Year 6 Autumn Term 1 Maths

Fluency, Reasoning, Problem Solving are the three strands that underpin maths mastery at Hyrstmount Junior School

At Hyrstmount Junior School we use the White Rose Maths Hub medium term planning as the basis for our maths teaching.

This term, year six will focus on four of the seven strands of the maths curriculum:
Number: Place Value
Number: Addition and Subtraction
Number: Multiplication and Division

We will also have arithmetic lessons each week which will focus on mental maths skills. These arithmetic skills underpin all elements of the maths curriculum and include:

- Multiplying and dividing by 10, 100 and 1000
- Rounding to the nearest whole, 10, 100, 1000 and 10, 000
- Solving calculations using all four operations
- Working with fractions, decimals and percentages
- Finding fractions and percentages of amounts

Fluency

Write the following number in words: 23650118

Put a number in the missing space below to make the sentence correct.
4_236460 > 46236460

What is the highest common factor of 24 and 36?

Circle the odd one out:

345 + 452 ≈800
691 + 113 ≈800
368 + 482 ≈800

Reasoning

Harry says "Without doing a written method I know 7350 ÷ 7 will not have a remainder." Is he correct? Convince me.

Belle divides 8541 by 8. She says "I know there will be a remainder before I start." Is she correct? Explain how you know.

Daniel completed the following calculation and got the answer 168
2(30 ÷ 5) + 14 = 168

Can you explain what he did and where he made the mistake?

Problem Solving

Imagine you have 25 beads. You have to make a 3 digit number on an abacus. You must use all 25 beads each time you make a number. How many different 3 digit numbers can you make?

Nancy is double her sister's age. They are both older than 20 and younger than 50. They are both multiples of 7. How old are they?

Craig says "250 ends in a zero therefore, when multiplying, I can only make 250 by multiplying by 5 or 10." Do you agree? How many ways can you find to disprove this?

How you can help

Ensure your child knows:

- times tables and associated division facts up to 12 x 12.
- how to tell the time using a both an analogue and digital clock.
- prime numbers to 50.
- properties of 2-d and 3-d shapes

www.ttrockstars.com - can be used to learn and revise times tables and division facts.

Key Instant Recall Facts

I know the multiplication and division facts for all times tables up to 12 x 12

Children should be able to answer these questions in any order, including missing number questions, e.g. 7 × ◯ = 28 or ◯ ÷ 6 = 7.

Children who have already mastered their times tables should apply this knowledge to answer questions including decimals, e.g. 0.7 × ◯ = 2.8 or ◯ ÷ 6 = 0.7 or multiplies of 10s e.g. 700 × ◯ = 2800 or ◯ ÷ 60 = 7.

Key Vocabulary

What is 12 multiplied by 6?

What is 7 times 8?

What is 84 divided by 7?

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs while walking to school or during a car journey? You don't need to practise them all at once: perhaps you could have a fact family of the day. If you would like more ideas, please speak to your child's teacher.

Speed Challenge – Take two packs of playing cards and remove the kings. Turn over two cards and ask your child to multiply the numbers together (Ace = 1, Jack = 11, Queen = 12). How many questions can they answer correctly in 2 minutes? Practise regularly and see if they can beat their high score.

Online games – There are many games online which can help children practise their multiplication and division facts.

Use memory tricks – For those hard-to-remember facts, www.multiplication.com has some strange picture stories to help children remember.