a horizontal line looks like? (The horizon)

Can you see horizontal and vertical lines around the classroom?

What do we call a line that is not horizontal or vertical?

Which shapes/symbols/letters have a horizontal/vertical line of symmetry?

Which have both?

Can you draw your own shape that has a horizontal and vertical line of symmetry?

### Varied Fluency



A line that runs from left to right across the page is called a \_\_\_\_\_ line.

A line that runs straight up and down the page is called a \_\_\_\_\_ line.

Find 3 horizontal and 3 vertical lines in the classroom.



Label the horizontal and vertical lines in each of these images.



Sort the shapes/symbols/letters depending on whether they have a horizontal line of symmetry, a vertical line of symmetry or both.

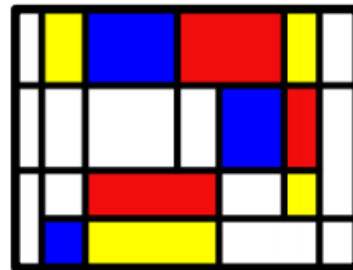


11

| Horizontal line of symmetry | Vertical line of symmetry | Horizontal and vertical lines of symmetry |
|-----------------------------|---------------------------|---|
|                             |                           |   |

Eva completes the table by drawing shapes.

Can you spot and correct her mistake?



How many horizontal and vertical lines can you spot in this image by Mondrian?

Create your own piece of art work using only horizontal and vertical lines.

Tuesday-

## Quadrilaterals

### Notes and Guidance

Children name quadrilaterals including a square, rectangle, rhombus, parallelogram and trapezium. They describe their properties and highlight the similarities and differences between different quadrilaterals.

Children draw quadrilaterals accurately using knowledge of their properties.

Teachers could use a Frayer Model with the children to explore the concept of quadrilaterals further.

### Mathematical Talk

What's the same about the quadrilaterals?

What's different about the quadrilaterals?

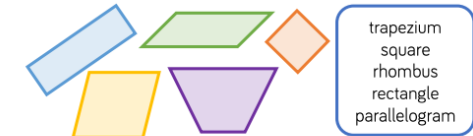
Why is a square a special type of rectangle?

Why is a rhombus a special type of parallelogram?

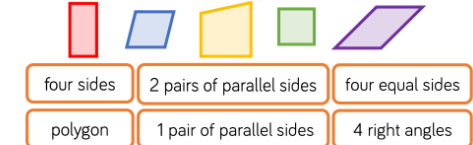
### Varied Fluency



Label the quadrilaterals using the word bank.



Use the criteria to describe the shapes.



Which criteria can be used more than once?

Which shapes share the same criteria?



Draw and label:

- a rhombus.
- a parallelogram.
- 3 different trapeziums

Complete each of the boxes in the table with a different quadrilateral.

|                 | 4 equal sides | 2 pairs of equal sides | 1 pair of parallel sides |
|-----------------|---------------|------------------------|--------------------------|
| 4 right angles  |               |                        |                          |
| No right angles |               |                        |                          |

Which box cannot be completed?

Explain why.

You will need:

Some 4 centimetre straws

Some 6 centimetre straws

How many different quadrilaterals can you make using the straws?

Calculate the perimeter of each shape.

## Wednesday-



Summer 3 Wednesday

### Place Value

Use the correct symbol to compare these numbers:

254  245

Reveal answer

+ and -

$272 + 9 =$   Reveal answer

$544 - 80 =$   Reveal answer

x and ÷

$10 \times 3 =$   Reveal answer

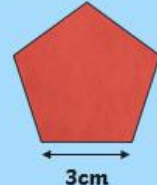
$20 \div 4 =$   Reveal answer

### Problem Solving

Find three different ways to complete this part-whole model using only numbers which are multiples of 5.



### Reasoning



The perimeter of this shape is 15cm.

Is Henry correct? Explain why.



## Wednesday-



Summer 3 Wednesday

+ and -

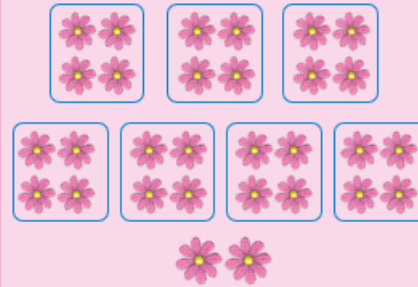
$35 + 66 =$   Reveal answer

$500 - 201 =$   Reveal answer

x and ÷

$9 \times 5 \times 8 =$   Reveal answer

$30 \div 4 =$  7 remainder 2 Reveal answer



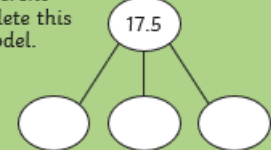
### Place Value

Put these numbers in order from smallest to greatest:

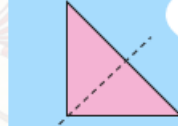
6128 6182 6218 6281

### Problem Solving

Find three different ways to complete this part whole model.



### Reasoning



I have drawn a line of symmetry on this triangle.

Is Jamil correct? Explain your reasoning.



## Thursday-. Home instead of classroom.

### Parallel & Perpendicular

#### Notes and Guidance

Children identify and find parallel and perpendicular lines in a range of practical contexts. They use the arrow notation to represent parallel lines and the right angle notation for perpendicular lines. Ensure that children are presented with lines that are not horizontal and vertical. Children may need to use their right-angle tester to help them check that lines are perpendicular.

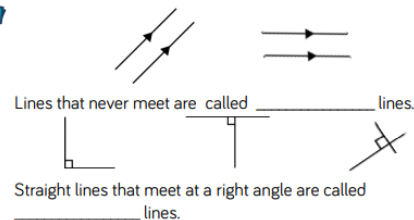
#### Mathematical Talk

Where might you see sets of parallel lines in the environment?

Can you see sets of parallel and perpendicular lines around the classroom?

Which shapes have only parallel lines?  
Which shapes have perpendicular lines?  
Which shapes have both parallel and perpendicular lines?

#### Varied Fluency



Find 3 sets of parallel and perpendicular lines in the classroom.

Draw a line that is parallel to this one.

Draw a line that is perpendicular to this one.

Use arrows to show the parallel lines in these shapes. Use the right angle notation to show the perpendicular lines.



## Thursday-

### Lines of Symmetry

#### Notes and Guidance

Children find and identify lines of symmetry within 2-D shapes. Children explore symmetry in shapes of different sizes and orientations. To help find lines of symmetry children may use mirrors and tracing paper. The key aspect of symmetry can be taught through paper folding activities. It is important for children to understand that a shape may be symmetrical, but if the pattern on the shape isn't symmetrical, then the diagram isn't symmetrical.

#### Mathematical Talk

Explain what you understand by the term 'symmetrical'.

Can you give any real-life examples?

How can you tell if something is symmetrical?

Are lines of symmetry always vertical?

Does the orientation of the shape affect the lines of symmetry?

What equipment could you use to help you find and identify lines of symmetry?

What would the rest of the shape look like?

#### Varied Fluency

Using folding, find the lines of symmetry in these shapes.



Sort the shapes into the table.

|                   | 1 line of symmetry | More than 1 line of symmetry |
|-------------------|--------------------|------------------------------|
| Up to 4 sides     |                    |                              |
| More than 4 sides |                    |                              |

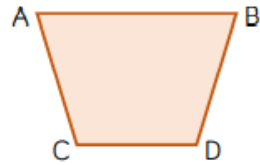


Draw the lines of symmetry in these shapes (you could use folding to help you).



What do you notice?

## True or False?



Line AB is parallel to line CD.  
Line AC is parallel to line BD.  
Line AC is perpendicular to line CD.

Redraw the shape so that line BD is perpendicular to line CD.

These lines are NOT parallel.



Convince me.

Mark 3 sets of parallel lines and 3 sets of perpendicular lines in this flag.



Design your own flag containing parallel and perpendicular lines.

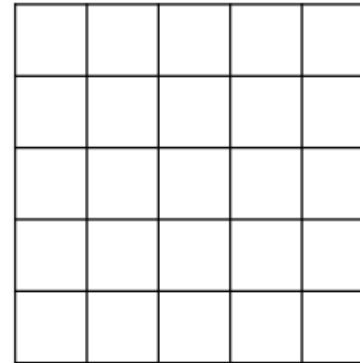


Jack

A triangle has 1 line of symmetry unless you change the orientation.

How many symmetrical shapes can you make by colouring in a maximum of 6 squares?

Is Jack correct? Prove it.



**Always, Sometimes, Never.**

A four-sided shape has four lines of symmetry.



## Friday-

Menu

Summer 3 Friday

### Place Value

Reveal answer

What are the next three numbers in this sequence?



### + and -

$$9 + 8 + 3 =$$

Reveal answer

$$563 - 400 =$$

Reveal answer

### × and ÷

$$70 \times 3 =$$

Reveal answer

$$8 \div 4 =$$

Reveal answer

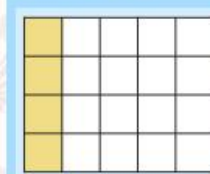
### Problem Solving

How many more red flags than green flags were used?



Reveal answer

### Reasoning



$\frac{4}{5}$  of this shape of this shape is unshaded.

Is Henry correct? Explain why.



## Friday-

Menu

Summer 3 Friday

### + and -

$$7000 + 30 =$$

Reveal answer

$$4050 - 400 =$$

Reveal answer

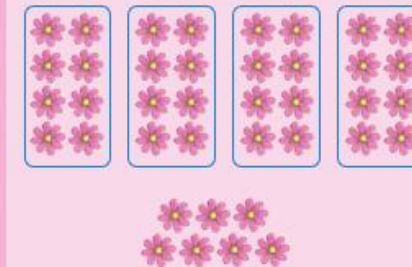
### × and ÷

$$3 \times 6 \times 7 =$$

Reveal answer

$$39 \div 8 = 4 \text{ remainder } 7$$

Reveal answer



### Place Value

Reveal answer

What are the next three numbers in this sequence?



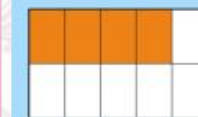
### Problem Solving

Reveal answer

Describe the translation from point A to point B.



### Reasoning



I need to colour in three more parts to show  $\frac{9}{10}$ .

Is Jamil correct?

Explain your reasoning.



## Vibrations

By placing rice on a drum, you can see the vibrations when you hit the drum, as well as hearing the sound.



## Loud and Quiet



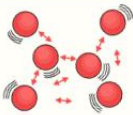
Try this mini investigation to find out if the vibrations change when the loudness of the sound changes.

Place some rice on the skin of a drum.

Bang the drum three times: gentle, medium and hard.

Observe the way the rice vibrates each time.

Is there a link between the loudness of the sound and the size of the vibrations?

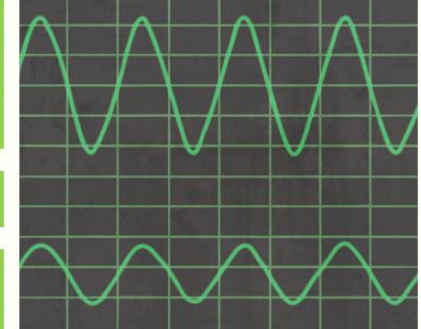


## Loud and Quiet

The louder the sound, the bigger the vibration. You should have noticed that the rice grains vibrated more when you hit the drum harder, creating a louder sound.

The size of the vibration is called the amplitude.

Quieter sounds have a smaller amplitude, and louder sounds have a bigger amplitude.



## How Does Sound Travel



So we know that sounds are caused by vibrations, and the louder sounds have bigger vibrations.

But how do these different sounds reach our ears?

These children have been talking about their ideas.

What do you think of their ideas?

I think sound can travel through the air because the air is lighter and easier to get through than solids or liquids.



Sound moves the air from the source of the vibration into our ears. If we are listening, we will hear the sound.

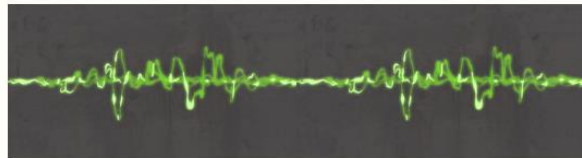
Follow this link to see how sound travels.

<https://www.bbc.co.uk/bitesize/clips/z9h6n39>

## How Does Sound Travel?

Sound can travel through solids, liquids and gases.

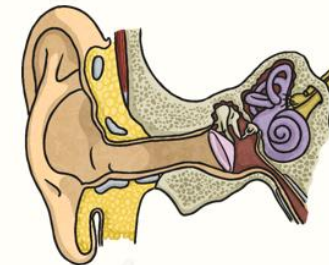
Sound travels as a wave, vibrating the particles in the medium it is travelling in.



So in our example, when you hit the drum, the drum skin vibrated. This made the air particles closest to the drum start to vibrate as well. The vibrations then passed to the next air particle, then the next, then the next. This carried on until the air particles closest to your ear vibrated, passing the vibrations into your ear.

## Hearing Sounds

Once in your ear, the vibrations travel into the ear canal until they reach the eardrum. The eardrum passes the vibrations through the middle ear bones (the hammer, the anvil and the stirrup) into the inner ear. The inner ear is shaped like a snail and is called the cochlea. Inside the cochlea, there are thousands of tiny hair cells. Hair cells change the vibrations into electrical signals that are sent to the brain through the hearing nerve. The brain tells you that you are hearing a sound and what that sound is.



### 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.



## YR3 answers

Menu

Summer 3 Monday

Place Value

Write 843 in words.

eight hundred and forty-three

Problem Solving

How much money in total?

£13 and 94 pence

Reasoning

Is my part-whole model correct?

Explain why.

+ and -

$296 + 30 = 326$   
 $442 - 50 = 392$

× and ÷

$60 \times 3 = 180$   
 $48 \div 4 = 12$

## YR4 answers

Menu

Summer 3 Monday

+ and -

$2800 + 400 = 3200$   
 $6030 - 700 = 5330$

× and ÷

$3 \times 4 \times 7 = 84$   
 $37 \div 4 = 9 \text{ remainder } 1$

Place Value

Write four thousand and thirty-six in numbers.

4036

Problem Solving

Alison buys a book for £3.75 and pays with a £5 note. With which coins could she receive her change?

£1, 20p, 5p or any combination with a total of £1.25

Reasoning

Is my part-whole model correct?

Is Jamil correct?

Explain your reasoning.

Eva thinks the star has both lines of symmetry, but it only has a vertical line of symmetry.



There are 5 horizontal lines and 8 vertical lines.

|                 | 4 equal sides | 2 pairs of equal sides | 1 pair of parallel sides |
|-----------------|---------------|------------------------|--------------------------|
| 4 right angles  |               |                        |                          |
| No right angles |               |                        |                          |

Children can discuss if there are any shapes that can go in the top right corner. Some children may justify it could be a square or a rectangle however these have 2 pairs of parallel sides.

**Square:** Four 4 cm - perimeter is 16 cm or four 6 cm - perimeter is 24 cm  
**Rectangle:** Two 4 cm and two 6 cm - perimeter is 20 cm  
**Rhombus:** Four 4 cm - perimeter is 16 cm  
 Four 6 cm straws - perimeter is 24 cm  
**Parallelogram:** Two 4 cm and two 6 cm - perimeter is 20 cm  
**Trapezium:** Three 4 cm and one 6 cm - perimeter is 18 cm

**Place Value**

Use the correct symbol to compare these numbers:

$$254 > 245$$

**+ and -**

$$272 + 9 = 281$$

$$544 - 80 = 464$$

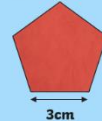
**x and ÷**

$$10 \times 3 = 30$$

$$20 \div 4 = 5$$

**Problem Solving**

Find three different ways to complete this part-whole model using only numbers which are multiples of 5.

**Reasoning**

The perimeter of this shape is 15cm.



Is Henry correct?  
Explain why.

**+ and -**

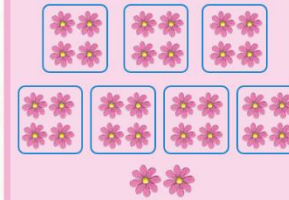
$$35 + 66 = 101$$

$$500 - 201 = 299$$

**x and ÷**

$$9 \times 5 \times 8 = 360$$

$$30 \div 4 = 7 \text{ remainder } 2$$

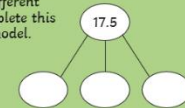
**Place Value**

Put these numbers in order from smallest to greatest:

6128 6182 6218 6281

**Problem Solving**

Find three different ways to complete this part whole model.

**Reasoning**

I have drawn a line of symmetry on this triangle.



Is Jamil correct?

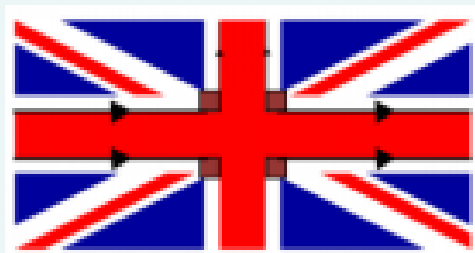
Explain your reasoning.



True  
False  
False

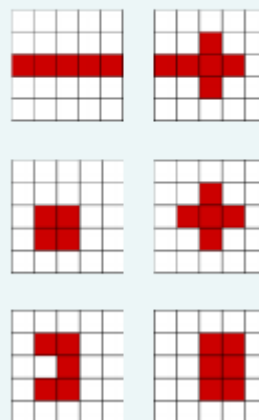


For example.



Children can draw and continue the lines to show that they will eventually meet so are not parallel.

There are a variety of options. Some examples include:



Jack is incorrect. Changing the orientation does not change the lines of symmetry. Children should prove this by drawing shapes in different orientations and identifying the same number of lines of symmetry.

Sometimes, provided the shape is a square.

Menu

Summer 3 Friday

### Place Value

What are the next three numbers in this sequence?



### + and -

$$9 + 8 + 3 = 20$$

$$563 - 400 = 163$$

### × and ÷

$$70 \times 3 = 210$$

$$8 \div 4 = 2$$

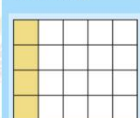
### Problem Solving

How many more red flags than green flags were used?



6

### Reasoning



$\frac{4}{5}$  of this shape of this shape is unshaded.

Is Henry correct? Explain why.



Menu

Summer 3 Friday

### + and -

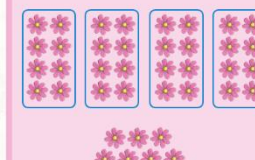
$$7000 + 30 = 7030$$

$$4050 - 400 = 3650$$

### × and ÷

$$3 \times 6 \times 7 = 126$$

$$39 \div 8 = 4 \text{ remainder } 7$$



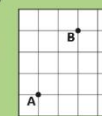
### Place Value

What are the next three numbers in this sequence?



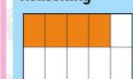
### Problem Solving

Describe the translation from point A to point B.



2 right and 3 up

### Reasoning



I need to colour in three more parts to show  $\frac{9}{10}$ .

Is Jamil correct? Explain your reasoning.





# Superheroes

## Captain America

Captain America's real name is Steven Rogers. He drank a special liquid, which gave him his super powers, and made a promise to use his abilities to look after his country. His powers include super strength, extremely high intelligence, incredible speed and super-fast reactions. He is also skilled at martial arts and exercises daily to keep himself as fit and healthy as possible.

His uniform is blue, red and white and he carries a round shield. There is a capital 'A' on his helmet.



## Wonder Woman

Wonder Woman's powers come from Greek gods. She was given strength from Demeter, the ability to communicate with animals from Artemis, wisdom from Athena and the powers of super speed and flight from Hermes.

Her bracelets can block weapons and her lasso can trap people into telling the truth. She wears a tiara as her true identity is Princess Diana of the Amazon Island, Themyscira. Her tiara is very sharp and can be used as a weapon.

Wonder Woman has had many enemies including Dr Cyber and Angle Man.



## Hulk

The Hulk's real name is Robert Bruce Banner. He was trying to save someone's life when he was caught in an explosion, transforming him into an incredibly powerful creature known as the Hulk.

In his superhero state, he has unbelievable physical strength, which grows depending on how stressed or angry he becomes. He turns green, can travel long distances due to limitless strength in his legs, and strikes his hands together to create shock waves which can deafen people, put out fires or send objects flying through the air. He can survive extreme temperatures, explosions, diseases and poisons and his body can repair itself. The Hulk can even breathe underwater.

## George Major

George Major may not be able to fly, but many believe that he is a hero.

George was only six years old when he was diagnosed with a serious disease. He was told he would have to make regular trips to hospital. Even though he was very ill, he decided that he wanted to make a difference and started fundraising to improve the children's room at the Royal Berkshire Hospital. With the help of his family, George set up the George's Marvellous Medicine Fund and through hosting tea parties, running competitions and auctions, £8,000 was raised to make the improvements. The room now has toys, board games, a games console and new furniture to make children's time in hospital more enjoyable. Funds also meant that new medical equipment could be bought.

With the support of his family, £10,000 has also been raised for a children's cancer charity. At the age of seven, George was given the award of 'Your Fundraiser of the Year' at the Pride of Britain Awards.

## Superheroes Questions

1. What is Captain America's real surname?

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2. How do you think Captain America uses his powers?

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3. Think of two reasons why Captain America might need his shield.

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4. How did George and his family raise money for the hospital?

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5. Can you think of another way to raise money?

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6. What does Wonder Woman wear which gives a clue about her true identity?

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7. Which Greek god gave Wonder Woman the ability to be able to communicate with animals?

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8. List three of the Hulk's super powers.

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9. Which fact tells us that Captain America is very loyal to his country?

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10. Who is the best hero in the fact file? Explain your reasoning.

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# Superheroes **Answers**

1. What is Captain America's real surname?  
**Captain America's real surname is Rogers.**
2. How do you think Captain America uses his powers?  
**Answers may include: rescuing people from danger, helping people in need, solving problems the country might be having, or anything similar.**
3. Think of two reasons why Captain America might need his shield.  
**Own answers. Examples may include: Protection against weapons, to throw at enemies etc**
4. How did George and his family raise money for the hospital?  
**Money was raised by hosting tea parties, running competitions and auctions.**
5. Can you think of another way to raise money?  
**Own answers. Examples: sponsored silence, name the teddy bear, bake sale etc**
6. What does Wonder Woman wear which gives a clue about her true identity?  
**The tiara gives a clue about Wonder Woman's true identity. She is Princess Diana of the Amazon Island, Themyscira.**
7. Which Greek god gave Wonder Woman the ability to be able to communicate with animals?  
**Artemis gave Wonder Woman the ability to communicate with animals.**
8. List three of the Hulk's super powers.  
**Examples will include three of the following: physical strength which grows depending on how stressed or angry he becomes, he turns green, he can travel long distances as he has limitless strength in his legs, he can strike his hands together to create shock waves which can deafen people, put out fires or send objects flying through the air, he can survive extreme temperatures, explosions, diseases and poisons, his body can repair itself and he can breathe underwater.**
9. Which fact tells us that Captain America is very loyal to his country?  
**Captain America made a promise to use his skills to look after his country.**
10. Who is the best hero in the fact file? Explain your reasoning.  
**Own answers and reasoning.**