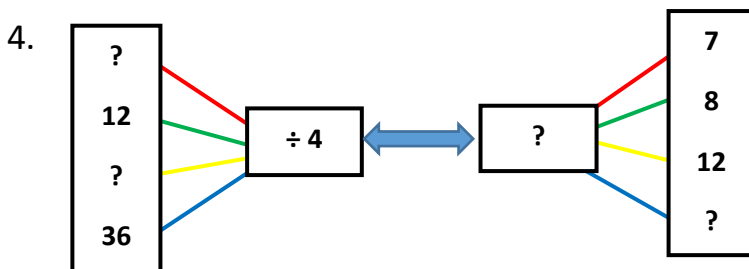
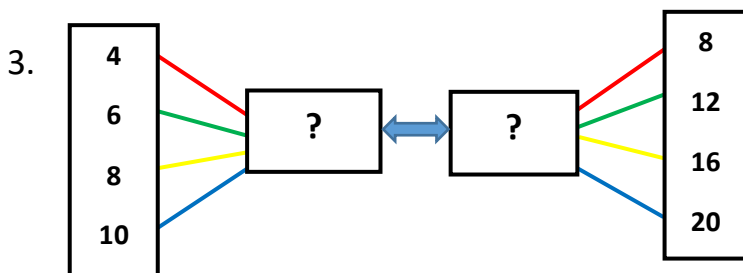
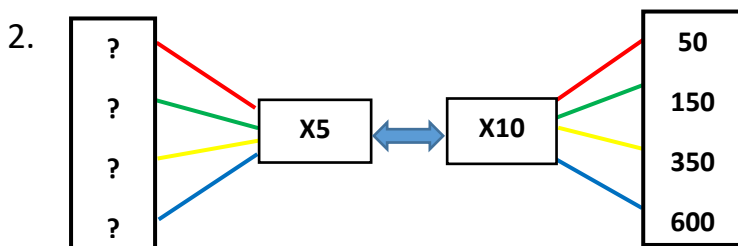
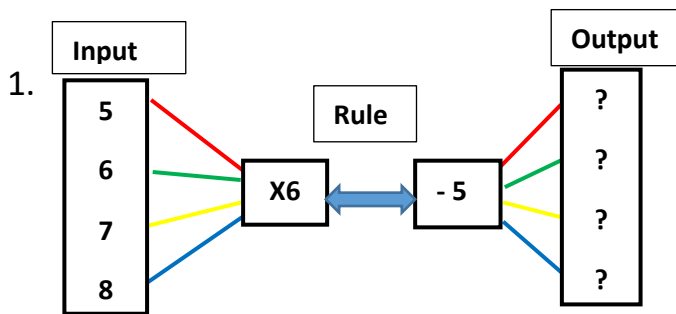


This week we will be exploring NUMBER PATTERNS with the Grade 6 learners. Scroll through the images for the questions and images linked to the questions.

QUESTIONS

Question 1 - Complete the number patterns



Question 2 – Write your pattern rule

Input	Output	Rule
1	3	$1 \times 2 = 2 + 1 = 3$ (example)
2	5	
3	7	
4	9	
5	11	

Question 3 – Fill in the empty boxes

Rule: multiply by 8	
Input	Output
7	
8	
9	
10	

Rule: Add 6, divide by 2	
Input	Output
	14
	8
	20
	5

Rule: Multiply by 5, add 6				
In	4	7	10	13
Out				

Rule: Add 7, subtract 9				
In				
Out	9	5	23	15

Question 4 – Complete the quiz

- What is the next number in the pattern: 37, 49, 61, ____, 85
- Finish the pattern according to the rule: multiply by 8: 1, ____, ____, ____, ____
- What are the missing numbers in the pattern: 3, 6, ____, 24, ____, 96, 192
- What is the rule for this pattern: 1, 5, 25, 125, 625...

MEMORANDUM

Question 1

1. $5 \times 6 - 5 = 25$

$6 \times 6 - 5 = 31$

$7 \times 6 - 5 = 37$

$8 \times 6 - 5 = 43$

2. $1 \times 5 \times 10 = 50$

$3 \times 5 \times 10 = 150$

$7 \times 5 \times 10 = 350$

$12 \times 5 \times 10 = 600$

3. $4 \times 2 + 0 = 8$

$6 \times 2 + 0 = 12$

$8 \times 2 + 0 = 16$

$10 \times 2 + 0 = 20$

$4 \times 1 \times 2 = 8$

$6 \times 1 \times 2 = 12$

$8 \times 1 \times 2 = 16$

$10 \times 1 \times 2 = 20$

4. $8 \div 4 + 5 = 7$

$12 \div 4 + 5 = 8$

$28 \div 4 + 5 = 12$

$36 \div 4 + 5 = 14$

Question 2

Input	Output	Rule
1	3	$1 \times 2 = 2 + 1 = 3$ (example)
2	5	$2 \times 2 = 4 + 1 = 5$
3	7	$3 \times 2 = 6 + 1 = 7$
4	9	$4 \times 2 = 8 + 1 = 9$
5	11	$5 \times 2 = 10 + 1 = 11$

Question 3

Rule: multiply by 8	
Input	Output
7	56
8	64
9	72
10	80

Rule: Add 6, divide by 2	
Input	Output
22	14
10	8
34	20
4	5

Rule: Multiply by 5, add 6				
In	4	7	10	13
Out	26	41	56	71

Rule: Add 7, subtract 9				
In	11	7	25	17
Out	9	5	23	15

Question 4

- a) 37, 49, 61, 73, 85
- b) 1, 8, 64, 512, 4096
- c) 3, 6, 12, 24, 48, 96, 192
- d) 1, 5, 25, 125, 625... - The rule is: multiply by 5