YEAR 3 Maths Attainment Statements – Examples of Teaching Activities

The following activities provide examples of the types of teaching activities undertaken in school - it is not an exhaustive list and some of these activities would be undertaken with teacher support. A child successful in these activities is demonstrating an excellent understanding of the concept and shows a depth of understanding . Many of these activities can be used at home – please use these as an opportunity to talk together about maths rather than a test of what you child can do or can't.

Maths Aspect: Number and Place Value

- Spot the mistake: 50,100,115,200 What is wrong with this sequence of numbers?
- True or False? 38 is a multiple of 8?
- What comes next? 936-10= 926 926 -10 = 916 916- 10= 906
- Do, then explain- 835, 535, 538, 388, 508. If you wrote these numbers in order starting with the smallest, which number would be third? Explain how you ordered the numbers.
- Do, then explain - Show the 3 value of the digit 3 in these numbers? 341, 503, 937. Explain how you know.
- Make up an example - Create numbers where the digit sum is three. Eg 120, 300, 210 . What is the largest/smallest number?

Maths Aspect: Addition and Subtraction

- True or false? Are these number sentences true or false?597 + 7 = 614, 804 – 70 = 744, 768 + 140 = 908. Give your reasons.
- Hard and easy questions - Which questions are easy / hard?
  323 + 10 =
  393 + 10 =
  454 - 100 =
  954 - 120 = Explain why you think the hard questions are hard?
- Other possibilities - ___+___ + ___= 14 What single digit numbers could go in the boxes? How many different ways can you do this?
- Convince me - _ _+ _ _+_ _ = The total is 201. Each missing digit is either a 9 or a 1. Write in the missing digits. Is there only one way of doing this or lots of ways? Convince me.
- Making an estimate - Which of these number sentences have the answer that is between 50 and 60
  174 - 119
  333 – 276
  932 - 871
- Always, sometimes, never –
  Is it always, sometimes or never true that if you subtract a multiple of 10 from any number the units digit of that number stays the same. Is it always, sometimes or never true that when you add two numbers together you will get an even number

Maths Aspect: Geometry

- What's the same, what's different? What is the same and different about these three2-D shapes? (different shapes)
- Visualising - I am thinking of a 3- dimensional shape which has faces that are triangles and squares. What could my shape be?
- Always, sometimes, never - Is it always, sometimes or never that all sides of a hexagon are the same length.
- Other possibilities - Can you find shapes that can go with the set with this label? "Have straight sides that are different lengths."
- Convince me - Which capital letters have perpendicular and / or parallel lines? Convince me.

- Working backwards - If I make the two opposite sides of a square 5 cm longer the new lengths of those sides are 27cm. What was the size of my original square? What is the name and size of my new shape?

Maths Aspect: Multiplication and Division

- Missing numbers - 24 =___ x___ Which pairs of numbers could be written in the boxes?
- Making links - Cards come in packs of 4. How many packs do I need to buy to get 32 cards?
- Use a fact- 20 x 3 = 60. Use this fact to work out
  21 x 3 = 22 x 3 =
  23 x 3 = 24 x 3 =
- Making links - 4 × 6 = 24 How does this fact help you to solve these calculations? 40 x 6 = 20 x 6 = 24 x 6 =
- How close can you get? _ _ × _ Using the digits 2, 3 and 4 in the calculation how close can you get to 100? What is the largest product? What is the smallest product?
- True or false? - All the numbers in the two times table are even. There are no numbers in the three times table that are also in the two times table.
- Use the inverse - Use the inverse to check if the following calculations are correct : 23 x 4 = 82, 117 ÷ 9 = 14
- Size of an answer- Will the answer to the following calculations be greater or less than 80
  23 x 3=
  32 x 3 =
  42 x 3 =
  36 x 2=

Maths Aspect: Measurement

- Top Tips - Put these measurements in order starting with the largest. Half a litre, Quarter of a litre, 300 ml. Explain your thinking
- Position the symbols- Place the correct symbol between the measurements > or <. 306cm ____Half a metre
  930 ml _____1 litre. Explain your thinking.
- Undoing - A programme lasting 45 minutes finishes at 5.20. At what time did it start? Draw the clock at the start and finish time.
- Explain thinking - Salha says that 100 minutes is the same as 1 hour. Is Salha right or wrong? Explain why.
- Write more statements - (You may choose to consider this practically) If there are 630ml of water in a jug. How much water do you need to add to end up with a litre of water? What if there was 450 ml to start with? Make up some more questions like this.
- Testing conditions- A square has sides of a whole number of centimetres. Which of the following measurements could represent its perimeter? 8cm ,18cm, 24cm, 25cm.
- Possibilities - I bought a book which cost between £9 and £10 and I paid with a ten pound note. My change was between 50p and £1 and was all in silver coins. What price could I have paid?
- Working backwards - Tom's bus journey takes half an hour. He arrives at his destination at 9:25. At what time did his bus
- leave? 9:05, 8:55, 8:45
- The answer is …. 25 minutes. What is the question?
- What do you notice?- What do you notice?
  1 minute = 60 seconds
  2 minutes = 120 seconds. Continue the pattern. Write down some more time facts like these.

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- Always, sometimes, never - Is it always, sometimes or never that all sides of a hexagon are the same length.
- Other possibilities - Can you find shapes that can go with the set with this label? "Have straight sides that are different lengths."
- Convince me - Which capital letters have perpendicular and / or parallel lines? Convince me.
- Working backwards - If I make the two opposite sides of a square 5 cm longer the new lengths of those sides are 27cm. What was the size of my original square? What is the name and size of my new shape?

Maths Aspect: Fractions (including Percentages and Decimals)

- Spot the mistake - six tenths, seven tenths, eight tenths, nine tenths, eleven tenths … and correct it.
- What comes next?- 6/10, 7/10, 8/10, ….., …. 12/10, 11/10, ….., ….., …..
- What do you notice?
  1/10 of 10 = 1
  2/10 of 10 = 2
  3/10 of 10 = 3 Continue the pattern. What do you notice? What about 1/10 of 20? - Use this to work out 2/10 of 20, etc.
- True or false?
  2/10 of 20cm = 2cm
  4/10 of 40cm = 4cm
  3/5 of 20cm = 12cm
- Give an example of a fraction that is less than a half. Now another example that no one else will think of.
- Ben put these fractions in order starting with the smallest. Are they in the correct order? One fifth, one seventh, one sixth.
- Odd one out.- Which is the odd one out in each of these trios, ½ 3/6 5/8, 3/9 2/6 4/9 Why? What do you notice?
- Find 2/5 of 10, Find 4/10 of 10. What do you notice? Can you write any other similar statements?
- Ordering - Put these fractions in the correct order, starting with the smallest. 4/8 ¾ ¼
- What do you notice?
  1/10 + 9/10 = 1
  2/10 + 8/10 = 1
  3/10 + 7/10 = 1 Continue the pattern. Can you make up a similar pattern for eighths?
- The answer is 5/10, what is the question? (involving fractions /operations)

Maths Aspect: Statistics

- True or false? (Looking at a bar chart) "Twice as many people like strawberry than lime". Is this true or false? Convince me. Make up your own 'true/false' statement about the bar chart.