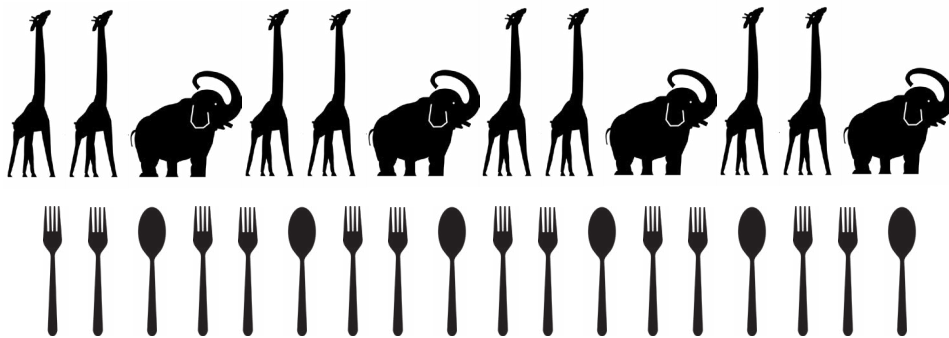# F-2: REMOTE MATHS
EDITION 7

PATTERNS - DESCRIBE, CONTINUE, CREATE

Mathematical language: Describe, continue, create, next, after, before, pattern, skip, sequence, repeat.

TASK 1: BUILD A REPEATING PATTERN

Patterns are a repeating sequence or design. In these repeating pattern examples, you can see the pattern of same, same, different.

- Using forks and spoons, create your own pattern.
- How many different repeating patterns can you make?
- Take a photograph of each pattern and explain the sequence.

Extending prompt: Patterns can be labelled using the alphabet. The examples above would be labelled A, A, B patterns instead of same, same, different. Label the patterns you made using the alphabet

Supporting task: http://toytheater.com/shape-pattern/

TASK 2: TRIANGLE PATTERNS   *Adapted from Nrich.*

Here is a link to triangles you can print and cut out. https://nrich.maths.org/content/id/5944/repeating%20patterns%20triangles.pdf

- Using just triangles what repeating patterns can you make?
- Make a collection of different patterns and describe your patterns
- You can colour some of the triangles in to help create interesting patterns.

Extending prompt: Using two colour pencils, find at least 10 different repeating patterns and describe them.
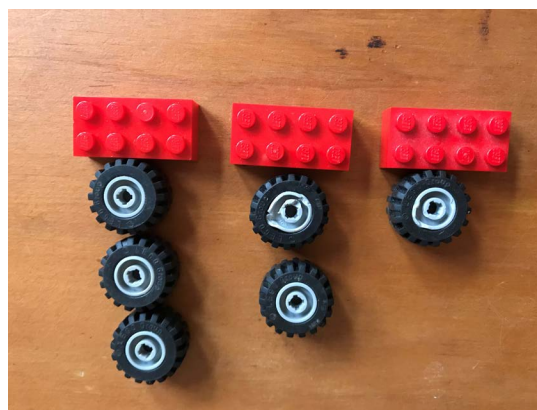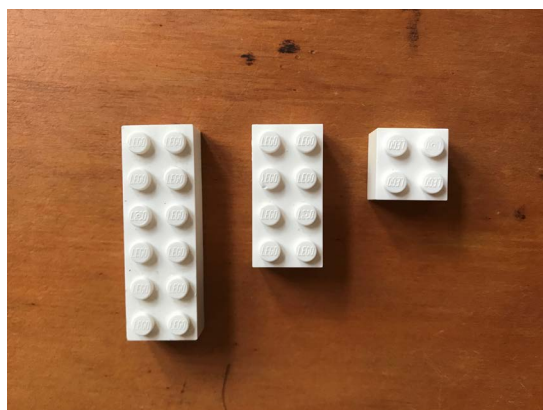
THE MATHEMATICAL
ASSOCIATION OF VICTORIA

Find more tasks on page 2.
© Mathematical Association of Victoria 2020

TASK 3: GROWING PATTERNS

Growing patterns are a little different. These photos demonstrate repeating patterns.

- What do you notice?
- Explain what you think a growing pattern is.
- Have a go at building some of your own growing pattern and describe them.

TASK 4: NEIGBOURHOOD PATTERN HUNT

Go for a walk around your neighbourhood with an adult. Draw or take photos of any patterns you find.

Extending prompt: Describe the patterns you found using the alphabet as explained in Task 1.

TASK 5: NUMBER PATTERNS

Patterns can also be made with numbers. Here are some examples:

These numbers go up by 2	0, 2, 4, 6, 8, 10, 12
These numbers go up by 5	0, 5, 10, 15, 20, 30
These numbers go up by 1, then up by 2	0, 1, 3, 4, 6, 7, 9, 10

Have a go at making your own number pattern. Here are some ideas you could try.

- Make a number pattern using the number 3
- Make a counting backwards pattern starting at 55
- Make a number pattern that has 12 in it
- Create a pattern with both 4 and 10 in the pattern

Extending prompt: http://toytheater.com/number-pattern/

LENGTH: MEASURE AND COMPARE OBJECTS

Mathematical language: Measure, compare, bigger, larger, biggest, largest, smaller, smallest, order, length, size.

TASK 1: LEAVES

- Go outside and find a leaf.
- Find 3 things that are longer than your leaf.
- Find 3 things that are smaller than your leaf

**Extending task:** Order your items from smallest to longest

TASK 2:DRAWING SIZE

Create a drawing and include the following things

- A tall person standing next to a short dog.
- A tree that is taller than the person.
- Two bikes that are smaller than the person but bigger than the dog.
- Five butterflies that are smaller than the dog.

TASK 3:HAND SPANS

How many objects can you find that are longer than three handspans but shorter than four hand spans?
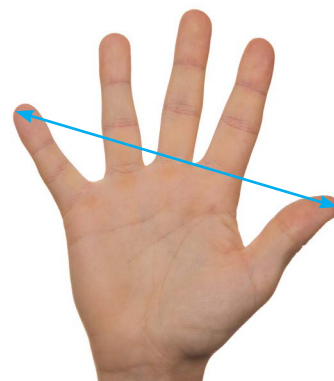
TASK 4: FIVE FRIENDS

Imagine your self standing with two friends who are shorter than you and two friends that are taller than you.

- Draw a picture of yourself with your four friends.

TASK 5: HOW LONG IS YOUR FOOT?

Measure and record the following things using toothpicks or match sticks

- Your foot
- Your favourite toy
- A dinner plate
- The remote for your TV

- Which object was the longest?
- Which object was the shortest?
- What difficulties did you have measuring?

Extending prompt: Using paper clips to measure http://fuse.education. vic.gov.au/Resource/LandingPage?ObjectId=d4fb01cd-b2ca-4f58-8124-816a922062fa

MAV would love your feedback on these resources. Click on the link or scan the QR code.

https://www.surveymonkey. com/r/MAHhomelearning

MATHS APP OF THE WEEK: MATH ADVENTURES

The challenge is to find hidden numbers on a grid, sounds simple but ... Math is about patterns, this game has you working out the pattern of the grid and in doing so learning how numbers work. By the end you'll understand the basics of the number system and have developed useful thinking skill guaranteed to improve your math.

iOS

https://apps.apple.com/au/app/number-find-lite/id405476641

Look out for more tasks next week!