Good Morning Year 6 !

It was lovely to see you yesterday on Zoom but if you didn't make it – don't worry.
We chatted about first impressions and how important they were. The general feeling was that people do make judgements about others quite quickly but everyone also recognises that it's not until you get to know people properly that you can really tell what they are like.

The booklet you are filling in is one way (and importantly, the initial way) your form tutor will find out about you so please fill in as much detail as you can.

I hope you are all getting outdoors a lot this week and maybe being a bit more active than normal.

Once I have finished these slides, I'm off for a walk with my dog – after all that algebra, I need some fresh air!

It's Thursday tomorrow so it will be Mrs McCullough and then I will be back on Friday and then... it will be half term!

Have a great home-learning day,

Best wishes,

Mrs Starbuck 

Maths from 19th May
Amazing

1. add 2 then double

4, 12, 28, 60, 124, 252

2. subtract 1 then double

3, 4, 6, 10, 18, 34, 66

3. double then subtract 1

2, 3, 5, 9, 17, 33

4. halve then subtract 2

~~156, 76, 36, 16, 5,~~ -

156, 76, 36, 16, 6, 1

5. multiply by 6 then halve

4, 12, 36, 108, 324, 972

6. double then add half.

$\frac{1}{4}$, 1, $2\frac{1}{2}$, 5, $10\frac{1}{2}$, 21, $42\frac{1}{2}$

7. Multiply by 10 subtract 1

0.14, 0.4, 3, 29, 289, 2889

36
× 6
216
3

108
× 6
648
4

324
× 6
1944
1 2

2 | 1944
972

8. multiply by 3 add 1

2, 7, 22, 67, 202, 607

9. Add 0.1 then double

2, 4.2, 8.6, 17.4, 35, 70.2.

10. Subtract 0.3 then double

1, 1.4, 2.2, ~~3.18~~, 3.6, 6.6, 12.6

Maths answers from 19th May

Awesome Challenge

1 a) 2, 5, 8, 11, 14, 17, 20 — rule add 3 — ~~2n+3~~ ~~3n+2~~ 3n-1

b) 4, 9, 14, 19, 24, 29, 34 — rule add 5 — 5n-1

c) 14, 10, 6, 2, -2, -6 — rule -4 — -4n+18

d) 12, 19, 26, 33, 40, 47, ~~54~~ — rule add 7. — 7n+5

2. a) 15, 25, 35, 45, 55 — rule add 10 — 10n+5

b) 3, 10, 17, 24, 31 — rule add 7 — 7n-4

c) 50, 41, 32, 23, 14 — rule subtract 9 — -9n+59

Apologies – this was **WAY** harder than I realised – if anyone actually worked this out please let me know!

3) a) 6, 18, 30, 42, 54 (5) (20)

12n-6

12×20 = 240

240-6 = 234

b) ~~+5, 12, 9,~~

15, 8, 1, -6, -13,

-7n+22

-7×20 = -140+22

-~~162~~ 118.

c) 5, 11, 23, 47, 95

$6(2)^{n-1} - 1$

20th = 3,145,727 !

Adventurous

1) $6n$ 2) $2n+1$ 3) $3n-2$ 4) $10n+1$

5) $5n-6$ 6) $n \div 2+3$ 7) n^2-3

8) $10 \times 4 = 40$. $4n$ 9) $10 \times 3 = 30$ $3n$

10) $2 \times 10 = 20+1 = 21$ $2n+1$ 11) $10 \times 3 = 30$. $3n$

12) $10 \times 4 = 40$ $4n$ 13) $3 \times 10 = 30+2 = 32$. $3n+2$

14) $10 \times 5+1 = 51$ $5n+1$ 15) $10 \times 5 = 50+2 = 52$ $5n+2$

16) $10 \times 5+1 = 51$ $5n+1$ 17) $10 \times 4 = 40+2 = 42$ $4n+2$

Affable Challenge

1) $3n+7$

4th $4\times3=12$
$12+7=19$

15th $15\times3=45$
$45+7=52$

21st $21\times3=63$
$63+7=70$.

2) $4n-1$

3rd $3\times4=12$
$12-1=11$

11th $11\times4=44$
$44-1=43$

18th $18\times4=72$
$72-1=71$

3) $10n-3$

6th $6\times10=60$
$60-3=57$

10th $10\times10=100$
$100-3=97$

50th $50\times10=500$
$500-3=497$

4) $6n+4$

4th $4\times6=24$
$24+4=28$

8th $8\times6=48$
$48+4=52$

15th $15\times6=90$
$90+4=94$

5) n^2+4

4th $4\times4=16$
$16+4=20$

6th $6\times6=36$
$36+4=40$

10th $10\times10=100$
$100+4=104$

6) $\frac{n}{2}+5$

4th $4\div2=2$
$2+5=7$

18th $18\div2=9$
$9+5=14$

23rd $23\div2=11.5$
$11.5+5=15.5$

7) 2 times the number
$2n$
5th term = 10

8) 10 times the number
$10n$
5th term 50

9) 2 times the number plus one
$2n+1$
5th term = 11

10) 3 times the number plus 1
$3n+1$
5th term = 16

11) 10 times the number plus 3
$10n+3$
5th term = 53

12) 4 times the number
$4n$
5th term = 20.

13) 3 times the number minus 1
$3n-1$
5th term = 14

14) 5 times number minus 2
$5n-2$
5th term

Spelling answers

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.	yacht
2. "I was twelth in line!" he shouted.	twelfth
3. It was a privalidge to work alongside him.	privilege
4. Class 2 were learning the rythem of a song.	rhythm
5. Grandad took them to the lesure centre after school.	leisure
6. The soldyer returned home for Christmas.	soldier
7. "You must acheive your best score," Mum told him.	achieve
8. The card had been put in the wrong catagory.	category

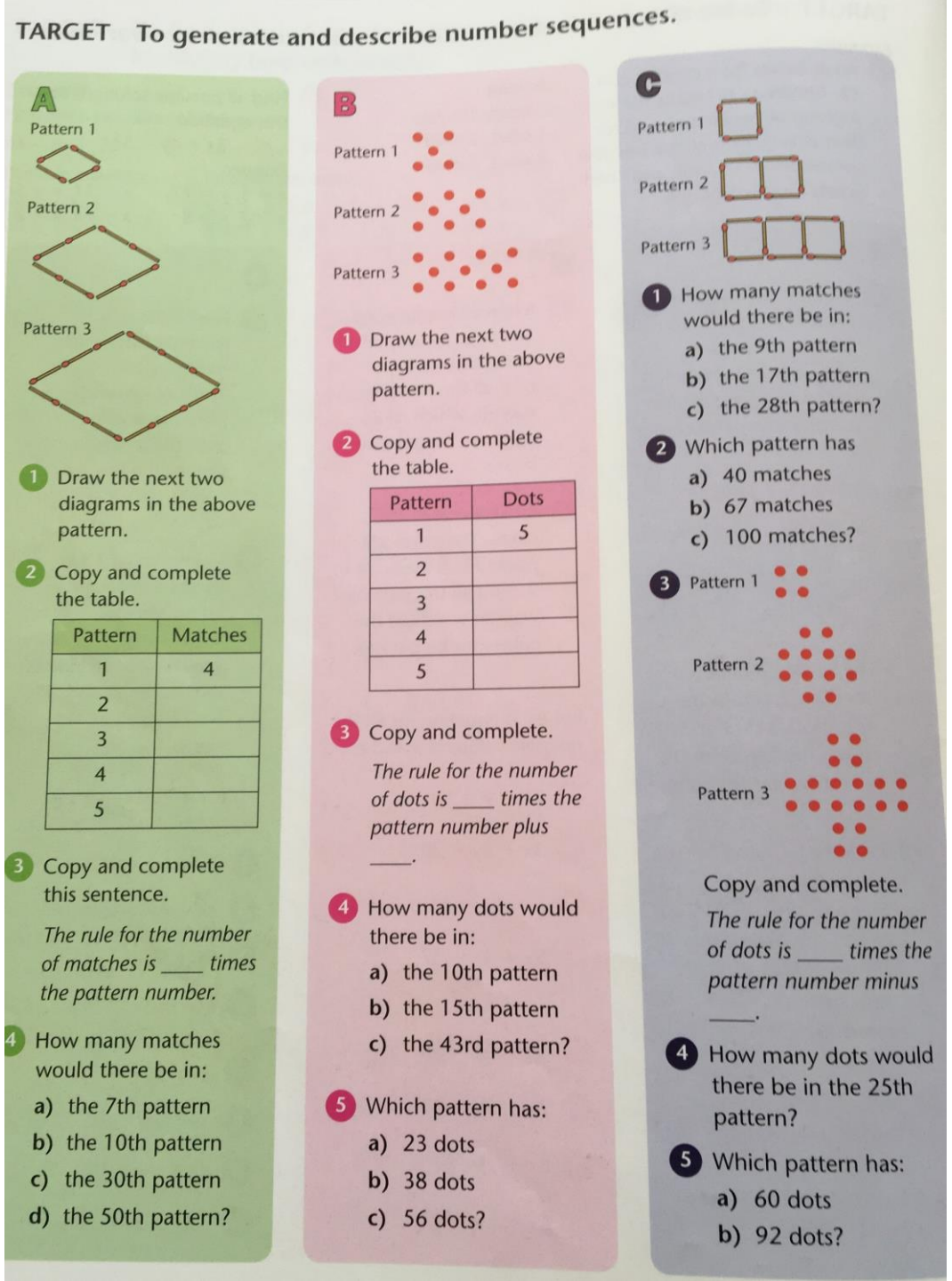
The spelling mistakes in these sentences have been circled. Write the correct spelling for each circled word in the box.

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

Wednesday 20th May

L.O: To generate and describe number sequences

There is a choice of 6 challenges today as everyone is at a different stage of their algebra journey – I have the answer book for this one though!



TARGET To generate and describe number sequences.

A

Pattern 1

Pattern 2

Pattern 3

1. Draw the next two diagrams in the above pattern.
2. Copy and complete the table.

Pattern	Matches
1	4
2	
3	
4	
5	

3. Copy and complete this sentence.

The rule for the number of matches is ____ times the pattern number.

4. How many matches would there be in:
   a) the 7th pattern
   b) the 10th pattern
   c) the 30th pattern
   d) the 50th pattern?

B

Pattern 1

Pattern 2

Pattern 3

1. Draw the next two diagrams in the above pattern.
2. Copy and complete the table.

Pattern	Dots
1	5
2	
3	
4	
5	

3. Copy and complete.

The rule for the number of dots is ____ times the pattern number plus ____.

4. How many dots would there be in:
   a) the 10th pattern
   b) the 15th pattern
   c) the 43rd pattern?
5. Which pattern has:
   a) 23 dots
   b) 38 dots
   c) 56 dots?

C

Pattern 1

Pattern 2

Pattern 3

1. How many matches would there be in:
   a) the 9th pattern
   b) the 17th pattern
   c) the 28th pattern?
2. Which pattern has
   a) 40 matches
   b) 67 matches
   c) 100 matches?
3. Pattern 1

Pattern 2

Pattern 3

Copy and complete.

The rule for the number of dots is ____ times the pattern number minus ____.

4. How many dots would there be in the 25th pattern?
5. Which pattern has:
   a) 60 dots
   b) 92 dots?

TARGET To generate and describe number sequences.

Examples

To find the rule that links the numbers study the gaps.

1	3	5	7	
3	0	−3	−6	
$\frac{4}{9}$	$\frac{8}{9}$	$1\frac{3}{9}$	$1\frac{7}{9}$	

The rule is: add 2 / subtract 3 / add $\frac{4}{9}$.

The nth term is: $2n - 1$ / $6 - 3n$ / $\frac{4n}{9}$.

A

Write the first six numbers in each sequence.

	Start at	Rule
1	4	+10
2	38	−2
3	7	+3
4	29	−4
5	0·5	+1
6	65	−7
7	15	+20
8	110	−11
9	21	+2
10	948	−101
11	26	+9
12	30	−3
13	$\frac{1}{2}$	$+\frac{1}{2}$
14	80	−5
15	25	+25

B

Complete these sequences by filling in the boxes. Write the rule each time.

1. 44 47 50 53 ☐ ☐ ☐
2. 89 85 81 77 ☐ ☐ ☐
3. 115 140 165 190 ☐ ☐ ☐
4. 0·5 0·6 0·7 0·8 ☐ ☐ ☐
5. −2 −4 −6 ☐ ☐ ☐ −14
6. 119 114 ☐ ☐ ☐ 94 89
7. −9 −6 ☐ ☐ ☐ 6 9
8. $\frac{1}{5}$ $\frac{2}{5}$ $\frac{3}{5}$ $\frac{4}{5}$ ☐ ☐ ☐
9. 5 3 1 ☐ ☐ ☐ −7
10. 37 ☐ 55 ☐ 73 ☐ 91
11. 366 316 ☐ 216 ☐ ☐ 66
12. ☐ −15 −10 ☐ ☐ 5 10
13. $1\frac{6}{7}$ ☐ $1\frac{2}{7}$ 1 ☐ ☐ $\frac{1}{7}$
14. ☐ ☐ 4·5 5 ☐ 6 6·5
15. ☐ 182 ☐ 380 ☐ 578 677
16. 10 6 ☐ ☐ ☐ −10 −14

C

Copy these sequences and write the next three numbers. What is the rule for each sequence?

Can you write the rule for the nth term?

1. 84 72 60 48
2. 64 71 78 85
3. 1·1 1·07 1·04 1·01
4. 4 $3\frac{5}{8}$ $3\frac{2}{8}$ $2\frac{7}{8}$
5. 165 146 127 108
6. −9 −7 −5 −3
7. 75 67 59 51
8. 0·02 0·04 0·06 0·08
9. 15 11 7 3
10. 43 55 67 79
11. −20 −14 −8 −2
12. 5 4·5 4 3·5
13. 135 156 177 198
14. 36 28 20 12
15. 50 175 300 425
16. 1·25 1·5 1·75 2
17. 10 $8\frac{3}{4}$ $7\frac{1}{2}$ $6\frac{1}{4}$
18. −11 −8 −5 −2

Today, I would like you to continue your All About Me booklet.

First, look at the clubs on offer – which of them would you like to join? You can highlight the ones that interest you.

Why do you think they like everyone to join at least one club? Even if clubs haven't been 'a thing' for you in the past, why might it be a good time to try one? Talk to someone at home about this.

Next, look at the page called 'A new school day' and the timetable that follows. SWCHS operates a two week timetable so the first week you look at Week 1 to see which lessons you have and then the next week, it will be Week 2 and the third week you go back to the Week 1 timetable – coming back after a holiday is the most confusing bit but you will be reminded which week you start back on. Then, complete questions 1-6.

After that, read the two homework pages and think about your approach to homework when you go to secondary school – will it be different to what you have done this year? How? It's a good idea to think about these things in advance.

Obviously, recently, you have done a lot of work at home so this may mean that your home-study habits have improved but you may also have had a bit more free time, so for some of you, think about what will be different in September.