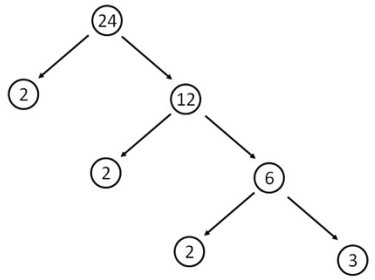
Year 6 Number Knowledge – Autumn 2

Each term, your child will focus on two areas to help them with their understanding of number. We would like you to choose one of the following activities to complete at home each week.

Multiplication tables and related division facts: Mental calculations

Countdown Choose any six numbers between 1 and 100. Get a family member or friend to choose a 3-digit number. Your task is to use your chosen numbers to make the target number. You can only use each of your chosen numbers once but you can use any of the four operations. You can also play it online if you'd prefer: https://www.topmarks.co.uk/Flash.aspx?f=countdowntimerv3	**Times tables practice** Know your times tables is essential to solving calculations quickly. Choose one of the following: ☐ Play TTRockstars ☐ Get a family member or friend to quiz you ☐ Write out the times table you need help remembering as quickly as you can – do it again and see if you can beat your time! ☐ Create your own game of pairs: write calculations and answers on different slips of paper and then put them face down. Turn an answer and a question over and see if they match.
Number bond target Choose a target number. Get a family member or friend to say a number and you have to work out what you need to add to make your target number. E.g. Target number: **5000** Family member or friend chooses 2735 I would say 2265 because 2735 + 2265 = 5000 SUPPORT: write the numbers down and use jottings to help you remember your mental calculations.	Create your own game to help a child in year 5 practice solving calculations using mental methods. Make sure it is fun to play and try to include different levels of challenge within your game.

Properties of number: Factors, multiples and prime numbers

Chose 3 numbers and create a factor tree for each one. E.g.  	Get a family member or friend to choose two numbers (the bigger the number, the hard this challenge is). You must write down the common factors of the two numbers. How do you know if you have found all of the common factors? What is the highest common factor? What is the lowest common factor?
Get a family member or friend to choose two numbers between 1 and 20. You must write down at least 3 common multiples of the two numbers. CHALLENGE: get your family member or friend to choose 3 numbers. Why is this more difficult?	**Number investigations** Choose a statement to investigate. Decide whether they are *always*, *sometimes* or *never* true. Remember to PEE (make your **point**, prove it with **evidence** then **explain** your point). All prime numbers are odd. All multiples of 10 are also multiples of 5 and 2. Even numbers have an even number of factors. CHALLENGE: think of your own mathematical statement to investigate.