



HILL WEST
Primary

FOUR OAKS

Home Learning Pack

Year 6

Autumn Term Week 6



Home Learning Links

Oak National Academy

Oak National Academy is an online classroom and resource hub. It provides high-quality video lessons and resources to support teachers, parents and pupils.

www.thenational.academy

BBC Bitesize

With BBC Bitesize it is easy to keep learning at home. You can access regular daily lessons in English, maths and other core subjects.

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

Read Works.org

Read Works offers access to 3000+ comprehension for all age groups. Just sign up for a free account to access fantastic texts.

<https://www.readworks.org/>

Education Quizzes

A series of short quizzes for children to complete related to the National Curriculum subjects. Just select KS1 for Reception, Year 1 & Year 2 and select KS2 for Years 3-6.

<https://www.educationquizzes.com/ks2/>

Top Marks

A range of activities here but especially good interactive activities for maths.

<https://www.topmarks.co.uk/>

Classroom Secrets

The platform is aimed at primary aged children and covers subjects such as maths, reading, grammar and spelling. The platform is really child-friendly so that they're able to access it on their own. There are a load of games and interactive activities from phonics to SATs

<https://kids.classroomsecrets.co.uk/>

National Geographic

National Geographic is a great platform for learning and it's totally free. There are online games, resources and competitions, too.

<https://www.natgeokids.com/uk/teacher-category/primary-resources/>

Reading Eggspress

<https://readingeggs.co.uk/>

Top Marks

A website for great interactive maths games.

<https://www.topmarks.co.uk/>

Times Tables Rockstars

This is a great times tables game, practice all of the tables up to 12 x 12. Your child's username and password can be found in their Homework Book.

<https://trockstars.com/>

Monster SATs

On-screen and paper-based resources, including curriculum-based games for primary schools.

<https://www.monstersats.co.uk/group-login-page/>

White Rose Maths Hub

Daily 'home learning' lessons for Years 1-9. Every lesson comes with a short video showing you clearly and simply how to help your child complete the activity successfully.

<https://whiterosemaths.com/homelearning/>

Khan Academy

A great website for learning, with all activities and videos for every topic. A favourite of Mr Ellison.

<https://www.khanacademy.org>

Codeclub

Fancy something a bit different. Try out the Code Club website for free tutorials and guides on creating code in a range of platforms.

<https://projects.raspberrypi.org/en/codeclub>

Duolingo

Fancy something a bit different. Try out the Code Club website for free tutorials and guides on creating code in a range of platforms.

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Monday

English

malevolent

contempt

malevolent - having or showing a wish to do evil to others: the glint of dark, malevolent eyes.

contempt - the feeling that a person or a thing is worthless or beneath consideration: Pam stared at the girl with total contempt

Analysing an author's language choices

The Graveyard Book

By Neil Gaiman

The Graveyard Book, which took over 20 years to write, is classified as a gothic fantasy. Typically, gothic novels are characterised by a gloomy setting, grotesque characters, mysterious or violent events, and an atmosphere of decay. As you read, determine what specific details make this book a gothic novel.



Vocabulary: Draw a line from each word on the left to its definition on the right. Then use the words on the left to fill in the blanks in the sentences below.

- | | |
|-----------------|--|
| 1. insinuated | a. forever |
| 2. sparse | b. presented reasons against something one opposes |
| 3. perpetuity | c. highest or final point |
| 4. endured | d. brought in gradually |
| 5. expostulated | e. acting in a systematic way |
| 6. dubiously | f. lasted |
| 7. culmination | g. doubtfully or uncertainly |
| 8. methodical | h. thinly spread or distributed |



Chapter 1: How Nobody came to the graveyard

Preview the book by reading the title and author's name and by looking at the cover illustration.

Based on the title, what predictions can you make about this novel's setting?

Looking at some of the illustrations. How would you describe some of the characters?

What do you think the book will be about?

Have you read any other books by this author or seen movies based on his work?



The man Jack paused on the landing.

Chapter 1: How Nobody came to the graveyard

Read opening as a class.

THERE WAS A HAND IN the darkness, and it held a knife. The knife had a handle of polished black bone, and a blade finer and sharper than any razor. If it sliced you, you might not even know you had been cut, not immediately. The knife had done almost everything it was brought to that house to do, and both the blade and the handle were wet. The street door was still open, just a little, where the knife and the man who held it had slipped in, and wisps of night-time mist slithered and twined into the house through the open door. The man Jack paused on the landing. With his left hand he pulled a large white handkerchief from the pocket of his black coat, and with it he wiped off the knife and his gloved right hand which had been holding it; then he put the handkerchief away. The hunt was almost over. He had left the woman in her bed, the man on the bedroom floor, the older child in her brightly coloured bedroom, surrounded by toys and half-finished models. That only left the little one, a baby barely a toddler, to take care of. One more and his task would be done. He flexed his fingers. The man Jack was, above all things, a professional, or so he told himself, and he would not allow himself to smile until the job was completed.



The man Jack paused on the landing.

Questions (Stop at The bars of the gates were closely spaced: they would have stopped a grown man from getting through, even stopped a ten-year-old child...) :

1. Why did the man Jack visit the tall house on the side of the hill? How did he track his prey?
2. Where had the man Jack, left the toddler's family?
3. Why did the man Jack not allow himself to smile until the job was done. What does this tell you about the character?
4. How does the other use the moon to create imagery and cohesion?
5. The moon shone through the **casement** window... it was **diffused** by the mist. What do these words mean?
6. What were the man Jack's other skills?
7. How has **insinuated** been used by the other, what imagery does this create?
8. How does the author use the second person and why?

Vocabulary:

1. d 2. h 3. a 4. f 5. b 6. g 7. c 8. e;

GPS

Underline the adjective in this sentence. The witch ran a gnarled finger across the spell book.	What is the grammatical term given to the underlined words? <u>Somewhat flustered</u> , the pet shop owner finally caught the escapee hamster.
What is the grammatical term given to the underlined word? According to the weather forecast, it will <u>likely</u> be a snow day tomorrow.	What type of conjunction is underlined? Frank checked for monsters <u>before</u> going to bed.

Inferences

Literary Devices

Highlight examples of the following

- Hook
- Point of View
- Simile
- Personification
- Metaphor
- Sentences for suspense/tension



The man Jack paused on the landing.

Omniscient Narration

Occasionally in *The Graveyard Book*, the narrator speaks directly to readers to guide them through the story. This narrative device is called the “omniscient,” or all-knowing, narrator. Find one example from Chapter One where the author used this technique.



The man Jack paused on the landing.

Was it what they expected given the image they had explored together? How has the author created the sense of drama and intrigue? What do you notice about the way in which the paragraph is structured? What is the impact of the variation in sentence length? How did you imagine the events as I read the passage aloud? What helped you to imagine this? Does it remind you of anything you have read before? Or anything you may have watched? What do you predict will happen next?

Likes	Dislikes
Patterns	Puzzles

Maths


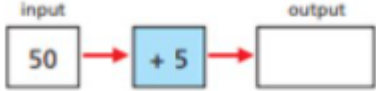
1) $40,354 + 67,667$

2) $416,834 + 125,479$

3) $9,773,113 + 8,359,696$

4) $54,490 + 24,684$

LO: To understand simple algebraic formulae **11.10.21**

<p>What is the input?</p> 	<p>What is the rule?</p> <p>3, 7, 15, 31</p>
<p>What is the next term?</p> <p>0.5, 2, 8, 32, ?</p>	<p>What is the output?</p> 
<p>Patrick says that 'A' must equal 30 in the equation: $10a + 5 = 35$, because $35 - 5$ equals 30.</p>	

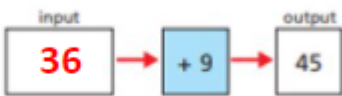
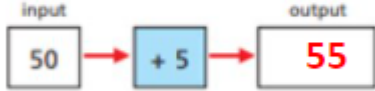



Answers

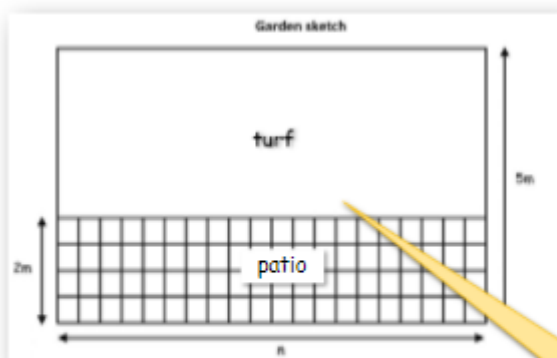
- 1) 108,021
- 2) 542,313
- 3) 18,132,809
- 4) 79,174

LO: To understand simple algebraic formulae

11.10.21

What is the input? 	What is the rule? $3(x2 + 1), 7(x2 + 1), 15(x2 + 1), 31 \dots$
What is the next term? 0.5, 2, 8, 32, 128 Multiply by 4.	What is the output? 
 Patrick says that 'A' must equal 30 in the equation: $10a + 5 = 35$, because $35 - 5$ equals 30. Incorrect, 10 lots of $A = 30$. So 30 divided by 10 means $A = 3$.	

Day 1: Understand and use simple formulae.

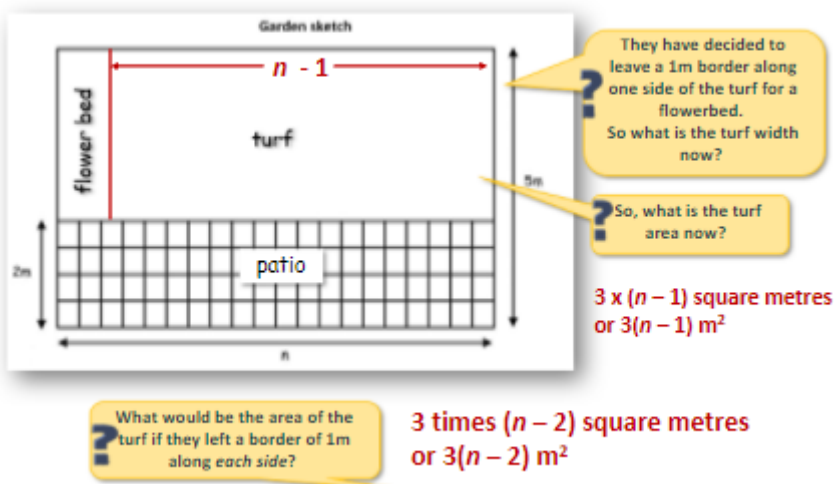


A company is building houses on different plots. The back gardens are 5m long, but they will be different widths. Each will have a patio area, the width of the plot, and 2m deep. The rest of the garden will be turfed.

We can use ' n ' to stand for the width of the garden, so the patio area is $2 \times n$ metres squared, which we can write as $2n \text{ m}^2$ for short.

Write a formula for the area of the turf.

$3n$ square metres or $3n \text{ m}^2$



Write a formula

Sheet 1

Discuss how these prices/amounts would be worked out with a partner, and then write a formula using n . Make $n=5$ in each example to see if the answer makes sense using your formula.

1. Stamps cost 52p each. The cost of n stamps is...
2. The number of wheels on n cars is...
3. The number of months in n number of years is...
4. For n fence panels, ... fence posts are needed.
5. The change from £10 after buying n apples at 25p each is...
6. The time to cook a chicken weighing n kg, at 45 minutes per kilogram and 20 minutes extra is...
7. The distance travelled when a bike wheel turns 20 times and the circumference of the wheel is n , is...
8. The price of an item costing n pounds after VAT of 20% added.

Problem Solving

Mr Hall and Mrs Rose order some photos online.

- a) Mr Hall orders 16 photos.

How much does he pay?

- b) Mrs Rose pays £6.05

How many photos did she order?



Answers

Day 2 Function machines Sheet 1

$$3 \times 5 = 15$$

$$6 \times 5 = 30$$

$$7 \times 5 = 35$$

$$5n$$

$$10 - 2 = 8$$

$$15 - 2 = 13$$

$$7 - 2 = 5$$

$$n - 2$$

$$2 \times 10 + 1 = 21$$

$$4 \times 10 + 1 = 41$$

$$10 \times 10 + 1 = 101$$

$$10n + 1$$

$$10 - 1 + 10 = 19$$

$$5 - 1 + 5 = 9$$

$$4 - 1 + 4 = 7$$

$$2n - 1$$

Tuesday

spectre
begrimed

spectre - a ghost: a dread of spectres and witches affected every aspect of daily life.

begrimed - blackened with ingrained dirt: they stand in front of begrimed windows.

Evaluating an author's use of figurative language

1. In an effort to safeguard the herons' nesting grounds, the Smiths gave a vast tract of land as a nature preserve in _____.
2. The senator _____ with a colleague in the hope of changing her vote on the tax bill.
3. Though Amy had moved as a child, her friendship with Jason _____ for more than two decades.
4. My Uncle Jim carefully combs his _____ locks of hair in an effort to conceal his bald spot.
5. Bob looked _____ at the pantry shelves and was convinced that there was not enough food to last the rest of the week.
6. Over many years, the pungent odors of garlic and boiled cabbage _____ themselves into every corner of the apartment.
7. The detective was thorough and _____ in his search for clues at the crime scene.
8. Jan viewed her college diploma as the _____ of four years of hard work.

insinuated
sparse
perpetuity
endured
expostulated
dubiously
culmination
methodical

Chapter 1: How Nobody came to the graveyard

Recap what has happened so far.

Continue to read Chapter 1.

"Owens!" called the pale woman, in a voice that might have been the rustle of the wind through the long grass. "Owens! Come and look at this!"

She crouched down and peered at something on the ground, as a patch of shadow moved into the moonlight, revealing itself to be a grizzled man in his mid-forties. He looked down at his wife, and then looked at what she was looking at, and he scratched his head.

"Mistress Owens?" he said, for he came from a more formal age than our own. "Is that what I think it is?"



The man Jack passed on the landing.

1. perpetuity
2. expostulate
3. endured
4. sparse
5. dubiously
6. insinuated
7. Methodical
8. culmination

Questions (continue from yesterday):

1. What clues does the author give the Owenses aren't alive?
2. Who was rattling the fates of the graveyard?
3. What happened to change the Owenses opinion of the stranger at the gate?
4. What caused other inhabitants of the graveyards to gather around the Owenses?
5. How did the man Jack enter the graveyard?
6. How has the author used a simile to describe the child's mother disappearing?
7. How does the author use comparatives to compare the man Jack and Silas?

GPS

Underline the modal verb in this sentence. Although I like my own painting, I think I might prefer yours.	Underline the three pronouns in this sentence. She couldn't wait for him to meet them.
Add in a suitable preposition. Your eyebrows are _____ your eyes.	Which is the correct article , a or an? ____ umbrella ____ delicious apple ____ orangutan ____ garden

Using the senses to describe

The author uses descriptive language to paint a vivid and detailed picture of the graveyard. Find one scene in the book in which the author evokes several of the senses. In the chart, give examples of language that evoked each of the senses noted.

Page _____	Sense Impressions
Sight	
Sound	
Smell	
Taste	
Touch	

Setting—The setting of a novel describes when and where the story takes place. When Bod meets with Silas, it is always after sundown, and the graveyard is described as a dark and shadowy place filled with the tombs, mausoleums, and other markers for the dead.



Setting description

Now, using the 5 sense and your vocabulary, write a setting description.

VOCABULARY		MODEL
vague drab common frantically guttural lucid imaginary rarely insinuated sparse perpetuity endured	expostulated dubiously culmination methodical malevolent, contempt, spectre, begrimed, sequester, irascible, malignant, discordant, incongruous, disquieting	<p>The fog was thinner as you approached the top of the hill. The half-moon shone, not as bright as day, not by any means, but enough to see the graveyard, enough for that.</p> <p>Look.</p> <p>You could see the abandoned funeral chapel, iron doors padlocked, ivy on the sides of the spire, a small tree growing out of the guttering at roof level.</p> <p>You could see stones and tombs and vaults and memorial plaques. You could see the occasional dash or scuttle of a rabbit or a vole or a weasel as it slipped out of the undergrowth and across the path.</p> <p>You would have seen these things, in the moonlight, if you had been there that night.</p> <p>You might not have seen a pale, plump woman, who walked the path near the front gates, and if you had seen her, with a second, more careful glance you would have realized that she was only moonlight, mist, and shadow. The plump, pale woman was there, though. She walked the path that led through a clutch of half-fallen tombstones towards the front gates.</p> <p>Spike-topped iron railings ran around part of the cemetery, a high brick wall around the rest of it.</p> <p>The graveyard kept its secrets.</p>

MATHS

5) $636,454 + 384,677$

6) $5,622,226 + 7,068,705$

7) $33,484 + 14,664$

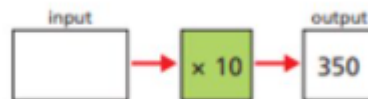
8) $904,106 + 633,390$

LO: To apply simple algebraic formulae

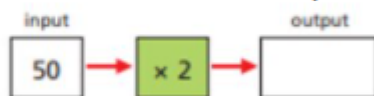
12.10.21

What is the next term?
10, 7, 4, 1, ?

What is the input?



What is the output?



What is the rule?

1, 2, 3, 5, 8....



SpongeBob says that in the equation $B + C = 13$, B must equal 10.

Day 2: Make generalisations; Understand and use simple formulae.

do not fit function rule

input output

2 5

input output

1 2 3 4 5 6 7 8 9 0

1 2 3 4 5 6 7 8 9 0

check values

give function

select function

Input 2 numbers and try to guess the rule of the function machine.

do not fit function rule

input output

1 2 3 4 5 6 7 8 9 0

1 2 3 4 5 6 7 8 9 0

check values

give function

select function

This machine does two things, one after the other, to each input. Each group in turn are going to suggest an input. We'll see the output and see if we can work out what the machine is doing...

<https://www.topmarks.co.uk/Flash.aspx?f=FunctionMachinev3>

<https://www.topmarks.co.uk/Flash.aspx?f=FunctionMachinev3>

Function machine rules


- The first function machine: $\times 2, + 1$. If n is the input, the number we put into the machine, we can write the output as $2n + 1$, which means we double the input, then add 1.
- The second function machine: $\times 10, - 4$. If n is the input, we can write the output as $10n - 4$.

Answers

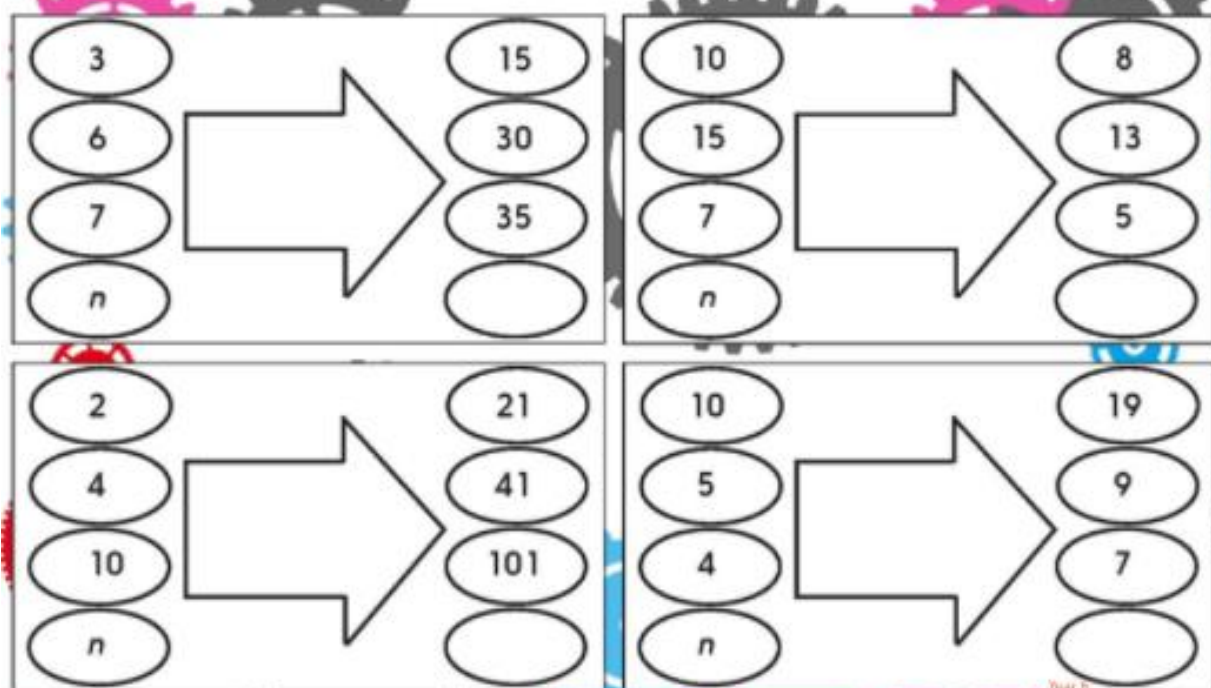
- 5) 1,021,131
- 6) 12,690,931
- 7) 48,148
- 8) 1,537,496

LO: To apply simple algebraic formulae

12.10.21

What is the next term? 10, 7, 4, 1, -2 Subtract 3	What is the input? <div>input 35 → × 10 → output 350</div>
What is the output? <div>input 50 → × 2 → output 100</div>	What is the rule? 1, 2, 3, 5, 8..... Add the previous 2 terms (eg: $1+2 = 3$. $2+3 = 5$)
 SpongeBob says that in the equation $B + C = 13$, B must equal 10. Nope, because the variables B and C are not fixed, they could represent multiple possibilities. eg: $B = 7$ and $C = 6$ or $B = 5$ and $C = 8$.	

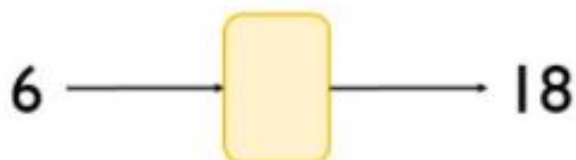
Work out what each function machine does. Write the output when n is the input.



Problem Solving

Eva has a one-step function machine.

She puts in the number 6 and the number 18 comes out.



What could the function be?

How many different answers can you find?

Answers

Day 2 Function machines Sheet 1

$$3 \times 5 = 15$$

$$6 \times 5 = 30$$

$$7 \times 5 = 35$$

$$5n$$

$$10 - 2 = 8$$

$$15 - 2 = 13$$

$$7 - 2 = 5$$

$$n - 2$$

$$2 \times 10 + 1 = 21$$

$$4 \times 10 + 1 = 41$$

$$10 \times 10 + 1 = 101$$

$$10n + 1$$

$$10 - 1 + 10 = 19$$

$$5 - 1 + 5 = 9$$

$$4 - 1 + 4 = 7$$

$$2n - 1$$

English

sequester

irascible

sequester - isolate or hide away: she sequestered the dagger deep in her coat pocket.

irascible - having or showing a tendency to be easily angered: he appeared to be an irascible and difficult man.

To analyse an author's use of dialogue

Vocabulary: Antonyms are words with opposite meanings. Draw a line from each word in column A to its antonym in column B. Then use the words in column A to fill in the blanks in the sentences below.

<u>A</u>	<u>B</u>
1. vague	a. unusual
2. drab	b. calmly
3. common	c. frequently
4. frantically	d. clear
5. guttural	e. real
6. lucid	f. confusing
7. imaginary	g. melodic
8. rarely	h. colorful

Language Study: Dialect

Dialect is a form of language that is spoken in a particular area by a particular group. It differs from standard language in its use of grammar, pronunciation, and vocabulary. In *The Graveyard Book*, Neil Gaiman uses dialect to help the reader imagine the characters. Cockney dialect to capture the unique expressions, pronunciations, and speech patterns of the Bishop of Bath and Wells, who is one of the ghouls. Read these examples of his dialect, and then write a translation.

The Bishop of Bath and Wells said, "Now me lad, what's your story, eh? And don't tell any porkies, remember as how you're talkin' to a bishop."

"Don't be like that, Yer Grace," said the Bishop of Bath and Wells. "'Ave a blinking 'eart. Look at the little mite. 'Asn't 'ad a decent meal in 'e don't know 'ow long."

"Smart as a whip, sharp as a tack, you'd have to get up pretty late at night to put anything past this lad," said the Bishop of Bath and Wells.

Chapter 1: How Nobody came to the graveyard

Recap what has happened so far.

Continue to read Chapter 1.

"I was looking for someone," said the man Jack, slipping his right hand back into his coat pocket, so the knife was hidden, but there if he needed it.

"In a locked graveyard, at night?" said the stranger.



The man Jack passed on the landing.

Questions (continue from yesterday):

1. How does an author show when a different speaker is talking?
2. Based on what you have learnt about the man Jack, what do you expect his voice to sound like, why?
3. What does Silas do to the man Jack to get him to leave the graveyard?
4. What clues does Josiah Worthington's dialogue give you about his character? (*obduracy* - stubbornly refusing to change one's opinion or course of action)
5. Does Josiah Worthington want the baby to stay, how do you know?
6. What sort of character is Caus Pompeius? Explain your reasoning.
7. When reading, how can creating voices and images for characters help with your understanding?

GPS

<p>Underline the adjectives.</p> <p>His shoes were black leather, and they were polished to such a shine that they looked like dark mirrors: you could see the moon reflected in them, tiny and half full.</p>	<p>Add co-ordinating conjunctions.</p> <p>The real moon shone through the casement window. Its light was not bright, ____ it was diffused by the mist, ____ the man Jack would not need much light.</p>
<p>Underline the subject in this sentence.</p> <p>Incredibly, the missing ring was found by a dog.</p>	<p>Underline the articles.</p> <p>The knife had done almost everything it was brought to that house to do, and both the blade and the handle were wet.</p>

1. d 2. h 3. a 4. b 5. g 6. f 7. e 8. c;

Dialogue — Write a short dialogue between Silas and the man Jack.

RECAP – CHECKLIST FOR SPEECH	MODEL
	<p>"I was looking for someone," said the man Jack, slipping his right hand back into his coat pocket, so the knife was hidden, but there if he needed it.</p> <p>"In a locked graveyard, at night?" said the stranger.</p> <p>"It was just a baby," said the man Jack. "I was just passing, when I heard a baby cry, and I looked through the gates and I saw him. Well, what would anyone do?"</p> <p>"I applaud your public-spiritedness," said the stranger. "Yet if you managed to find this child, how were you planning to get out of here with it? You can't climb back over the wall holding a baby."</p> <p>"I would have called until someone let me out," said the man Jack. A heavy jingling of keys. "Well, that would have been me, then," said the stranger. "I would have had to let you out." He selected one large key from the key ring, said "Follow me."</p> <p>The man Jack walked behind the stranger. He took his knife from his pocket. "Are you the caretaker, then?"</p>

Maths

1) $8,899,612 + 5,818,451$

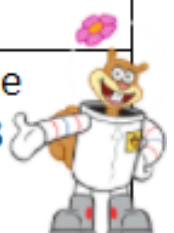
2) $92,572 + 39,504$

3) $578,700 + 984,997$

4) $5,044,486 + 7,741,903$

LO: To express missing number problems algebraically **13.10.21**

<p>What is the rule? 2, 6, 18, 54.....</p>	<p>What is the output?</p> <p>input → -7 → output</p> <p>50 → -7 → <input type="text"/></p>
<p>What is the input?</p> <p>input → -2 → output</p> <p><input type="text"/> → -2 → 21</p>	<p>What is the next term?</p> <p>2, 9, 16, 23, ?</p>
<p>Sandy says there are only 2 possibilities for D and E in the equation $D \times E = 24$. $D = 2$ and $E = 12$ and $D = 8$ and $C = 3$ Can you help?</p>	



Answers

- 1) 14,718,063
- 2) 132,076
- 3) 1,563,697
- 4) 12,786,389

LO: To express missing number problems algebraically 13.10.21

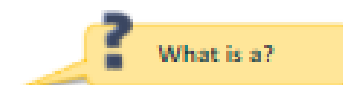
What is the rule? $2(x3)$, $6(x3)$, $18(x3)$, 54.....	What is the output? <div>input 50 \rightarrow - 7 \rightarrow output 47</div>
What is the input? <div>input 23 \rightarrow - 2 \rightarrow output 21</div>	What is the next term? 2, 9, 16, 23, 30 Add 7
Sandy says there are only 2 possibilities for D and E in the equation $D \times E = 24$. $D = 2$ and $E = 12$ and $D = 8$ and $C = 3$. Can you help? You could also have $D = 24$ and $E = 1$ and $D = 6$ and $E = 4$. You could also swap <u>all</u> of these variables round.	



$$25 + a = 30$$

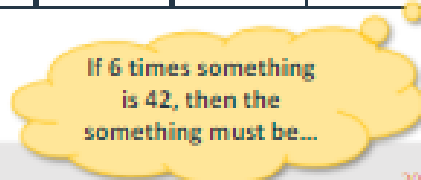
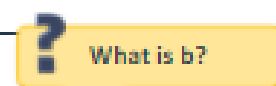
This is called an equation and 'a' stands for a mystery number.

30
25 a



$$6b = 42$$

42					
b	b	b	b	b	b



$$35 \div c = 7$$

35						
c	c	c	c	c	c	c



What is c?

We can think of this as 7 lots of something makes 35.

$$3 \times 5 = 17 - d$$



This one needs a bit of working out first. Have a chat with your maths partner.

First, we need to work out 3×5 .
 $15 = 17 - d$, so d must be...?



$$3e + 1 = 18 - 5$$

$$3e + 1 = 13$$

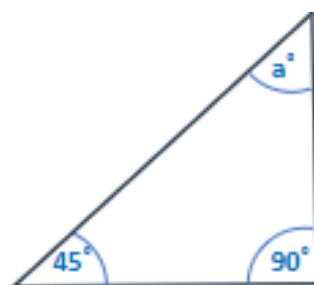
$$3e = 12$$

$$\text{So } e = 4$$

Which part can we work out first?



Challenge! Work in pairs to write your own missing number problem for another pair to solve. We'll share a few with the class.



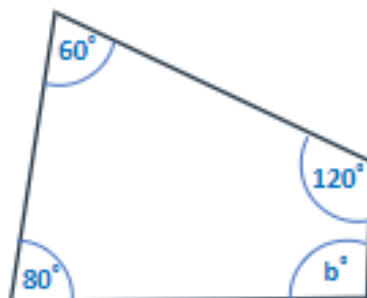
What is the total of the angles inside a triangle?
How can we find a?



$$90^\circ + 45^\circ + a^\circ = 180^\circ$$

$$135^\circ + a^\circ = 180^\circ$$

$$\text{So } a = 45^\circ$$



What is the total of the angles inside a quadrilateral?
How can we find b?



$$80^\circ + 60^\circ + 120^\circ + b^\circ = 360^\circ$$

$$260^\circ + b^\circ = 360$$

$$\text{So } b = 100^\circ$$

Solving equations

Sheet 2

Solve these equations:

1. $15 - a = 7$

3. $4c = 48$

5. $5e + 2 = 32$

32	
5e	2

7. $72^\circ + 36^\circ + e = 180^\circ$



9. $45^\circ + 85^\circ + 120^\circ + c = 360^\circ$



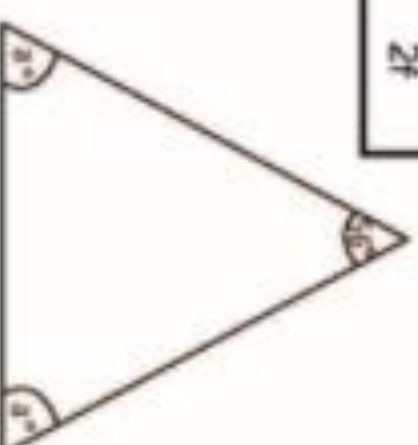
2. $8 + b = 13$

4. $90 \div d = 3$

6. $10 + 2f = 16$

16	
10	2f

8. $56^\circ + 2a = 180^\circ$

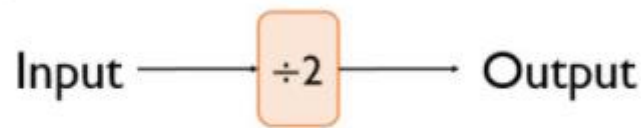


10. $130^\circ + 150^\circ + 2d = 360^\circ$



Problem Solving

Dora puts a number into the function machine.



Dora's number is:

- A factor of 32
- A multiple of 8
- A square number

What is Dora's input?

What is her output?

Answers

Day 1 Solving equations Sheet 2

1. $a = 8$
2. $b = 5$
3. $c = 12$
4. $d = 30$
5. $e = 6$
6. $f = 3$
7. $e = 72^\circ$
8. $a = 62^\circ$
9. $c = 110^\circ$
10. $d = 40^\circ$

Thursday

English

malignant

discordant

malignant - evil in nature or effect; malevolent: the evil queen was portrayed by the author as malignant and powerful.

discordant - (of sounds) harsh and jarring because of a lack of harmony: the ghosts discordant screeching echoed through the house.

Examining an author's vocabulary choices.

1. Tan, olive, and gray are considered _____ colors in contrast to red, orange, and yellow.
 2. The butterfly beat its wings _____ as it tried to escape from the spider web.
 3. Even though the teacher did her best to answer our questions, her answers were so _____ as to make us wonder if we would pass the test.
 4. Children of ten prefer to read about _____ characters, such as pixies or elves, rather than real characters.
 5. I am counting on you to give me brief and _____ directions so that I do not get lost.
 6. Cardinals and blue jays are a(n) _____ sight around most bird feeders.
 7. In Northern states, one _____ sees a mosquito during the winter months.
 8. The dog made a(n) _____ sound deep in the back of its throat as the stranger approached the house.
1. vague
 2. drab
 3. common
 4. frantically
 5. guttural
 6. lucid
 7. imaginary
 8. rarely

Chapter 1: How Nobody came to the graveyard

Recap what has happened so far.

Continue to read Chapter 1.

"Exactly," said Silas, nodding. "A very good point, Sir Josiah. I couldn't have put it better myself. And for that reason, if for no other, it is vital that the child be raised with as little disruption as possible to the, if you'll forgive the expression, the *life* of the graveyard." With that he strolled over to Mrs. Owens, and he looked down at the infant asleep in her arms. He raised an eyebrow. "Does he have a name, Mrs. Owens?"

"Not that his mother told me," she said.

"Well, then," said Silas. "His old name won't be of much use to him now, anyway. There are those out there who mean him harm. Suppose we pick a name for him, eh?"



The man Jack passed on the landing.

Questions (continue from yesterday):

Find these words as you read. Pause at each one, read around the word and discuss its meaning – check the meaning on an iPad or laptop.

- | | |
|----------------|-------------------|
| 1. proconsul | 6. flagstone |
| 2. scandalized | 7. wistful |
| 3. decreed | 8. amphitheatre |
| 4. ballad | 9. Democracy |
| 5. dubiously | 10. north-western |

Creating a gothic villain

- How would you describe the man Jack?



The man Jack paused on the landing.

Create your own.

- Map words and phrases.
- Remember gothic horror – think dark – vampires, evil Victorian criminals, ghosts and ghouls.



Example

Asclepius

Hoarse, rasping, discordant voice – muffled by his mask.

Talks in rhymes and riddles

Has a mysterious friend who chases lost children into the graveyard

Is able to move silently.

Folk tales say they steal the souls of wayward children



Wears old hessian sack clothing.

Plague doctor's mask

Fingers are made of begrimed roots

Carries around a incense burner – constantly enveloped in mist.

Tall slender and towers over people.

The smell of a rotting corpse lingers in the air around him.

Maths

5) $47,536 + 13,023$

6) $436,376 + 599,893$

7) $5,089,500 + 1,315,771$

8) $93,670 + 70,400$

LO: To express missing number problems algebraically

14.10.21



<p>What is the output?</p> <p>input output</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">50</div> <div style="color: red; font-weight: bold; margin: 0 10px;">→</div> <div style="background-color: yellow; padding: 5px; margin: 0 10px;">$\div 10$</div> <div style="color: red; font-weight: bold; margin: 0 10px;">→</div> <div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 10px;"></div> </div>	<p>What is the rule?</p> <p>14, 7, 3.5, 1.75...</p>
<p>What is the next term?</p> <p>28, 21, 14, 7, ?</p>	<p>What is the input?</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 60px; height: 30px; margin: 0 10px;"></div> <div style="color: red; font-weight: bold; margin: 0 10px;">→</div> <div style="background-color: yellow; padding: 5px; margin: 0 10px;">$\div 3$</div> <div style="color: red; font-weight: bold; margin: 0 10px;">→</div> <div style="border: 1px solid black; padding: 5px; margin: 0 10px;">9</div> </div>
<p>Squidward says that 'n' is a mystery number and that he never knows what it is.</p>	

Day 2: Express missing number problems algebraically.

The outside red numbers are multiplied to give the blue numbers in the central part of the table. Our challenge is to work out what letters ' a ', ' b ' and ' c ' represent.

What do we multiply by 3 to give 21?

\times	3	b
a	21	56
c	12	32

$3a = 21$, so $a = ?$

$ab = 56$ but we know $a = 7$, so
 $7b = 56$, so $b = ?$

How can we work out what c represents?

$3c = 12$

So $c = ?$

\times	d	e
f	60	36
8	40	24



Work in pairs to agree what numbers d , e and f represent.

Answers

- 5) 60,559
- 6) 1,036,269
- 7) 6,405,271
- 8) 164,070

LO: To express missing number problems algebraically

14.10.21

<p>What is the output?</p> <p>input 50 \rightarrow $\div 10$ \rightarrow 5 output</p>	<p>What is the rule?</p> <p>$14(\div 2)$, $7(\div 2)$, $3.5(\div 2)$, $1.75\dots$</p>
<p>What is the next term?</p> <p>28, 21, 14, 7, 0</p> <p>-7 or 7 times tables backwards</p>	<p>What is the input?</p> <p>input 27 \rightarrow $+ 3$ \rightarrow 9 output</p>
<p>Squidward says than 'n' is a mystery number and that he never knows what it is. In fact, 'n' can be any number in a function. When 'n' changes, the outcome of the function changes.</p>	



Algebra puzzles

Sheet 2

Work out what numbers the letters represent in these puzzles and problems.

1.

x	a	b
4	20	48
c	35	84

2.

x	e	f
d	24	28
9	54	63

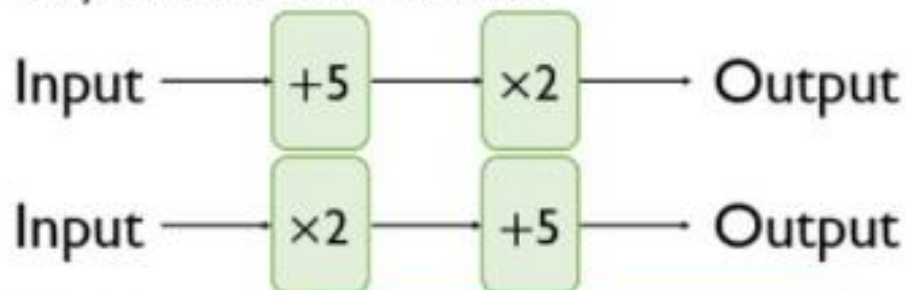
3.

x	12	g
3	36	30
h	72	i

- Jason has k trading cards. Sally has 32. Altogether they have 60 trading cards. How many trading cards does Jason have?
- Maya has 57 books. Eva has m more books than Maya. Altogether they have 120 books. How many more books does Eva have?
- Chef has bought n buns at 20p each. He spent £40. How many buns did he buy?
- Marcus collected 40 shells. He gave p shells to his sister. He was left with 32 shells. How many did he give to his sister?

Problem Solving

Teddy has two function machines.



He says,



The function machines will give the same answer.

Is Teddy correct?

Is there an input that will give the same output for both machines?

Answers:

Day 2 Algebra puzzles Sheet 2

1. $a = 5$ $b = 12$ $c = 7$
2. $d = 4$ $e = 6$ $f = 7$
3. $g = 10$ $h = 6$ $i = 60$
4. $k = 28$
5. $m = 63$
6. $n = 200$
7. $p = 8$

Friday

English

incongruous

disquieting

incongruous - not in harmony or keeping with the surroundings or other aspects of something:

the pristine interior was incongruous with the dilapidated surroundings outside.

disquieting - inducing feelings of anxiety or worry: the woman in black's gaze was

disquieting; a shiver ran down his spine

Examining an author's vocabulary choices.

Antonyms:	Prefix:	Root word:	Suffix:
Synonyms:		Word: disquieting	Etymology:
Definition:			
Sentences:			

Chapter 1: How Nobody came to the graveyard

Recap what has happened so far.

Continue to read Chapter 1.

A huge white horse, of the kind that the people who know horses would call a "grey," came ambling up the side of the hill. The pounding of its hooves could be heard before it was seen, along with the crashing it made as it pushed through the little bushes and thickets, through the brambles and the ivy and the gorse that had grown up on the side of the hill. The size of a Shire horse it was, a full nineteen hands or more. It was a horse that could have carried a knight in full armor into combat, but all it carried on its naked back was a woman, clothed from head to foot in grey. Her long skirt and her shawl might have been spun out of old cobwebs.



GPS

<p>The horse paused beside the obelisk. What is an obelisk.</p>	<p>What's the figurative device? In a voice like the chiming of a hundred tiny silver bells she said only, "The dead should have charity." And she smiled.</p>
<p>The horse, which had been contentedly ripping up and masticating a clump of thick grass, stopped then. Write a synonym for masticating.</p>	<p>He found the tall house on the side of the hill, and he examined the three bodies he found there, and he studied the pattern of the knife-wounds. In bold is an example of _____.</p>

Questions (continue from yesterday):

1. Using the images and the text, what sort of character is the Lady on the Grey – explain your reasons with evidence.
2. How do the people of the graveyard react to seeing the Lady on the Grey? Why do you think this is?
3. Why has the author used this simile? *The dead are not superstitious, not as a rule, but they watched her as a Roman Augur might have watched the sacred crows circle, seeking wisdom, seeking a clue.* An **augur** was a priest and official in the classical Roman world. His main role was the practice of augury: Interpreting the will of the gods by studying the flight of birds.

Character description

Write a character description.

VOCABULARY		TARGETS	MODEL
vague drab common frantically guttural lucid imaginary rarely insinuated sparse perpetuity endured	expostulated dubiously culmination methodical malevolent, contempt, spectre, begrimed, sequester, irascible, malignant, discordant, incongruous, disquieting		He flexed his fingers. The man Jack was, above all things, a professional, or so he told himself, and he would not allow himself to smile until the job was completed. His hair was dark and his eyes were dark and he wore black leather gloves of the thinnest lambskin. His shoes were black leather, and they were polished to such a shine that they looked like dark mirrors: you could see the moon reflected in them, tiny and half full. The man Jack's eyes were accustomed to the dim moonlight, so he had no desire to turn on an electric light. And light was not that important, after all. He had other skills. The man Jack sniffed the air. He ignored the scents that had come into the room with him, dismissed the scents that he could safely ignore, honed in on the smell of the thing he had come to find. He could smell the child: a milky smell, like chocolate chip cookies, and the sour tang of a wet, disposable, nighttime diaper

Maths

1) $91,454 + 79,931$









2) $459,294 + 830,411$

3) $6,890,428 + 1,801,558$

4) $90,843 + 97,655$

LO: To find pairs of numbers that satisfy an equation with two unknowns

15.10.21

Solve to find A $A + 13 = 28$		What is the rule? 12, 8, 6, 5.....	
Find B and C	X	11	C
	B	44	24
	7	77	42
		 +  +  = 33  +  +  = 30 What is the value of  ?	
 The rule is $3n + 2$, Plankton says that if n is 2 then the answer is 4.			

Day 3: Find pairs of numbers that satisfy an equation with two unknowns, enumerate possibilities of combinations of two variables.

$$a + b = 10$$

a and b are two new mystery numbers

Discuss in pairs what numbers a and b might represent.

There are LOTS of possibilities.

List some pairs of possibilities.

a	b
10	0
9	1
8	2
7	3
6	4
5	5
4	6
3	7
2	8
1	9
0	10

$$c \times d = 24$$

Discuss in pairs what whole numbers c and d might represent.

List ALL the pairs of possibilities on your whiteboard.

c	d
1	24
2	12
3	8
4	6
6	4
8	3
12	2
24	1

$$2e + f = 8$$

8	
$2e$	f

Work with a partner to find a pair of whole numbers which will work.

Test out your ideas by substituting for the letters, e.g. if you think 3 and 2 will work, work out $2 \times 3 + 2 = 8$. So, e could equal 3 and f equal 2. Could e equal 2 and f equal 3? Try it!

Double a number, plus another number makes 8...
If e is 1, then f must be...
If e is 2, then...

e	f
0	8
1	6
2	4
3	2
4	0




Some interesting patterns in this table.

Answers

- 1) 171,385
- 2) 1,289,705
- 3) 8,610,986
- 4) 188,498

LO: To find pairs of numbers that satisfy an equation with two unknowns

15.10.21

Solve to find A $A = 15 + 13 = 28$			What is the rule? $12(\text{half} + 2), 8(\text{half} + 2), 6(\text{half} + 2), 5\text{.....}$		
Find B and C	X	11	 = 33 $\text{Triangle} = 8$  = 30 What is the value of  ?		
	B=4	44			
	7	77			
<p>The rule is $3n + 2$, Plankton says that if n is 2 then the answer is 4. Plankton just did $n(2)+2$ and forgot to multiply $n(2) \times 3$ first, before adding 2. Answer = 8.</p>					

Can you find 3 pairs of number which can be used to satisfy these equations?

Challenge: Can you create an equation for your partner to solve?

$$a + b = 9$$

$$c \times d = 15$$

$$10 - e = f$$

$$g + h + 1 = 11$$

$$j \times k - 1 = 15$$

$$m + n - 2 = 8$$

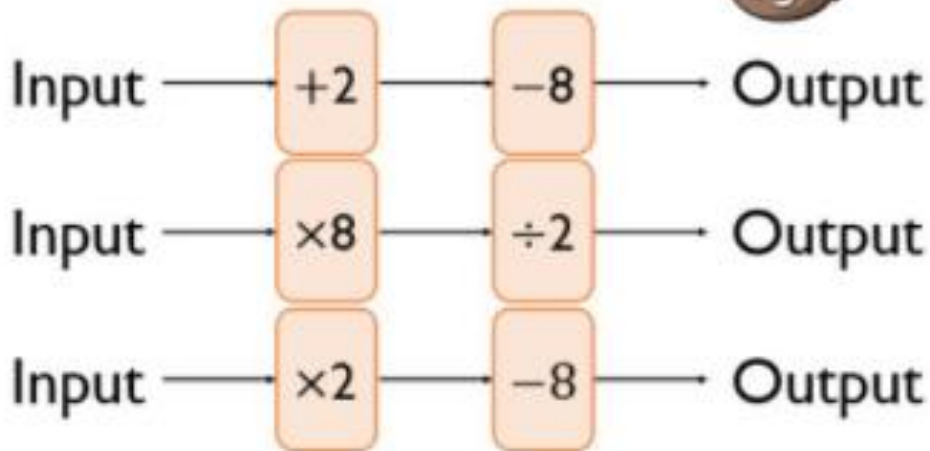
$$p \times q = 20$$

$$14 - r = s$$

$$2t + u = 10$$

Problem Solving

Mo has the following function machines.



Explain which of these can be written as single function machines.

Answers

Day 3 Equations with two unknowns Sheet 1

$a + b = 9$

$a = 0, b = 9, a = 1, b = 8, a = 2, b = 7, a = 3, b = 6, a = 4, b = 5, a = 5, b = 4, a = 6, b = 3, a = 7, b = 2, a = 8, b = 1, a = 9, b = 0$

$c \times d = 15$

$c = 1, d = 15, c = 3, d = 5, c = 5, d = 3, c = 15, d = 1.$

$10 - e = f$

$e = 0, f = 10, e = 1, f = 9, e = 2, f = 8, e = 3, f = 7, e = 4, f = 6, e = 5, f = 5, e = 6, f = 4, e = 7, f = 3, e = 8, f = 2, e = 9, f = 1, e = 10, f = 0$

$g + h + 1 = 11$

$g = 0, h = 10, g = 1, h = 9, g = 2, h = 8, g = 3, h = 7, g = 4, h = 6, g = 5, h = 5, g = 6, h = 4, g = 7, h = 3, g = 8, h = 2, g = 9, h = 1, g = 10, h = 0$

$j \times k - 1 = 15$

$j = 1, k = 16, j = 2, k = 8, j = 4, k = 4, j = 8, k = 2, j = 16, k = 1$

$m + n - 2 = 8$

$m = 0, n = 10, m = 1, n = 9, m = 2, n = 8, m = 3, n = 7, m = 4, n = 6, m = 5, n = 5, m = 6, n = 4, m = 7, n = 3, m = 8, n = 2, m = 9, n = 1, m = 10, n = 0$

$p \times q = 20$

$p = 1, q = 20, p = 20, q = 1, p = 2, q = 10, p = 10, q = 2, p = 4, q = 5, p = 5, q = 4$

$14 - r = s$

$r = 0, s = 14, r = 1, s = 13, r = 2, s = 12, r = 3, s = 11, r = 4, s = 10, r = 5, s = 9, r = 6, s = 8, r = 7, s = 7, r = 8, s = 6, r = 9, s = 5, r = 10, s = 4, r = 11, s = 3, r = 12, s = 2, r = 13, s = 1, r = 14, s = 0$

Science

In this lesson, we will be learning about the difference between night and day. You will find out how the earth turns and why night and day happen.

<https://classroom.thenational.academy/lessons/what-is-the-difference-between-night-and-day-60wp2c>

Computing

<https://codeclub.org/en/python2>

RE

In today's lesson we will be learning all about how the religion of Judaism began. We'll learn about Abraham, an important prophet who lived 4000 years ago.

<https://classroom.thenational.academy/lessons/what-was-the-first-covenant-between-abraham-and-god-cdj0t>

Geography

In this lesson we will learn how to locate specific areas on OS maps and practice the skill of reading four and six-figure grid references.

<https://classroom.thenational.academy/lessons/what-are-os-maps-cgtk6r>

History

In this lesson, we will learn about how the Industrial Revolution transformed working-conditions in England between 1750-1850.

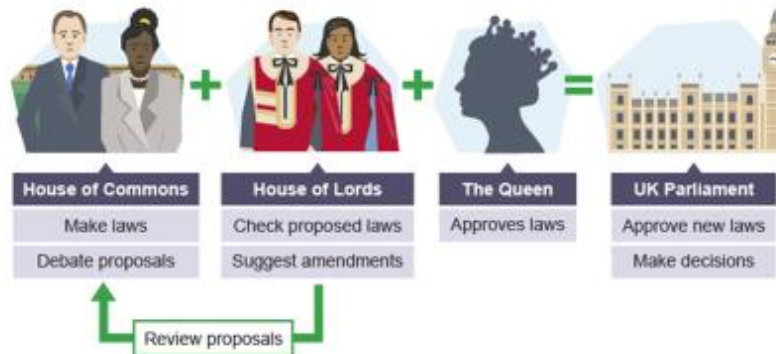
<https://classroom.thenational.academy/lessons/child-labour-during-the-industrial-revolution-6gup2r>

PDW

Date

PDW

To understand what constitutes a fair democracy.



Article 4

Governments must do all they can to make sure every child can enjoy their rights by creating systems and passing laws that promote and protect children's rights.

1. Free and fair elections

Reflects the free expression of the will of the people.

- Regular
- Secret ballot
- Universal suffrage
- Majority rule

4. Active participation of citizens

Essential to democracy is the active participation of citizens.

- Civic
- Electoral
- Political voice

2. Multi party system

A multiparty system allows for a wider range of ideas.

- Choice
- Scrutiny
- Limitation of power

5. The rule of law

Public officials can only act if they are authorised to do so by law. No one is above the law.

- Laws must be clear, publicised, stable and evenly apply.
- Citizens are protected from the abuse of power.

3. Protection of human rights

A strong democracy should also aim to protect the interest of the people, protect human rights and civil liberties.

- Freedom of Speech
- Freedom of association
- Individual and minority rights

6. Separation of powers

It is a fundamental principle whereby powers and responsibilities are divided among the legislative branch, executive branch, and judicial branch.

- Scrutiny and accountability
- Checks and balances

Art Design Sheet

I am making a..... By.....

Don't forget to label your design, this will include the ingredients used.

Full Text – Graveyard Book – Neil Gaimon

https://onlinereadfreenovel.com/neil-gaiman/33915-the_graveyard_book.html