

Multiplication and Division: Find the Primes

Aim: Establish whether a number up to 100 is prime and recall prime numbers up to 19. I can name all of the prime numbers to 20.	Success Criteria: I can explain what a prime number is. I know that 2, 3, 5, 7, 11, 13, 17 and 19 are prime numbers.	Resources: Lesson Pack Dice Whiteboards and pens
	Key/New Words: Prime number, composite number, factor, multiple, odd, even, consecutive.	Preparation: Differentiated Find the Primes Activity Sheets – one per child Bingo Sheet – one per child

Prior Learning: It will be helpful if the children know the multiplication facts up to 12×12 , and understand the words multiple, factor and prime number.

Learning Sequence

	Star Number: The Lesson Presentation shows a star with a number inside it. On each point of the star, there is a quick task to do to the star number, e.g. double it, partition it, find its factors, halve it, multiply its digits. A slide with a more challenging number is also included for you to use if you wish.	
	What Is a Prime Number? What is a prime number? Children look at the ideas suggested on the Lesson Presentation and decide which definition is correct. Children discuss with a talk partner before feeding back to the class.	
	Prime Numbers to 20: Children work in pairs to name all of the prime numbers to 20 . Share the answers on the Lesson Presentation , encouraging children to check that they have identified every prime number.	
	Prime Number Bingo: Distribute the Bingo Sheets. Children follow the instructions on the Lesson Presentation to play the game in pairs. The first person to cross off all of their prime numbers is the winner.	
 Children name the prime numbers to 20 then use the numbers 5, 6, 7, 8, and 9 and the operations + and - to calculate them. Children name the prime numbers to 20 then use the numbers 0, 1, 2, 3 and 9 and all four operations to calculate them. Children name the prime numbers to 20 then investigate whether they can use various sets of consecutive numbers and all four operations to calculate them.	Find the Primes: Children complete the differentiated Find the Primes Activity Sheets , naming all of the prime numbers to 20.	
 Children identify prime and composite numbers. Children prove whether a statement is correct. They identify possible numbers from given criteria. Children solve prime number problems.	Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.	
	Prime Rhyme: Children learn the rhyme for remembering the prime numbers to 20.	

Exploreit

Rhymeit: Children write their own rhyme to remember the prime numbers less than 20.

Composeit: Children use tuned or untuned musical instruments to turn the 'Prime Rhyme' into a song by composing a melody to go with the words.

Learnit: Children learn the prime numbers up to 50 and test each other in pairs.