Addition and Subtraction: Subtract 1-Digit from 2-Digit Numbers Crossing 10

Aim:	**Success Criteria:**	**Resources:**
Add and subtract numbers using concrete objects, pictorial representations, and mentally. To subtract a 1-digit number from a 2-digit number.	I can use known number facts to subtract a 1-digit number from a 2-digit number, crossing a ten boundary. I can use a number line to subtract a 1-digit number from a 2-digit number, crossing a ten boundary. I can use number patterns to subtract a 1-digit number from a 2-digit number, crossing a ten boundary.	Lesson Pack Number lines Representations of tens and ones if required
	Key/New Words: One-digit, two-digit, number fact, subtract, take away, minus, subtract across ten, pattern, partition, part, whole, part-whole model, number line, count back, leaves, recall, predict, reason, explain.	**Preparation:** Gift Shop Activity Sheet – one per child Diving into Mastery Activity Cards – as required

Prior Learning:	It would be helpful if children have been introduced to subtracting across ten. The following lesson supports this learning: _____

Learning Sequence

	**Remember It:** The children subtract the same amount from each of the numbers on the slides. They discuss and explain the pattern, suggesting other numbers they could use. They then make up one for a friend to solve.	
	**Jump-Back Jill:** The Lesson Presentation introduces Jump-Back Jill who demonstrates subtracting on a number line. Jill always begins by jumping back to land on a multiple of ten.	
	**Jumping Further:** Using the Lesson Presentation, invite the children to partition the number being subtracted so that they can jump back to a ten, then subtract the rest using the part-whole model to help them.	
	**Gift Shop:** Children complete the differentiated Gift Shop Activity Sheet, using subtraction to calculate how much the children will have left when they have bought a gift from the stall. Can the children use known number facts to subtract a 1-digit number from a 2-digit number, crossing a ten boundary? Can the children use a number line to subtract a 1-digit number from a 2-digit number, crossing a ten boundary? Can the children use number patterns to subtract a 1-digit number from a 2-digit number, crossing a ten boundary?  Children work out how much money each child will have left. They use a part-whole model to partition the number being subtracted and draw a number line to help them.  Children work out all the possibilities for how much money each child will have left. They use a part-whole model to partition the number being subtracted and draw a number line to help them.  Children work out how much money each child will have left. They use a part-whole model to partition the number being subtracted and draw a number line to help them. They then solve some inverse puzzles and write number sentences for them.	

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.

Children subtract a one-digit number from a two-digit number using number lines by first targeting a multiple of ten. They use practical equipment to support partitioning.

Children reason about which subtraction calculations are correct. They correct mistakes and explain what went wrong.

Children solve a 'find all possibilities' subtraction problem using a number line.

How Much?: Using the Lesson Presentation, ask the children to calculate the change when purchasing items from a given amount of money. Encourage the children to partition the subtracted number to jump back to a multiple of ten, then subtract the other part. Invite the children to consider how they will represent their learning, for example using a part-whole model or a number line.

Exploreit

Completeit: Use these _____ to give a different visual picture of bridging through 10 and 20 to subtract.

Avoidit: Play in a pair or small group. Take a pack of cards and turn them face down. Start with 50 points. The first player turns over a card and begins to subtract from 50. They keep going for as long as they like, or at any point, stop and bank their score. This is then safe. If they turn over a J, Q or K, they lose all their points from that round and start their next turn from 50 or their banked score.

Spendit: Children build up their understanding of bridging ten by spending money on items priced below ten pence. They represent a calculation in as many ways as they can, including number lines, ten-frames, part-whole diagrams and concrete materials. They explain to another child what they are doing and why.

Learnit: Children will find this superb a great resource to support addition and subtraction methods.