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Maths Warm-up

PowerPoint - Year 3

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1. Numbers to 10 000 – Preparation

The activities on the next slide need lots of numbers. Each person must:

- write a 3-digit or 4-digit number on a piece of paper, e.g. 624
- write a different 3-digit or 4-digit number in word form on another piece of paper, e.g. nine hundred and fifteen.

As a class, shuffle the numbers together into one pile and divide them up between groups.

Numbers to 10 000 (Cont.)

Working in a small group, use the numbers you received to complete one of the following activities:

- represent your numbers using MAB blocks
- choose four of the numbers and order them from smallest to largest. Then choose another four and order them in the same way.
- write out each of your numbers in expanded notation, e.g. 900 + 70 + 4 (974).

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2. More Numbers to 10 000

Fill in the blanks with any single digit and then use this information to write a 4-digit number using these same place values. There are only 3 place values described, but you need to write a 4-digit number. Use your knowledge of place value to figure out how.

___ thousands ___ tens ___ ones → _ _ _ _

What number is 100 less than this number? _ _ _ _

___ thousands ___ hundreds ___ ones → _ _ _ _

What number is 10 less than this number? _ _ _ _

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3. Number Lines

Use a whiteboard marker to place chosen numbers on the number line between 2000 and 3000.

4. Place Value

Choose a 3-digit number ending in 99 and write it below.

_ 9 9

Name the number that is:

- 100 more than this
- 10 more than this
- 1 more than this.

Choose a 4-digit number ending in two zeroes and write it below.

_ _ 0 0

Name the number that is:

- 100 more than this
- 10 more than this
- 1 more than this.

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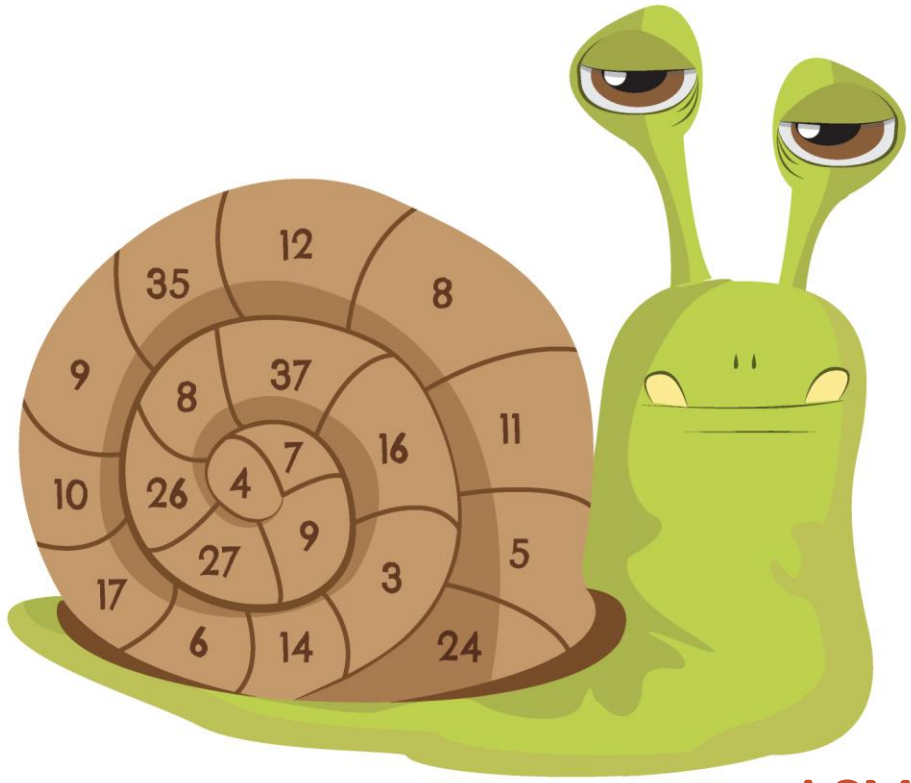
5. Target Number – Addition and Subtraction

Write a number in the middle of the target. Using addition or subtraction, make as many equations as you can that equal the target number.

6. Any Operation

Choose a person to be the ‘caller’. They call out number sentences that can use any operation but must equal a number on the snail. Everyone calculates the answer, but take turns coming to the whiteboard to circle the correct number on the snail.



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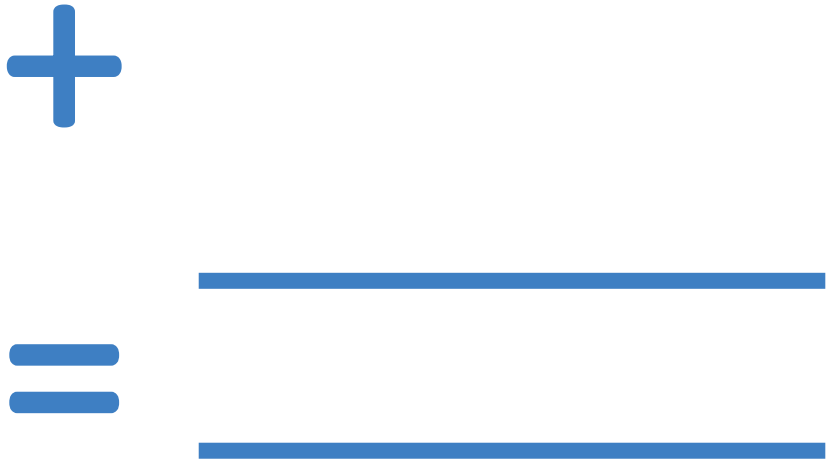
7. Addition – Algorithms

Use the below algorithm template to model and solve addition problems.

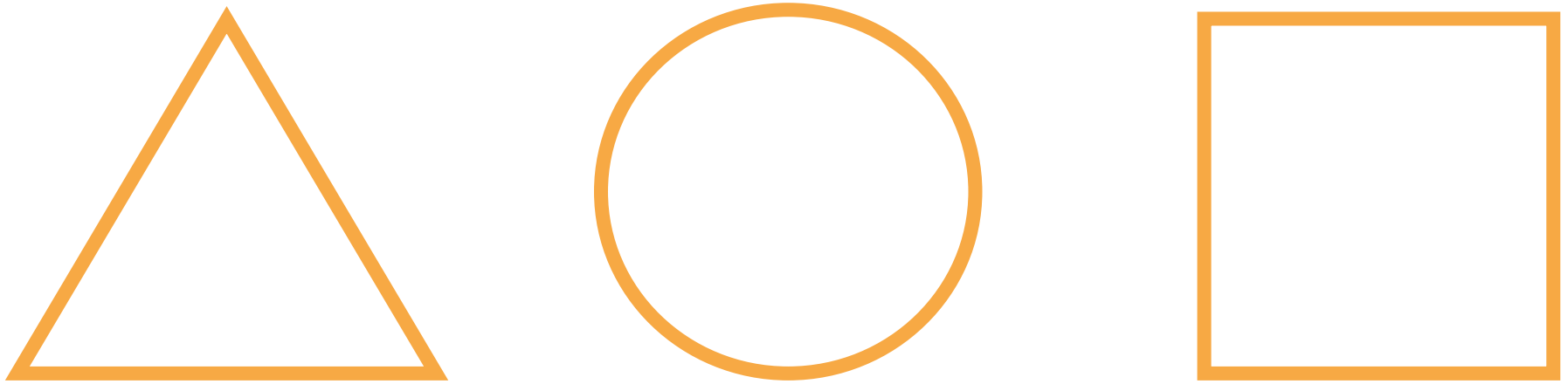


8. Subtraction – Algorithms

Use the below algorithm template to model and solve subtraction problems.

9. Arrays – Multiplication

Using a separate piece of paper for each shape, draw several rows of each of the shapes below.



Swap your arrays with a friend's. Beside their arrays, record the multiplication equation that matches each array.

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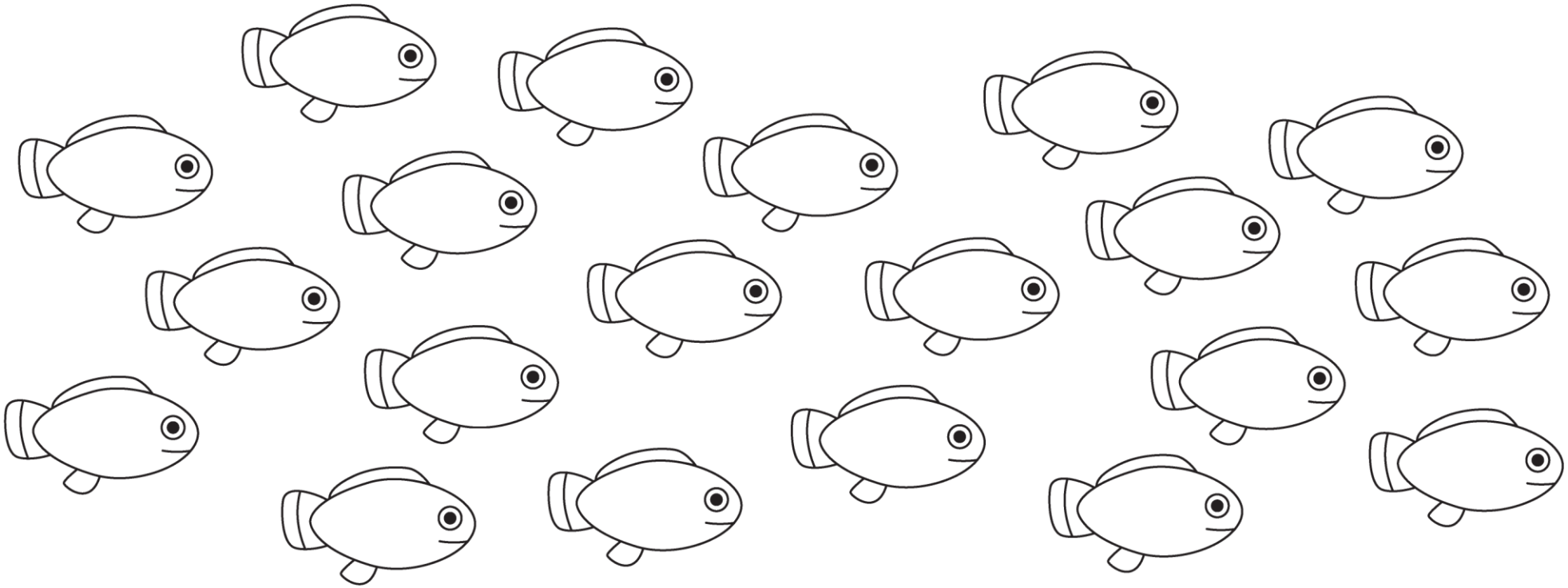
10. Fractions of a Collection

There are 20 fish below. Using a whiteboard marker, colour in some of the fish. What fraction is shown by the number of fish coloured?



$$\frac{\quad}{\quad}$$

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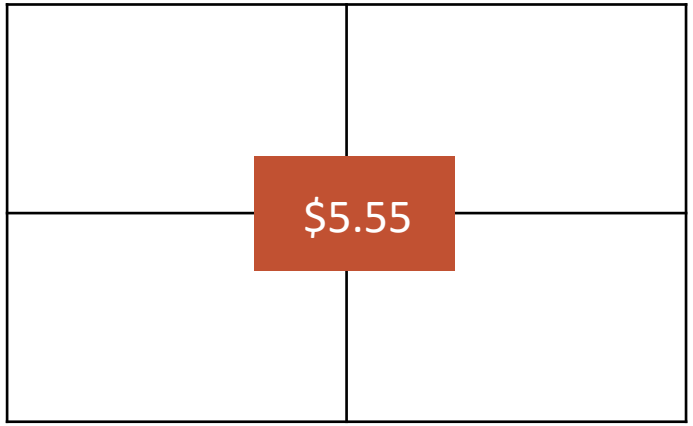
11. Money – Making Change

Draw up a large page as shown below. In the middle, write an amount in dollars and cents that is less than $50. Imagine this is the cost of a toy you want.



Think of an Australian banknote with a value greater than the cost of the toy. If you gave this note to a shopkeeper, what change would you get back? In the four blank boxes, draw the notes and coins you might receive as change.

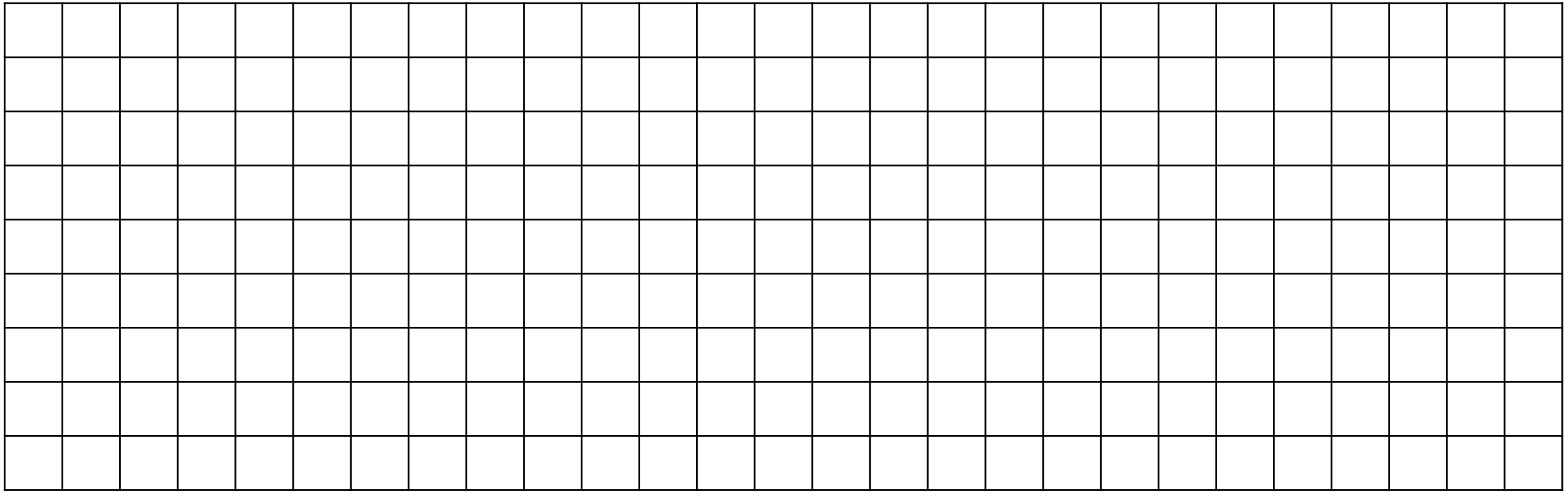
12. Measurement – Length

Each person needs a ruler, paper and a pencil for this activity. After each step, pass the paper to a new person.

1. In the middle of your page, draw a line that is <15 cm long. PASS IT ON.
2. Extend the line an extra 2 cm. PASS IT ON.
3. Draw a line that touches the first line, but is shorter than it. PASS IT ON.
4. Draw a line that passes through ALL the previous lines and is longer than any of them. Place a blob on one end of this line. PASS IT ON.
5. Draw a line to connect with the blob. Make this line exactly 3 cm long.

13. Measurement – Area

Use a whiteboard marker to draw the outline of your hand (with your fingers together) on the grid. Then, calculate how many squares your handprint covers. Remember that a ½ square in one place and a ½ square in another place would make up 1 square.



14. Measurement – Capacity

Think of containers that can hold liquid. Some may be small, like teaspoons. Their capacity is measured in millilitres (mL). The capacity of larger containers, such as car petrol tanks, is measured in litres (L). Write down what containers you think fit in the columns below.

Containers Measured in mL	Containers Measured in L

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15. Measurement – Mass

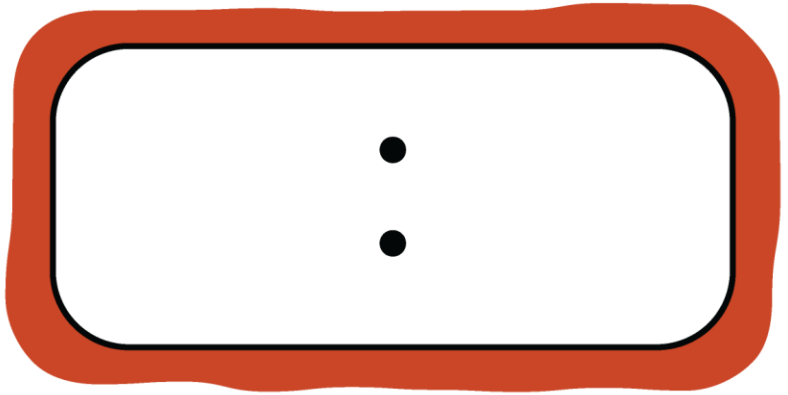
Work with a partner to find three items that you think would weigh either less than 1 kg or approximately 1 kg.

Write the object's name and tick its estimated weight in the table below. Use scales to weigh each object, and then record its actual weight in the table.

OBJECT	ESTIMATION		ACTUAL WEIGHT
	Less than 1 kg	About 1 kg	
1. 2. 3.			

16. Time – to the Minute

Choose a time and write it three different ways: on the analogue clock, on the digital clock, and then written out in words.



In words (past/to/o'clock):

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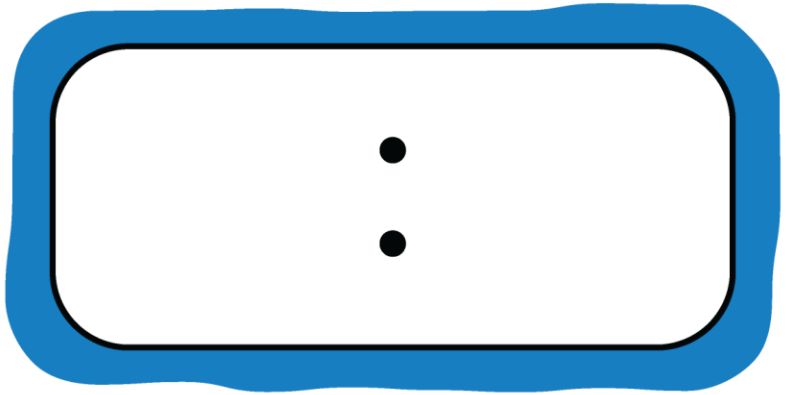
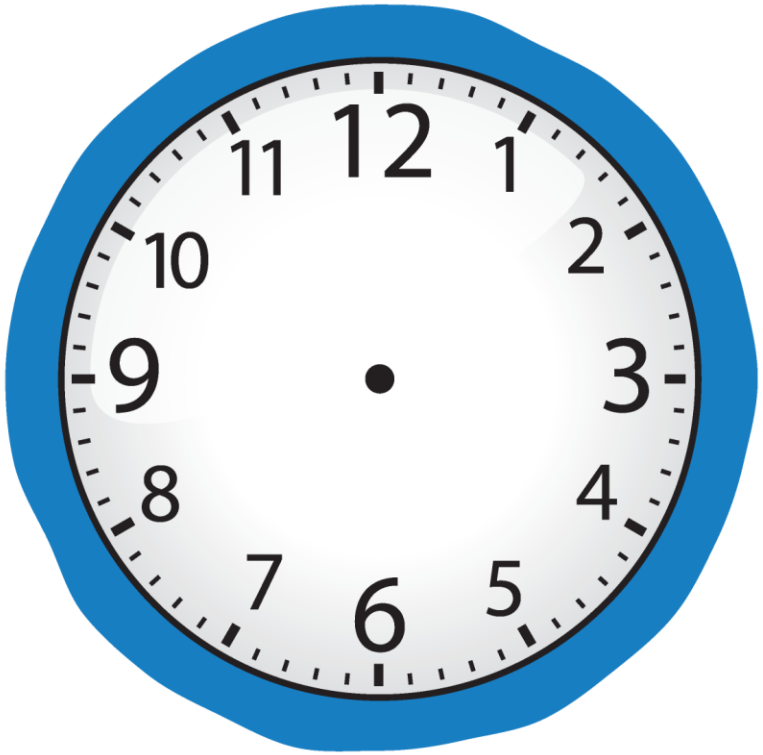
17. Time – Later Than Given Time

Work with a partner. One person chooses a time and writes it on the digital clock. Their partner works out what the time would be 5, 10 or 15 minutes later and records it on the analogue clock.





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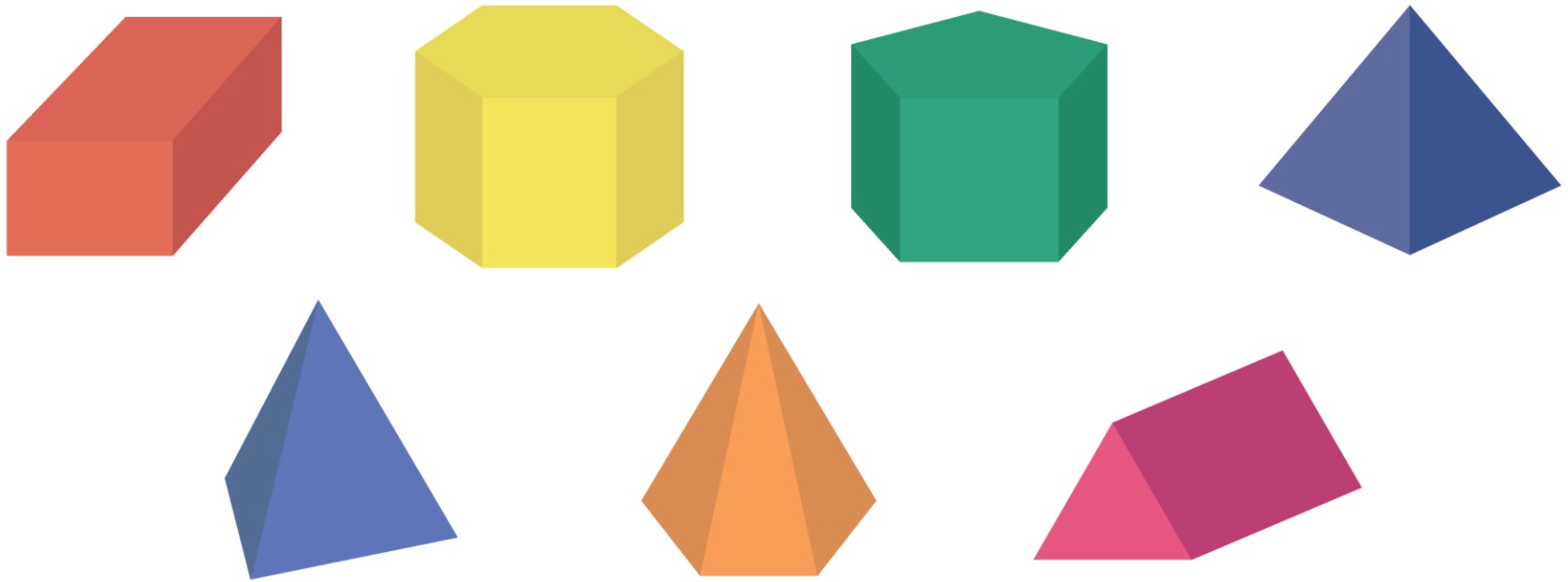
18. Shape – 3D Objects

Choose a 3D object, name it, and draw all of its faces.



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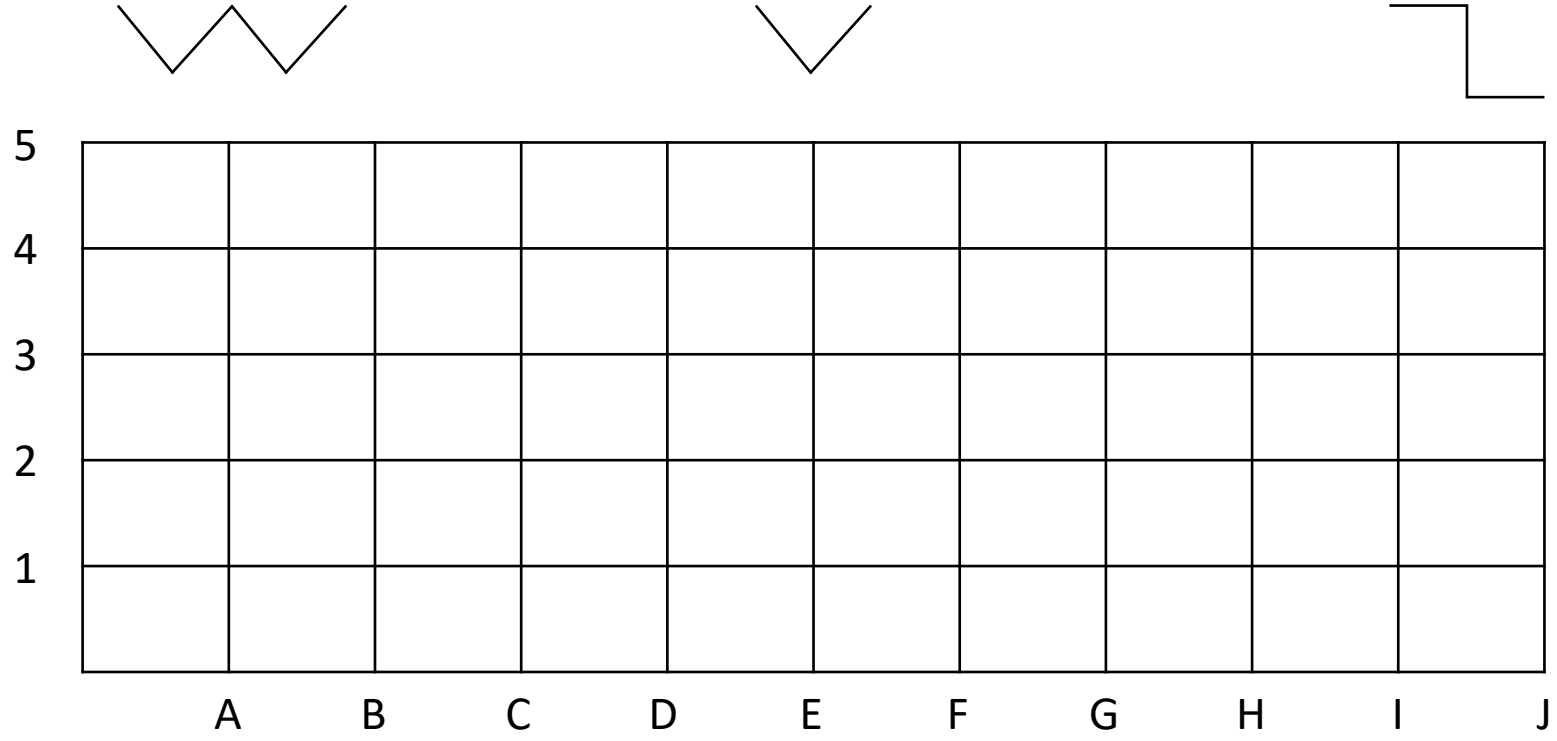
19. Location – Using a Grid

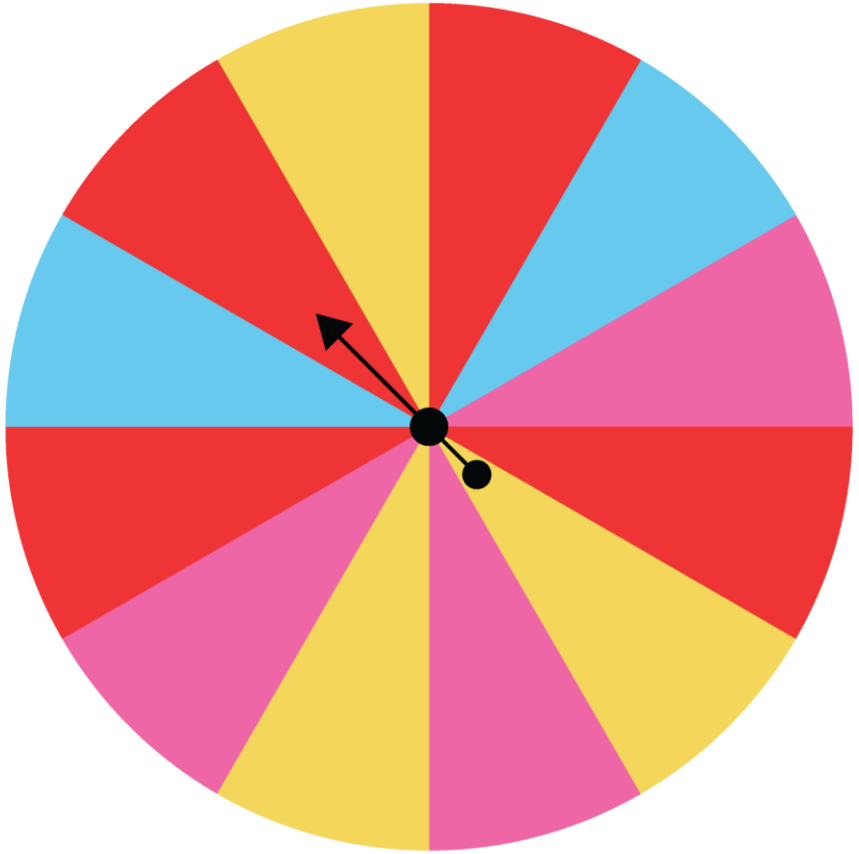
Play this game as a class. One person calls out coordinates. Students take turns plotting them on the grid. (The coordinates could form a type of line or shape).



20. Statistics – Chance

Imagine this wheel was spun 20 times. Make up sentences that use the below words to describe the likelihood of the spinner landing on particular colours.

- impossible
- even chance
- most likely
- least likely



21. Statistics – Data

On the next slide, you will see a graph. Look at the graph and think about what it might represent. As a group, decide what it could be comparing and investigating.

Remember to label the graph with:

- a title
- names for both axes
- categories on the horizontal axis
- numbers on the vertical axis.

What two facts can you tell from looking at your graph?

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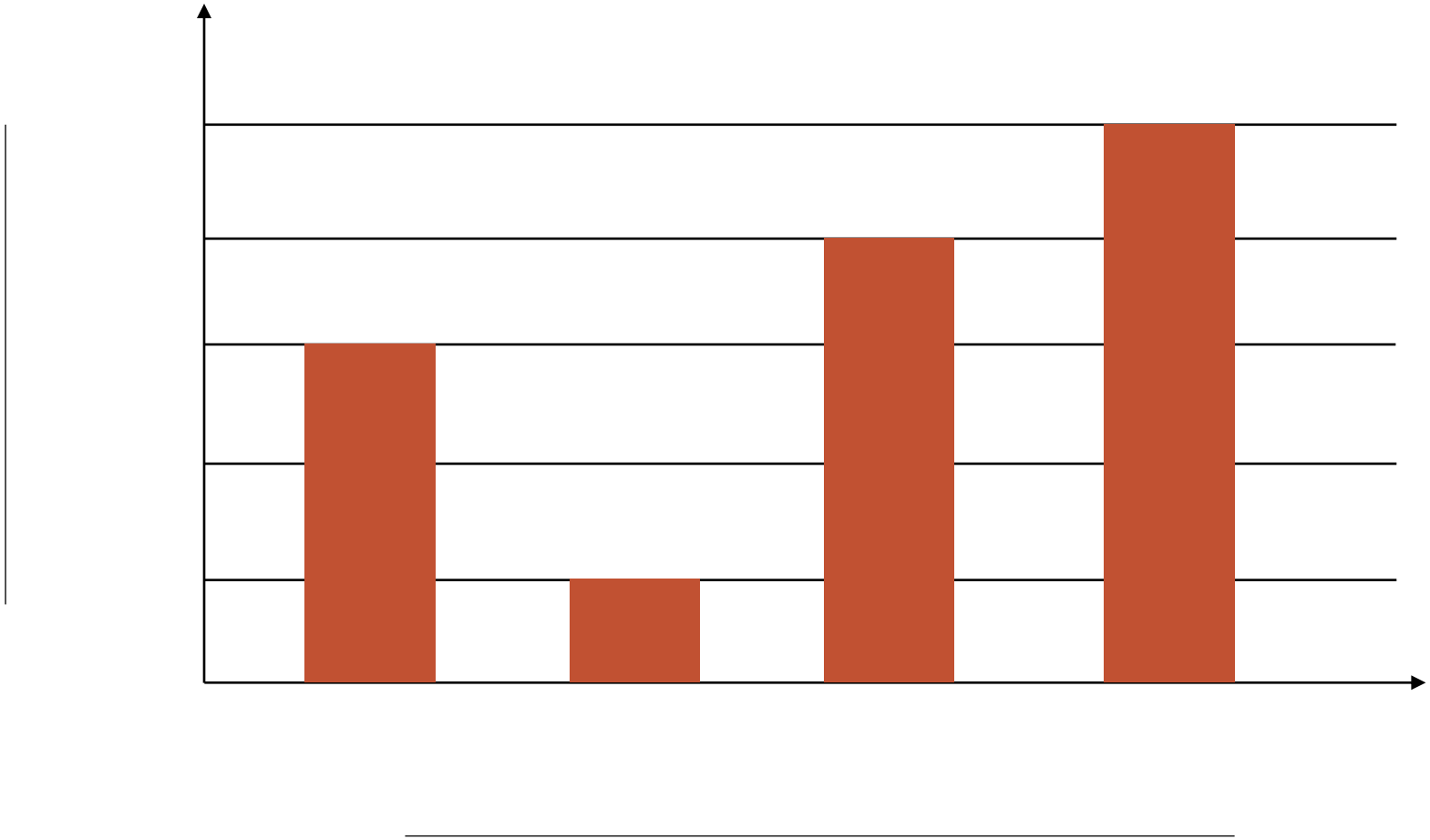
Statistics – Data (Cont.)

Title: _____