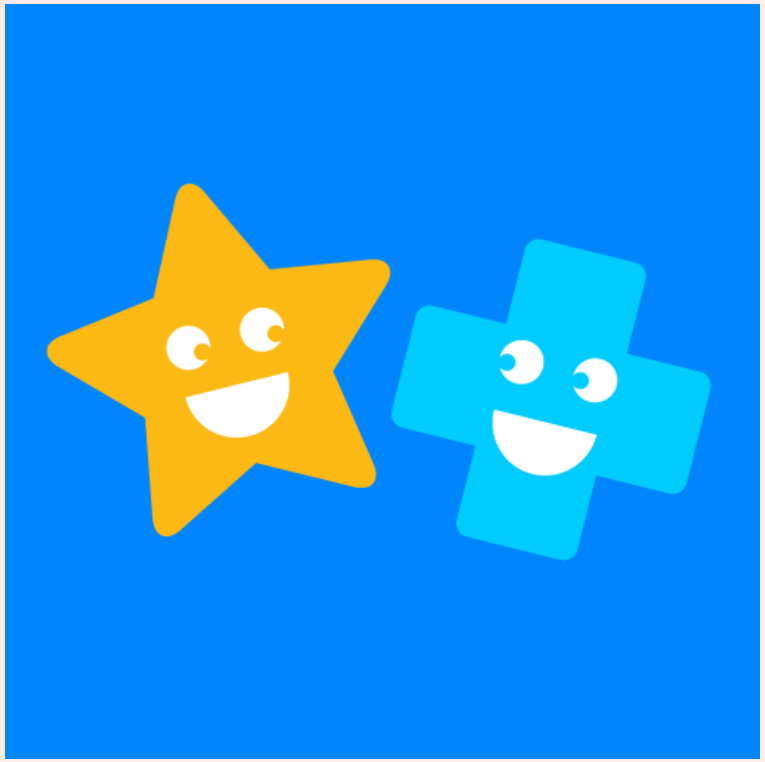
Maths Workshop Year 5
25.09.25

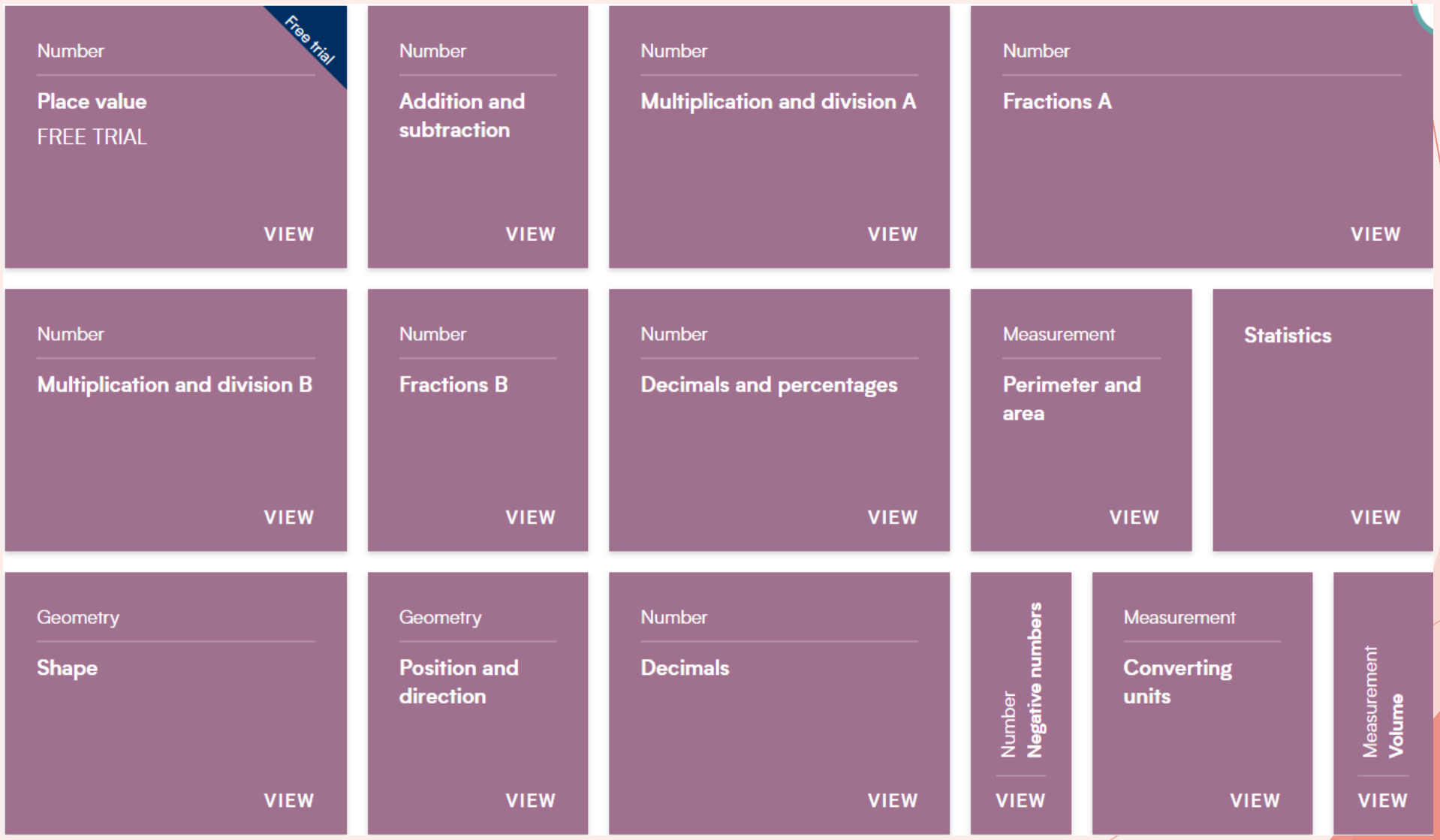
Doodle Maths whilst everyone arrives.



Agenda

- Year 5 expectations
- Overview of lessons
- Activity time

Year 5 expectations



Year 5 expectations

Number - Number and Place Value

- [ ] I can read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.
- [ ] I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.
- [ ] I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
- [ ] I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.
- [ ] I can solve number problems and practical problems that involve all of the above.
- [ ] I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

Year 5 expectations

Number - Addition and Subtraction

- [ ] I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
- [ ] I can add and subtract numbers mentally with increasingly large numbers.
- [ ] I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- [ ] I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

Year 5 expectations

Number - Multiplication and Division

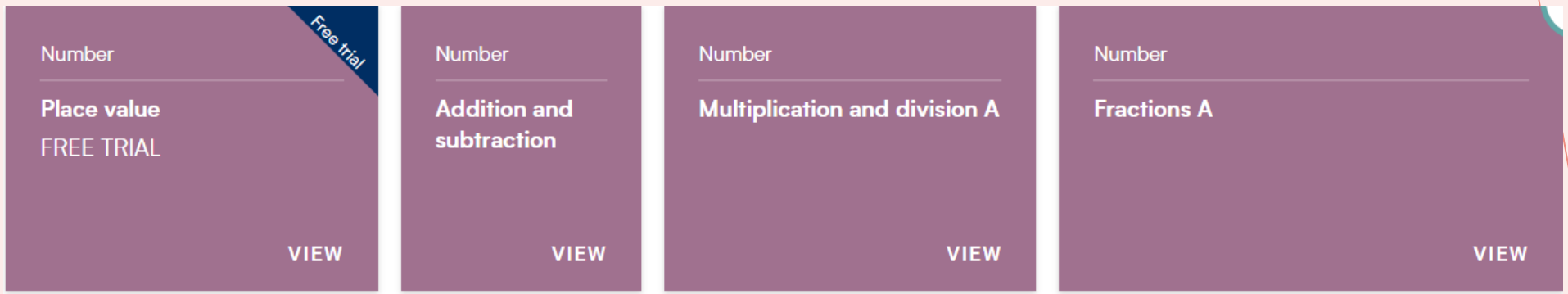
- [ ] I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- [ ] I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.
- [ ] I can establish whether a number up to 100 is prime and recall prime numbers up to 19.
- [ ] I can multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
- [ ] I can multiply and divide numbers mentally drawing upon known facts.
- [ ] I can divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
- [ ] I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- [ ] I can recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}).
- [ ] I can solve problems involving multiplication and division including using my knowledge of factors and multiples, squares and cubes.
- [ ] I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.
- [ ] I can solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Year 5 expectations

Number - Fractions (Including Decimals and Percentages)

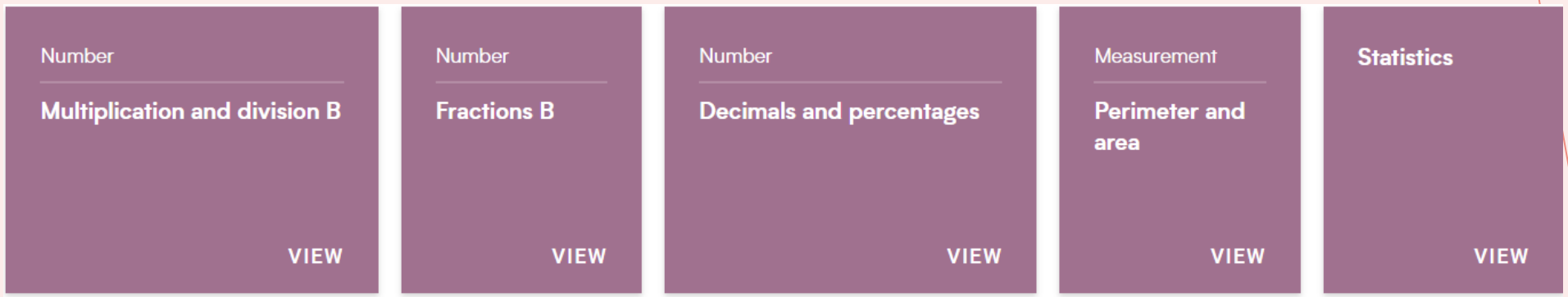
- ☐ I can compare and order fractions whose denominators are all multiples of the same number.
- ☐ I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- ☐ I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$].
- ☐ I can add and subtract fractions with the same denominator and denominators that are multiples of the same number.
- ☐ I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- ☐ I can read and write decimal numbers as fractions [for example, 0.71 = $\frac{71}{100}$].
- ☐ I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- ☐ I can round decimals with two decimal places to the nearest whole number and to one decimal place.
- ☐ I can read, write, order and compare numbers with up to three decimal places.
- ☐ I can solve problems involving number up to three decimal places.
- ☐ I can recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.
- ☐ I can solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.

Year 5 expectations



- Autumn overview

Year 5 expectations



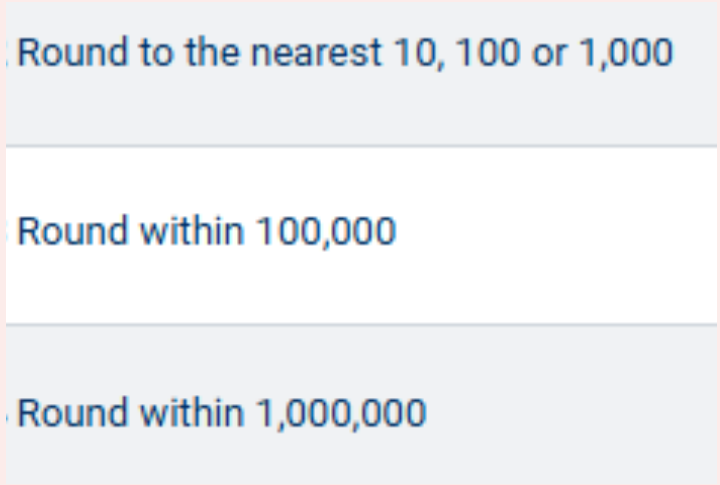
- Spring overview

Year 5 expectations

- Summer overview

Lesson overview

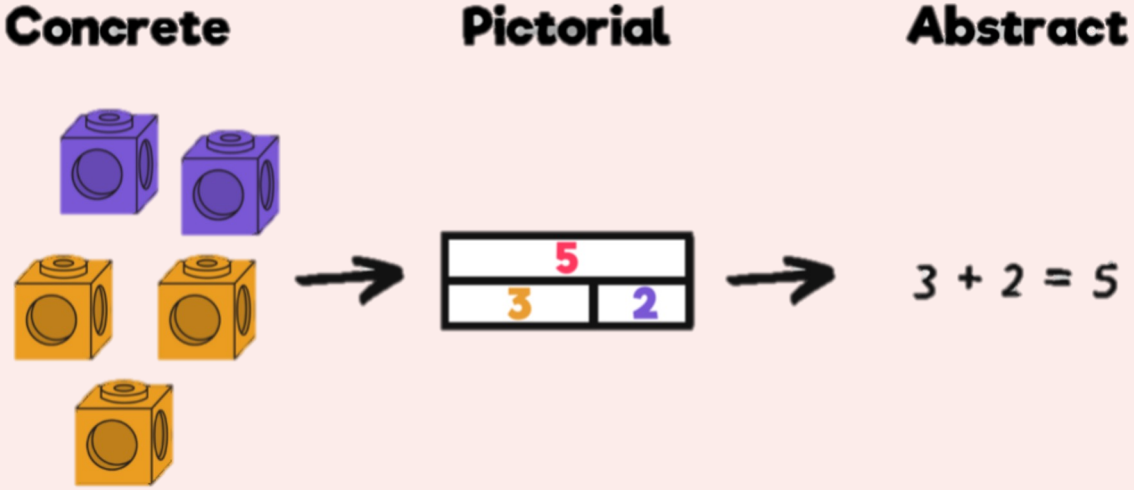
- LO's break down skill for that lesson. Usually, a small step to achieve the Year 5 expectations.



- Allows for time to recap, and consolidate necessary knowledge before moving onto new content.

Lesson overview

- Fluency



- Reasoning

Work out the missing numbers.

			4		3		
	+	2		5		2	
		7	8	5	2	9	

What mistake has been made?

1,562 + 301 = 4,572

Dexter is estimating the sum of a 6-digit number and a 5-digit number.

My 6-digit number rounds to 200,000 to the nearest 10,000

I have rounded my 5-digit number to the nearest 1,000

My estimate of the total is one-quarter of a million.

What could Dexter's numbers be?

What is the greatest possible total of Dexter's numbers?

What is the smallest possible total of Dexter's numbers?

Activity time

- Formal methods – addition and subtraction up to 1,000,000
- Angle detective
- Word problems/Reasoning
- Place Value Board Game

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Please complete the questionnaires and place on teacher desk.