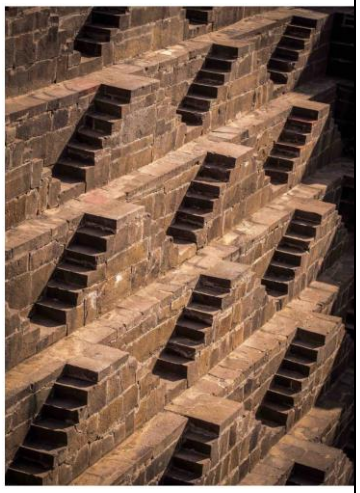
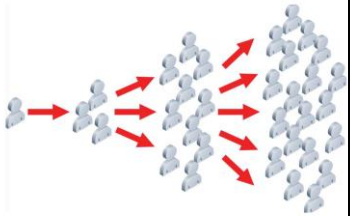
Year 5- Mathematics - Learn from home timetable

Big Idea Concept: Addition and subtraction

I can describe, continue and create patterns resulting from addition and subtraction

Australian Curriculum Connection: **Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction**

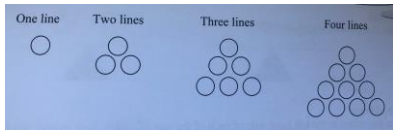
Monday	Tuesday	Wednesday	Thursday	Friday
Launch and Tune In Watch the dot pattern reveal: D:\Remote learning\Dotty (Act 1)-HD.mp4 What do you wonder? How many dots will be on the screen after the last bell?	**Launch and Tune In**  What is happening in these image? How is it related to addition or subtraction? Could you use this image to write a number sentence?	**Launch and Tune In**  Can you use this image as inspiration to draw an addition pattern? Can you change the pattern to make it a subtraction pattern?	**Launch and Tune in**  Look at this brick wall. What pattern can you see? Why have they designed it like this? Can you write / draw this pattern?	**Launch and Tune In**  What is happening in this image? What do you think it represents? If the diagram was to continue, what do you think would be represented next?

Vocabulary in Mathematics:

Students should be able to communicate using the following language: plus, **sum**, add, addition, **increase**, minus, the difference between, subtract, subtraction, **decrease**, equals, is equal to, empty number line, strategy, digit.

<table>
<tr>
<td>Conceptual Development

See below the Growing Patterns using toothpicks to grow words.</td>
<td>Conceptual Development

Look at this pattern.
Can you describe the pattern using numbers and words?
If you were going to draw the fifth line of counters for the shape, what would you draw?

How many counters would be in the shape? How do you know?</td>
<td>Conceptual Development

Look back over yesterdays task. Can you complete the table?

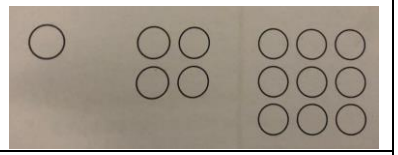
<table><tr><td>How many lines?</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>How many counters in the bottom line?</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>How many counters altogether?</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table></td>
<td>Conceptual Development

Using the table from yesterdays lesson, what patterns do you see in the table?

If the shape had 12 lines, how would you work out how many counters were in the shape altogether?</td>
<td>Conceptual Development

The number pattern we have been exploring this week is called a ‘triangular number’. What do you think this might mean? Why would they be called triangular numbers?

Challenge:
Square numbers are similar to triangular numbers. Look at the following patterns and work out what the seventh square number would be.

  </td>
</tr>
<tr>
<td>Learning Journal
Can you use the idea from the above task to grow a pattern spelling your first name.
How many toothpicks would you use to form the first letter?
How would you grow this letter to form a pattern?</td>
<td>Learning Journal
Write and draw the responses from the questions above in your learning journal.</td>
<td>Learning Journal
Can you continue the table above to include 5, 6,7 lines in the pattern?

How did you work out how many counters altogether?</td>
<td>Learning Journal
Write a number sentence (sum) to explain your pattern</td>
<td>Learning Journal

Record your thinking from todays lesson above into your learning journal.</td>
</tr>
<tr>
<td></td>
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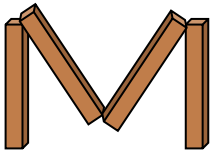
<td></td>
</tr>
</table>

Growing Patterns

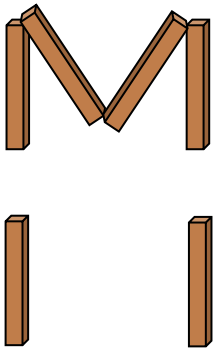
We are using matchsticks to grow each of the letters in the word 'MATHS'.

This is how we can grow the letter M:

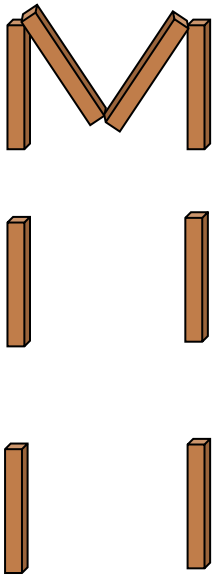
Picture 1



Picture 2



Picture 3



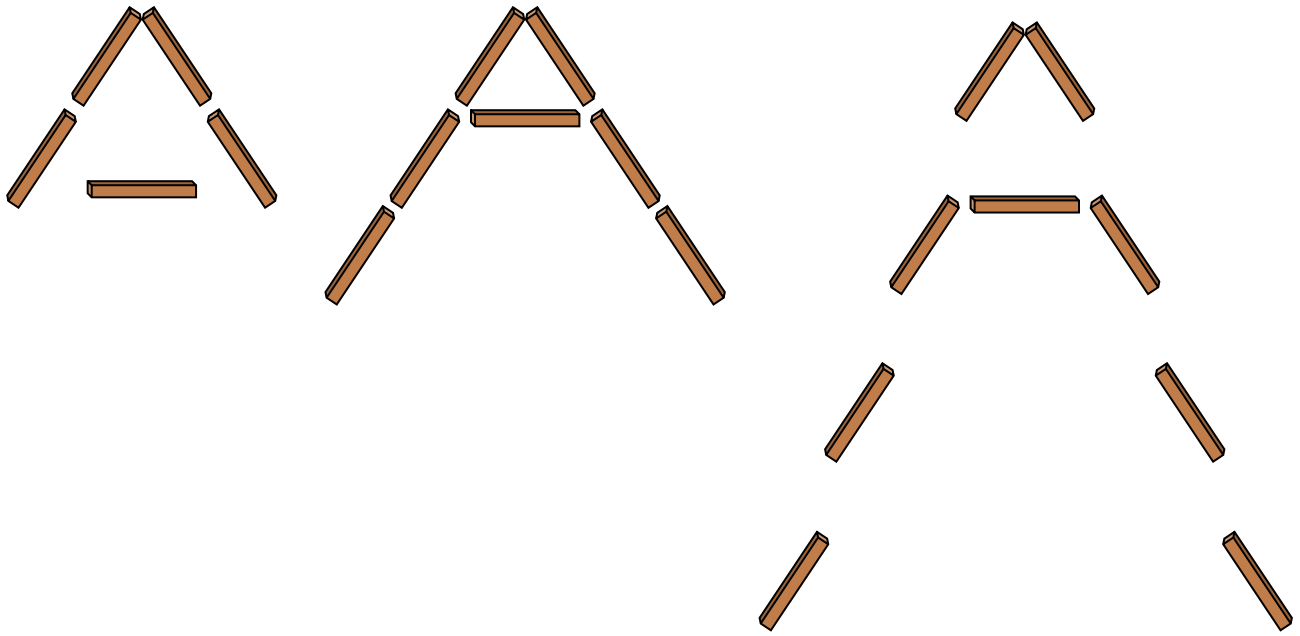
We are going to count how many matchsticks there are in each picture and put the results in a table.

Picture	Number of Matchsticks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
20	
100	

The rule is ...

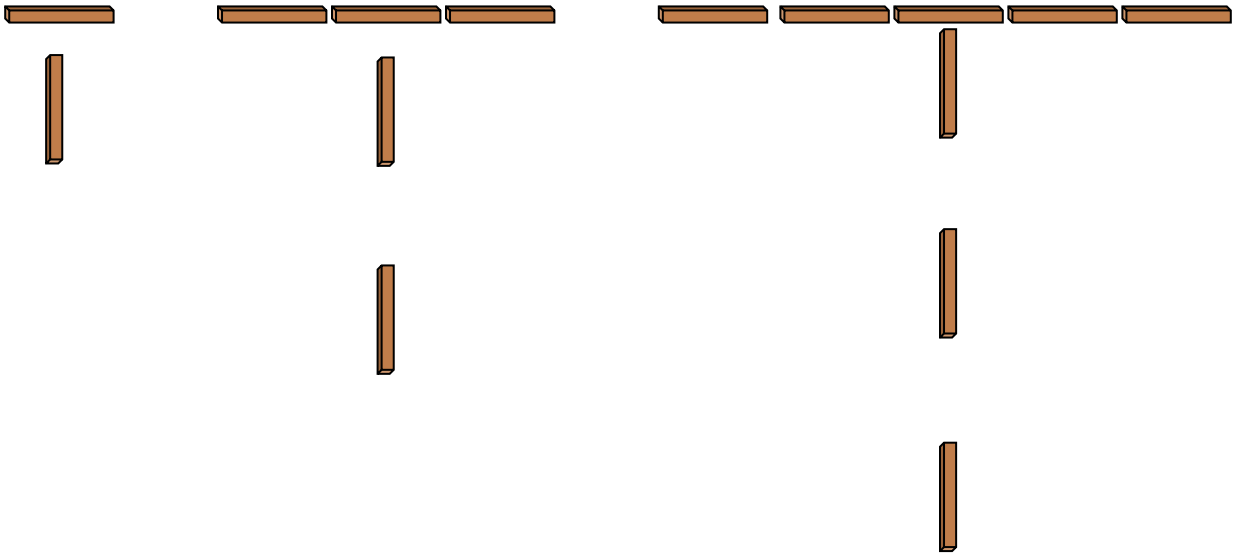
This is how we can grow the letter A:

Picture 1 **Picture 2** **Picture 3**



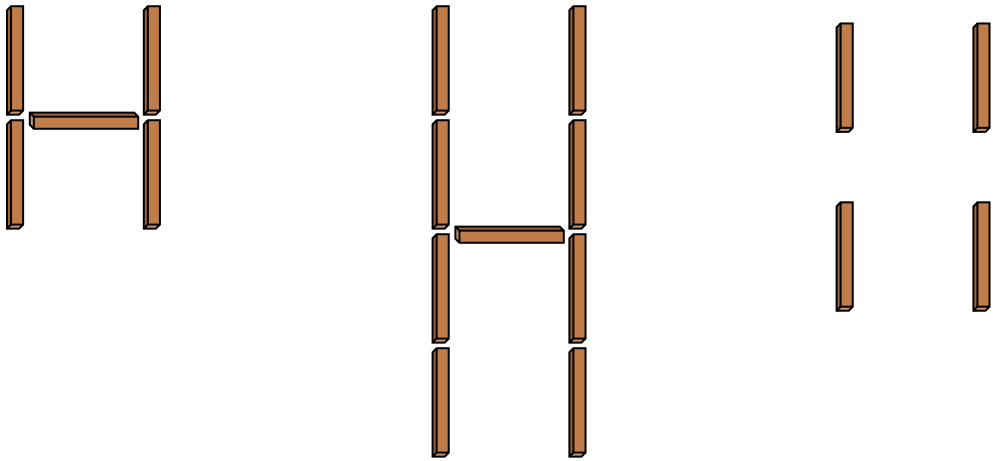
This is how we can grow the letter T:

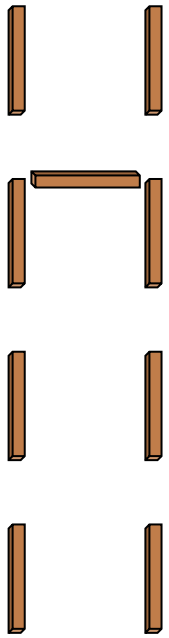
Picture 1 **Picture 2** **Picture 3**



This is how we can grow the letter H:

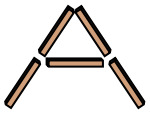
Picture 1 **Picture 2** **Picture 3**





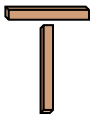
How can you grow the letter S?

Growing Patterns

The letter 

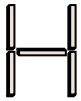
Picture	Number of Matchsticks
1	
2	
3	
4	
5	
6	
7	

The rule is...

The letter 

Picture	Number of Matchsticks
1	
2	
3	
4	
5	
6	
7	

The rule is ...

The Letter 

Picture	Number of Matchsticks
1	
2	
3	
4	
5	
6	
7	

The rule is...

The Letter S

Picture	Number of Matchsticks
1	
2	
3	
4	
5	
6	
7	

The rule is ...