

Good Morning Everyone.

I am really looking forward to seeing you this morning and hearing what you think about First Impressions.

Today, there's more work to do on your All About Me booklets and then some more number sequences.

Because of the lockdown, I have been spending more time than usual in my garden – it is normally quite neglected!

It has been a real treat to spend time every day watching the changing seasons. Trees in my garden that were bare at the start of lockdown are now full of leaves. Nature is amazing! I saw this about trees and thought it was good advice.

I hope to see you soon - on Zoom!

Best wishes,

Mrs Starbuck



Year 6 Summer Term 1 Answers

6

a
Write a subjunctive mood sentence about what may happen if you become a parent in the future.

Accept any subjunctive mood sentence that references the future, e.g. If I were to become a parent, I will let my children stay up late.

b
Mr Whoops has accidentally jumbled up an adverb that show time. Can you help him to unjumble them?

ayotd

today



c
The word 'type' belongs to two different word classes. Tick the sentence that uses 'type' as a verb.



The office assistant began to **type** the letter.



An emu is a **type** of flightless bird.

d
Tick the box to say whether the underlined word is an adverb or an adjective.

	adverb	adjective
She arrived <u>early</u> for the meeting.	☒	☐
They had an <u>early</u> morning meeting.	☐	☒

e
Add in the missing word class and punctuation labels.

The clumsy waiter dropped soup in

adjective

verb

my lap – I certainly didn't give

dash

adverb of possibility

him a tip!

f
Replace the underlined words with a synonym. Use a thesaurus to help.

Rosa Parks was an African-American woman who made history with her comparatively small action of sitting still on a bus, which went on to spark major changes in American society.



Accept any more ambitious synonyms for 'comparatively' and 'major', e.g. relatively and key.

Year 6 Summer Term 1 Answers

6

a
Write a subjunctive mood sentence about what may happen if you become a parent in the future.

Accept any subjunctive mood sentence that references the future, e.g. If I were to become a parent, I will let my children stay up late.

d
Tick the box to say whether the underlined word is an adverb or an adjective.

	adverb	adjective
She arrived <u>early</u> for the meeting.	✓	
They had an <u>early</u> morning meeting.		✓

Use 'late' as an adverb in your own sentence.

e.g. He was very late getting up this morning.

b
Mr Whoops has accidentally jumbled up **two** adverbs that show time. Can you help him to unjumble them?

ayotd eercnyltr



_____ today _____

_____ recently _____

e
Add in the missing word class and punctuation labels.

The clumsy waiter dropped soup in

adjective

verb

my lap – I certainly didn't give

dash

adverb of possibility

him a tip!

c
The word 'type' belongs to two different word classes. How is the word 'type' used in these sentences?

The office assistant began to **type** the letter. verb

An emu is a **type** of flightless bird. noun

f
Replace the underlined words with a synonym.

Rosa Parks was an African-American woman who made history with her comparatively small action of sitting still on a bus, which went on to spark major changes in American society.



Accept any more ambitious synonyms for 'comparatively' and 'major', e.g. relatively and key.

Year 6 Summer Term 1 Answers

6

a
Accept any subjunctive mood sentence that references the future, e.g. If I were to become a parent, I will let my children stay up late.

d
Tick the box to say whether the underlined word is an adverb or an adjective.

	adverb	adjective
She arrived <u>early</u> for the meeting.	✓	
They had an <u>early</u> morning meeting.		✓

e.g. He was very late getting up this morning.

e.g. The late afternoon sun was beaming through the window.

b
Mr Whoops has accidentally jumbled up **three** adverbs that show time. Can you help him to unjumble them?

ayotd eercnyltr eefrob

today

recently

before



e
Add in the missing word class and punctuation labels.

The clumsy waiter dropped soup in

adjective

verb

my lap – I certainly didn't give

dash

adverb of possibility

him a tip!

Now, write and label your own sentence on the back of your mat.

c
Accept two sentences where 'type' is used as a verb and a noun, e.g. The office assistant began to type the letter. AND An emu is a type of flightless bird.

f
Replace the underlined words with a synonym.

Rosa Parks was an African-American woman who made history with her comparatively small action of sitting still on a bus, which went on to spark major changes in American society.



Accept any more ambitious synonyms for 'comparatively', 'major' and 'society', e.g. relatively, key and culture.

Spelling Answers

Word endings: al, el, il, le

To achieve 100 you need to correctly spell words with these letters at the ends.

1 Circle the correct **spelling** for each sentence.

- a) The gymnast won a gold medal / meddle.
- b) A rumble / rumbel of thunder could be heard.
- c) A stone had to be removed from the child's nostrul / nostril.
- d) Can you put these words in alphabetical / alphabeticle order?
- e) Here is an exampul / example of what you need to do.

2 Add two letters to each of the words below to complete the spellings.

- a) Some food contains added chemicalals.
- b) If you swivel round on your chair, you will be able to see.
- c) The cables behind the computer are in a mess.
- d) People in the desert still use camels for transport.
- e) It is traditional to give presents on birthdays.

3 Check the spelling of the el / al ending words in the passage below. Underline the **incorrect spellings** and write them correctly below.

We were playing marbels in the garden but the gravle on the path kept making them tumble in the wrong directions. However, while so close to the ground, I saw a beautiful beetel with colours like jewles on its back. It was possibel to pick it up so I put it in a jar to show my teacher. She said it was not a regional example, but a tropicel one. What a discovery!

<u>marbles</u>	<u>gravel</u>	<u>beetle</u>
<u>jewels</u>	<u>possible</u>	<u>tropical</u>

Maths answers

Sequences

Slide 1

1. 2, 4, 8, 16 32, 64, 128, 256, 512, 1024
2. 73, 68, 63, 58, 53, 48, 43, 38, 33, 28
3. 3, 4, 6, 9 13, 18, 24, 31, 39, 48
4. 8, 4, 2, 0, -2, -4, -8, -16, -32, -64
5. 1, 4, 9, 16 25, 36, 49, 64, 81, 100
6. 3, 6 12, 24, 48, 96, 192, 384, 768, 1536

Slide 2

7. 2, 5, 8, 11, 14, 17
8. 1, 2, 4, 8, 16, 32
9. 74, 69, 64, 59, 54, 49
10. 64, 32, 16, 8, 4, 2
11. 1, 3, 9, 27, 81, 243,
12. 2, 20, 200, 2000, 20,000, 200,000
13. 1.2, 1.1, 1.0, 0.9, 0.8, 0.7
14. $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$

Slide 3

- | | | Rule |
|----|---------------------------|--------|
| 1. | 2, 4, 6, 8, 10, 12 | +2. |
| 2. | 5, 9, 13, 17, 21, 25 | +4 |
| 3. | 56, 51, 46, 41, 36 | -5 |
| 4. | 0.3, 0.55, 0.8, 1.05, 1.3 | +0.25. |
| 5. | 7, 13, 19, 25, 31, 37 | +6 |
| 6. | 90, 77, 64, 51, 38, 25 | -13. |

Slide 4

- | | | Rule |
|-----|---------------------------------|------|
| 7. | 4, 8, 12, 16, <u>20, 24, 28</u> | +4 |
| 8. | 5, 9, 13, 17, 21, <u>25, 29</u> | +4 |
| 9. | 4, 7, 10, 13, <u>16, 19, 21</u> | +3 |
| 10. | 4, 6, 8, 10, <u>12, 14, 16</u> | +2 |
| 11. | 3, 5, 7, 9, <u>11, 13, 15</u> | +2 |

Tuesday 19th May

L.O. To find the n th term in a sequence

Yesterday, you were finding the *rule* in a sequence of numbers or shapes. This is how you move from one *term* to the next.

Sequence: 7, 11, 15, 19 rule: add 4

A *term* is the name for any number in the sequence – the first number will be the first term, the second number, the second term, the third, the third term and so on.

In the sequence above, 19 is the fourth term.

Today, we are going to think about how we can find any number in a sequence. This is called : **finding the n th term** . It is really useful because it allows you to find *any* term in a sequence without having to work through all of the them.

As a Formula

Saying "starts at 3 and jumps 2 every time" is fine, but it doesn't help us calculate the:

- 10th term,
- 100th term, or
- n^{th} term, where n could be any term number we want.

So, we want a formula with " n " in it (where n is any term number).

So, What Can A Rule For $\{3, 5, 7, 9, \dots\}$ Be?

Firstly, we can see the sequence goes up 2 every time, so we can **guess** that a Rule is something like "2 times n " (where " n " is the term number). Let's test it out:

Test Rule: $2n$

n	Term	Test Rule
1	3	$2n = 2 \times 1 = 2$
2	5	$2n = 2 \times 2 = 4$
3	7	$2n = 2 \times 3 = 6$

That **nearly** worked ... but it is **too low** by 1 every time, so let us try changing it to:

Test Rule: $2n+1$

n	Term	Test Rule
1	3	$2n+1 = 2 \times 1 + 1 = 3$
2	5	$2n+1 = 2 \times 2 + 1 = 5$
3	7	$2n+1 = 2 \times 3 + 1 = 7$

That Works!

So instead of saying "starts at 3 and jumps 2 every time" we write this:

$$2n+1$$

Now we can calculate, for example, the **100th term**:

$$2 \times 100 + 1 = \mathbf{201}$$

In an arithmetic sequence, the difference between the terms is constant (this means it will be the same).

The n th term could be any term in the sequence.

The n th term is a formula with ' n ' in it which enables you to find any term in the sequence without having to go up one at a time.

The letter ' n ' stands for the **term number** so to find the 50th term you would substitute ' n ' with 50.

So in the sequence 7, 11, 15, 19

1. The n th term of a sequence is always written as $an + b$ (Remember when you have two letters or a letter and a number next to each other there is a missing $\times$ between them so an means $a \times n$)
2. The a is always the difference between the terms - the difference in this sequence is 4 so we know it is $4n + b$
3. The b is found by looking at the first term, where $n=1$, the first term is 7, and $4n=4 \times 1=4$ to get to 7 we need to add 3, so $B = 3$
4. This means that **the n th term = $4n + 3$**

If I want to find the 50th term, I can substitute n with 50 and in this case $4n + 3$ will be $4 \times 50 + 3 = 203$ therefore, I know that the 50th number in this sequence will be 203. Pick some other numbers for this and calculate the n th term.

Even if this only makes a little bit of sense, you are doing well and this will be something you will do lots more of at secondary school so PLEASE don't worry if this all sounds complicated!

Sequences

Write the first six terms of these sequences. Start at the number given and use the rule shown.

1. 4 1 2, 2 8, 6 0, ...

1  add 2, then double

2  subtract 1, then double

3  double, then subtract 1

4  halve, then subtract 2

5  multiply by 6, then halve

6  double, then add $\frac{1}{2}$

7  multiply by 10, then subtract 1

8  multiply by 3, then add 1

9  add 0.1, then double

10  subtract 0.3, then double

There are four challenges today
So, work at your won speed and
what you feel comfortable with.

Amazing Challenge

If you want more practice
working out sequences work
through these

Awesome Challenge

Answer these questions and write the formula for each sequence.

For Q3, write the formula for each sequence and find the 20th term for each.

Sequences and the n th term

1

Write the next three terms in these sequences:

a) 2, 5, 8, 11, _____, _____, _____ b) 4, 9, 14, 19, _____, _____, _____

c) 14, 10, 6, _____, _____, _____ d) 12, 19, 26, 33, _____, _____, _____

2

Write the next term and the rule for these sequences:

a) 15, 25, 35, 45, _____ Rule: _____

b) 3, 10, 17, 24, _____ Rule: _____

c) 50, 41, 32, 23, _____ Rule: _____

3

Complete the first five terms in these sequences:

a) the sequence starts with the number 6 and the rule is add 12

_____, _____, _____, _____, _____

b) the sequence starts with the number 15 and the rule is subtract 7

_____, _____, _____, _____, _____

c) the sequence starts with the number 5 and the rule is double and add 1

_____, _____, _____, _____, _____

Adventurous Challenge

Part 1

The n th term

Write these rules for shape number n .

Algebra **A10**

1. 6 times the shape number

2. double the shape number, then add 1

3. treble the shape number, then subtract 2

5. 10 times the shape number, then add 1

5. 5 times the shape number, then subtract 6

6. halve the shape number, then add 3

7. multiply the shape number by itself, then subtract 3



Adventurous challenge

Part 2

Write how many sticks are needed to make the tenth shape in each sequence.

?

8

10

12

14

9

11

13

15

17

Write the rule for shape number n in each sequence.

Affable challenge

The nth term

Write these terms for each sequence.

1 $3n + 7$
4th, 15th, 21st

4 $6n + 4$
4th, 8th, 15th

2 $4n - 1$
3rd, 11th, 18th

5 $n^2 + 4$
4th, 6th, 10th

i. $3n + 7$
a. $(3 \times 4) + 7 = 19$

3 $10n - 3$
6th, 10th, 50th

6 $\frac{n}{2} + 5$
4th, 18th, 23rd

Describe the rules in words to show the relationship between the numbers and the terms for each sequence. Write the nth term for each.

7

Term	1	2	3	4	n
Number	2	4	6	8	

9

Term	1	2	3	4	n
Number	3	5	7	9	

11

Term	1	2	3	4	n
Number	13	23	33	43	

13

Term	1	2	3	4	n
Number	2	5	8	11	

8

Term	1	2	3	4	n
Number	10	20	30	40	

10

Term	1	2	3	4	n
Number	4	7	10	13	

12

Term	1	2	3	4	n
Number	4	8	12	16	

14

Term	1	2	3	4	n
Number	3	8	13	18	

All About Me...

1. In your booklet today, complete the activity entitled '**Map of the School**'

There are 5 questions and you will need some coloured pencils to plan a route around the buildings.

Many children worry about getting lost because they know that SWCHS or any secondary school is vastly bigger than primary school but the layout is normally really logical and you will find you quickly work out where to go and how to get there.

Also, when you first start, you normally have a little extra time to find your way about and special monitors to help you find your way.

2. Then, you need to complete the **About Me** section.

I suggest that you **draft the answers first** and check for any spellings before you write it up. Try to avoid one word answers and **write in complete sentences**. If you find the answers tricky, ask someone else in your family for their opinion.

You will also need to **add a photo** on this page. If that's difficult, you can draw a picture of yourself but a photo helps the form tutor to put a face to a name once they have met you. Make this a **RECENT** picture of you rather than one from when you were little. While this might be cute, it makes life much harder for the form tutor if they also have to 'guess the baby!'

Spellings

Each sentence below has one word that is incorrect. Write the correct spelling of the word in the box.

1. Dad had bought himself a yaut for his birthday.
2. "I was twelfth in line!" he shouted.
3. It was a privalidge to work alongside him.
4. Class 2 were learning the rythem of a song.
5. Grandad took them to the lesure centre after school.
6. The soldyer returned home for Christmas.
7. "You must acheive your best score," Mum told him.
8. The card had been put in the wrong catagory.

The spelling mistakes in these sentences have been circled. Write the correct spelling for each circled word in the box.

1. His work didn't corespand to the task.
2. "My dog will harress you for food," laughed Stacey.
3. An old lady will occupie the flat from tomorrow.
4. The class practised some ryming words.
5. "You should not be prejudised against new students," scolded the teacher.
6. It suddenly ocured to him that he was late.
