

Aughton St Michael's



Maths Parent Workshop

Oct 2022

What we do works!



KS1 data

ARE- 76%

GD- 35%

KS2 Data

ARE- 87% **NA 71%**

GD- 43% **NA 22%**

Times tables

62% **NA 30%**

ARE= Age related expectations

GD= Greater Depth

NA= National Average

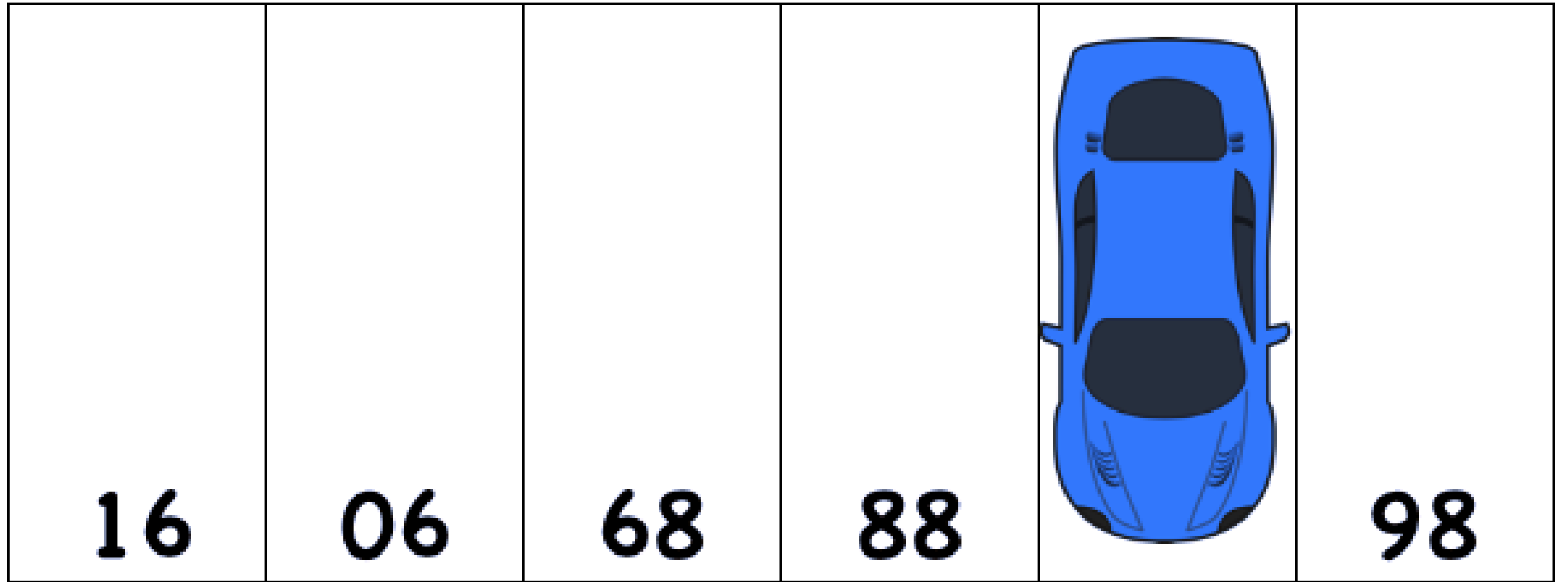
Overall curriculum INTENT

To create independent and resilient learners who enquire into the world around them.

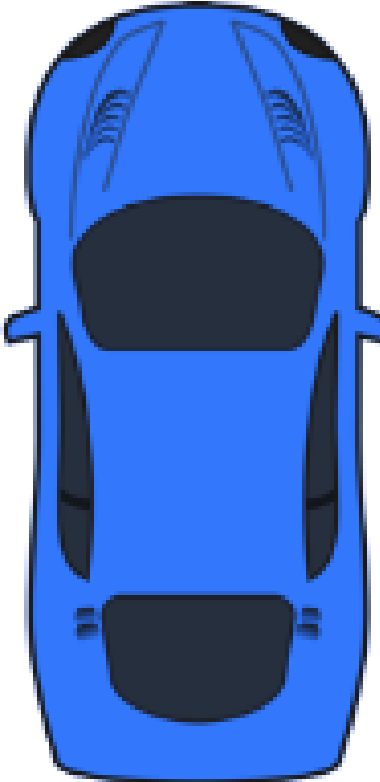
Maths curriculum INTENT

To create independent and resilient mathematicians who can use reasoning to enquire into problems and use Maths to better understand the world around them.

I've parked my car at the Trafford Centre and can't work out the number of the space I've parked in. Can you help me out?



I've parked my car at the Trafford Centre and can't work out the number of the space I've parked in. Can you help me out?

86		88	89	90	91
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Our Curriculum

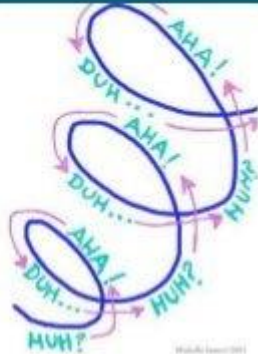
- ▶ Within our curriculum we ensure that we cover all the objectives set out in the [National Curriculum 2014](#). (Mastery)

To help ensure this we:

- ▶ Follow the Lancashire Maths Planning documentation from Lancashire Mathematics Centre.
- ▶ Spiral Curriculum

Bruner's Spiral Curriculum

- (1) The student revisits a topic, theme or subject
- (2) The complexity of the topic or theme increases with each revisit
- (3) New learning has a relationship with old learning and is put in context with the old information.



A screenshot of the school website. The top navigation bar is red with white text for 'Home', 'Classes', 'Our School', 'Parents', 'Curriculum', 'Policies', and 'Contact'. The 'Curriculum' menu is open, showing a list of subjects: 'Curriculum Intent', 'Maths', 'English', 'Books to Read Before You Leave Aughton St Michael's', 'Religious Education', 'Other Subjects', 'Assessment', 'Maths Workshop Resources', 'We Love Reading', and 'Enhancement Days'. The main content area is titled 'Maths' and contains the following text: 'Within our curriculum we ensure that we cover all the objectives set out in the N... To help ensure this we: Follow the Lancashire Maths Planning documentation from Lancashire Mathematic... on the internet. If you wish to see a copy please make an appointment with the s... Mathematics Programmes of Study'. Below this is a 'Files to Download' section with green buttons for 'Addition Methods Summary', 'Calculation Policy: Addition', 'Calculation Policy: Multiplication', and 'Calculation Policy: Subtraction'.

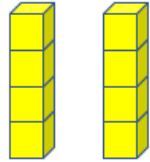
What does this mean on a day-to-day basis?

- ▶ Avoiding a procedural approach to teaching maths.

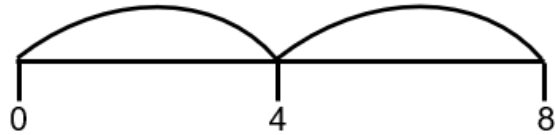
Mastering mathematical understanding

The CPA approach

- Concrete – the 'doing phase'



- Picture – the 'seeing phase'



- Abstract – the 'symbolic phase'

$$4 + 4 = 8$$
$$4 \times 2 = 8$$

The Concrete, Pictorial, Abstract approach (CPA) is a highly effective approach to teaching that develops a deep and sustainable understanding of maths in pupils.

- ▶ Maths baskets are used from Reception to Year 6



What does this mean on a day-to-day basis?

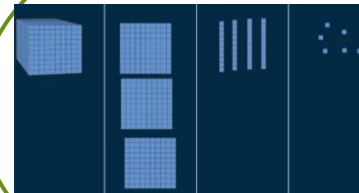
- Reasoning is seen daily throughout our maths lessons.

For example the following question could be shown in the following ways

1	3	□	6	←	1	3	4	6	
4	□	5	1		+	4	3	5	1
□	6	9	7						

One thousand three hundred and forty six

+



$$1 + 300 + 50 + 4000$$

- [Link to calculation policy](#)

Explanation

Jack thinks of two 2-digit numbers and add them together his answer is 203. Explain how you know he has made a mistake.

Explanation

- The biggest 2-digit number is 99.
- $99 + 99 = 198$
- So the largest possible answer he could get is 198.
- His answer is 203 which is greater than 198, so he is incorrect

Explanation

Look at the following statement and decide if it is *always* true, *sometimes* true or *never* true

If I add 2 numbers the answer always gets bigger

Explanation

If I add 2 numbers the answer always gets bigger

Sometimes

4 + 2 = 6 so it's got bigger.

4 + 0 = 4 so it's stayed the same.

4 + -1 = 3 so it's got smaller.

Today's Workshops

- ▶ KS1 Addition and subtraction methods.
- ▶ Multiplication: Grid Method
- ▶ Division written methods
- ▶ Fractions
- ▶ Miss Harrison
- ▶ Miss. Stone
- ▶ Mr Quirk
- ▶ Mrs Wood

Maths drop ins

Tuesday 4 th October	9:15am	Year 5
Wednesday 5 th October	9:15am	Year 4
Wednesday 5 th October	11:00am	Year 1
Thursday 6 th October	9:15am	Year 2
Thursday 6 th October	11:00am	Year 3
Friday 7 th October	9:15am	EYFS
Friday 7 th October	11:00am	Year 6