YEAR 4 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: 950, 975,1000,1250 What is wrong with this sequence of numbers?
- True or False? 324 is a multiple of 9?
- What comes next? 6706+ 1000= 7706 7706 + 1000 = 8706 8706 + 1000 = 9706
- Do, then explain -5035, 5053, 5350, 5530, 5503 If you wrote these numbers in order starting with the largest, which number would be third? Explain how you ordered the numbers.
- Do, then explain- Show the value of the digit 4 in these numbers? 3041, 4321, 5497.
- Make up an example - Create four digit numbers where the digit sum is four and the tens digit is one. Eg 1210, 2110, 3010 What is the largest/smallest number?
- Possible answers - A number rounded to the nearest ten is 540. What is the smallest possible number it could be? What do you notice? Round 296 to the nearest 10. Round it to the nearest 100. What do you notice? Can you suggest other numbers like this?

Maths Aspect: Addition and Subtraction

- True or false?- Are these number sentences true or false?6.7 + 0.4 = 6.11, 8.1 – 0.9 = 7.2
- Hard and easy questions- Which questions are easy/ hard?
  13323 - 70 =
  12893 + 300 =
  19354 - 500 =
  19954 + 100 = Explain why you think the hard questions are hard?
- Convince me- _____- 666 = 8___ What is the largest possible number that will go in the rectangular box? What is the smallest? Convince me
- Making an estimate- Which of these number sentences have the answer that is between 550 and 600
  1174 - 611
  3330 – 2779
  9326 - 8777
- Always, sometimes, never - Is it always sometimes or never true that the difference between two odd numbers is odd.

Maths Aspect: Measurement

- Put these amounts in order starting with the largest. Half of three litres, Quarter of two litres, 300 ml. Explain your thinking
- Position the symbols- Place the correct symbols between the measurements > or <, £23.61 2326p 2623p Explain your thinking.
- Undoing- Imran's swimming lesson lasts 50 mins and it takes 15 mins to change and get ready for the lesson. What time does Imran need to arrive if his lesson finishes at 6.15pm?
- Explain thinking- The time is 10:35 am. Jack says that the time is closer to 11:00am than to 10:00am. Is Jack right? Explain why.
- Write more statements - One battery weighs the same as 60 paperclips; One pencil sharpener weighs the same as 20 paperclips. Write down some more things you know. How many pencil sharpeners weigh the same as a battery?
- Testing conditions -If the width of a rectangle is 3 metres less than the length and the perimeter is between 20 and 30 metres, what could the dimensions of the rectangle lobe? Convince me.
- Possibilities - Adult tickets cost £8 and Children's tickets cost £4. How many adult and children's tickets could I buy for £100 exactly? Can you find more than one way of doing this?
- Working backwards - Put these times of the day in order, starting with the earliest time.
  A: Quarter to four in the afternoon
  B: 07:56
  C: six minutes to nine in the evening
  D: 14:36
- The answer is … 225 metres. What is the question?
- What do you notice?- What do you notice? 1:00pm = 13:00, 2:00pm = 14:00. Continue the pattern

Maths Aspect: Multiplication and Division

- Missing numbers- 72 = __x___ Which pairs of numbers could be written in the boxes?
- Making links - Eggs are bought in boxes of 12. I need 140 eggs; how many boxes will I need?
- Use a fact - 63 ÷ 9 = 7. Use this fact to work out 126 ÷ 9 =, 252 ÷ 7 =
- Making links -How can you use factor pairs to solve this calculation? 13 x 12 (13 x 3 x 4, 13 x 3 x 2 x 2, 13 x 2 x 6)
- Prove It - What goes in the missing box? 6 ___x 4 = 512
- How close can you get? ___ ____ ___ X 7 Using the digits 3, 4 and 6 in the calculation how close can you get to 4500? What is the largest product? What is the smallest product?
- Always, sometimes, never?-
  Is it always, sometimes or never true that an even number that is divisible by 3 is also divisible by 6.
  Is it always, sometimes or never true that the sum of four even numbers is divisible by 4.
- Use the inverse- Use the inverse to check if the following calculations are correct: 23 x 4 = 92, 117 ÷ 9 = 14
- Size of an answer - Will the answer to the following calculations be greater or less than 300
  152 x 2=
  78 x 3 =
  87 x 3 =
  4 x 74 =

Maths Aspect: Fractions (including Percentages and Decimals)

- Spot the mistake- sixty tenths, seventy tenths, eighty tenths, ninety tenths, twenty tenths … and correct it.
- What comes next? - 83/100, 82/100, 81/100, ….., …..,….. 31/100, 41/100, 51/100, ….., …..,
- What do you notice?-
  1/10 of 100 = 10
  1/100 of 100 = 1
  2/10 of 100 = 20
  2/100 of 100 = 2 How can you use this to work out 6/10 of 200? 6/100 of 200?
- True or false?- 1/20 of a metre= 20cm 4/100 of 2 metres = 40cm
- Give an example of a fraction that is more than a half but less than a whole.
- Explain how you know the fraction is more than a half but less than a whole.
- Missing symbol - Put the correct symbol < or > in each box 3.03__ 3.33, 0.37___ 0.32
- What needs to be added to 3.23 to give 3.53? What needs to be added to 3.16 to give 3.2?
- Do, then explain- Circle each decimal which when rounded to the nearest whole number is 5.
  5.3 5.7 5.2 5.8 Explain your reasoning
- Odd one out.- Which is the odd one out in each of these trio s¾, 9/12, 4/6 - 9/12, 10/15, 2/3 Why? What do you notice?
- Find 4/6 of 24, Find 2/3 of 24 What do you notice? Can you write any other similar statements?
- Ordering- Put these numbers in the correct order, starting with the smallest. ¼ 0.75 5/10 Explain your thinking
- What do you notice?- 5/5 – 1/5 = 4/5 4/5 – 1/5 = 3/5
  Continue the pattern- Can you make up a similar pattern for addition?
- The answer is 3/5, what is the question?
- What do you notice?
  11/100 + 89/100 = 1
  12/100 + 88/100 = 1
  13/100 + 87/100 = 1
  Continue the pattern for the next five number sentences.

Maths Aspect: Geometry

- What's the same, what's different?- What is the same and what is different about the diagonals of these 2-D shapes?
- Visualising - Imagine a square cut along the diagonal to make two triangles. Describe the triangles. Join the triangles on different sides to make new shapes. Describe them. (you could sketch them) Are any of the shapes symmetrical? Convince me.
- Other possibilities Can you draw a non-right angled triangle with a line of symmetry? Are there other possibilities.
- Always, sometimes, never - Is it always, sometimes or never true that the two diagonals of a rectangle meet at right angles.
- Other possibilities Can you show or draw a polygon that fits both of these criteria? What do you look for? "Has exactly two equal sides." "Has exactly two parallel sides."
- Convince me - Ayub says that he can draw a right angled triangle which has another angle which is obtuse. Is he right? Explain why.

- Working backwards - Here are the co-ordinates of corners of a rectangle which has width of 5. (7, 3) and (27, 3) What are the other two co-ordinates?

Maths Aspect: Statistics

- True or false? (Looking at a graph showing how the class sunflower is growing over time) "Our sunflower grew the fastest in July". Is this true or false? Convince me. Make up your own 'true/false' statement about the graph.