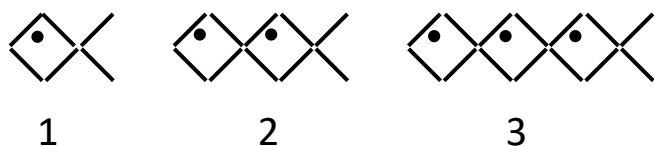# Patterns and Relationships – Set 5

✱ *Note:* At this stage a student should be able to start with a rich question (a) or a sequential pattern (b) and from here they should be able to create a table (c) or graph (d) and from there be able to describe the rules behind the pattern verbally.
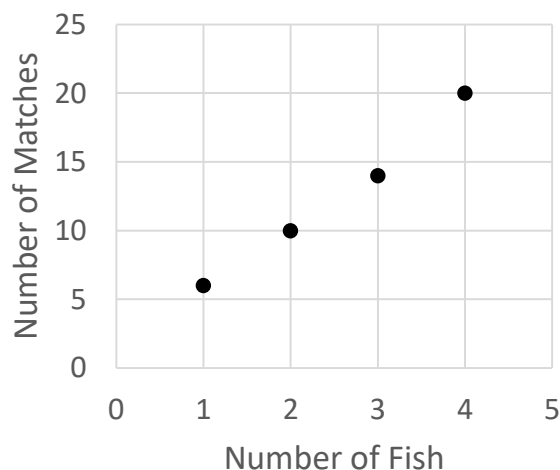
Ⓐ *Can interpret a question that contains a sequential pattern.*

Manaia can make 1 fish out of 6 match sticks, 2 fish out of 10 match sticks and 3 fish out of 14 match sticks, using this pattern how many match sticks does he need to make 4 fish?

Ⓑ *Can create, interpret and continue sequential patterns (diagrams).*

1   2   3

Ⓒ *Can fill in a tables and use it to find a pattern.*

Number of houses	Number of matches
1	6
2	10
3	14
4	?

+4
+4
+4

- Name each column
- Fill in both columns correctly
- Can work out numbers in both columns that comes next.
- Can use the table to work out the next number in the sequential pattern.
- Can work out the pattern between each number.

Ⓓ *Can create a graph to represent the information.*

- Need numbers along both axis.
- Dots or crosses put in the correct place.
- Use dots or crosses when information is discrete. (things you count)
- Join the dots or crosses to create a line when information is indiscrete. (things you measure)

Ⓔ *Use state rules in words to describe the pattern.*

6 matches are needed to make 1 fish, and 4 more matches are needed to make each fish after that.

Start with 6 for 1 fish and +4 for each extra fish.