Addition and Subtraction: Add and Subtract a Multiple of Ten and Ones

Aim: Add and subtract numbers using concrete objects, pictorial representations, and mentally. I can add a 1-digit number to a multiple of ten and perform the inverse.	Success Criteria: I can add a 1-digit number to a multiple of 10. I can subtract a 1-digit number to target a multiple of 10. I can spot a pattern. I can continue a pattern.	Resources: Lesson Pack Number shapes, bundles of straws, base ten blocks or other representations of tens and ones Arrow cards
	Key/New Words: Count back, how many less, keeping track, explain, prove, reasoning, represent, patterns, continue a pattern, inverse, multiple, add, count on and how many more.	Preparation: Diving into Mastery Activity Cards – as required Differentiated Prove It Cards – one per pair Tens and Ones Mat – as required

Prior Learning: It will be helpful if children can count forwards and back, starting and stopping in different places.

Learning Sequence				
	Remember It: Children click on the Lesson Presentation to roll the dice. They add or subtract the dice according to the instructions on the slide. Children explain what they have noticed and continue the pattern. They then investigate the patterns with base ten blocks or other representations of tens and ones to deepen their understanding. Can the children spot and continue a pattern?			
	What Happens to Zero? Children add a one-digit number to a ten. They use representations of tens and ones, the Tens and Ones Mat and arrow cards to support their learning. Children explain what happens to the zero and why the digit representing the tens doesn't change.			
	Fast and Furious: Invite the children to complete the calculations shown on the Lesson Presentation. Ask them to apply the patterns that they have noticed and to record their answers on whiteboards at top speed!			
Vindle Class	Finding Zero: The Lesson Presentation demonstrates what happens when the complete group of ones are subtracted from a two-digit number. Children are invited to describe what they notice and to explain why.			
	Prove It! Children complete a differentiated Prove It Card . They explain what they notice to their partner using equipment, numbers lines or drawings to represent their thinking. Can the children add a one-digit number to a multiple of ten? Can the children subtract a one-digit number to target a multiple of ten? Can the children spot and continue a pattern?			
	 Children work through a card, either in pairs or as a group (if an adult is available). They identify the pattern and continue it, demonstrating what they have noticed using a Tens and Ones Mat, arrow cards, base ten blocks, or other representations of tens and ones. Children work through a card in pairs. They identify the pattern and continue it, demonstrating what they have noticed using a Tens and Ones Mat, arrow cards, base ten blocks, or other representations of tens and ones. 			



Rollit: Children roll a multiple of tens dice and a 0 - 6 or 0 - 9 dice. They add the two numbers together. Can they say how much they would add to make the next multiple of ten? Can children spot the pattern?

Learnit: Children will find this visually exciting a useful tool for developing strategies to add and subtract.