Number and Place Value: Interpret Negative Numbers in Context

Aim: Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. To interpret negative numbers in context.	Success Criteria: I can identify negative numbers on different scales. I can find the difference between negative numbers using number lines.	Resources: Lesson Pack
	Key/New Words: Negative, below, zero, step, number line, scale, count, forwards, backwards, integer, interval.	Preparation: Negative Number Cards – cut out and hidden around the classroom Differentiated Computer Conundrums Activity Sheet – one per child Blank Number Lines A and B – one per pair Diving into Mastery Activity Sheets – per child as required

Prior Learning: It will be helpful if children have covered negative numbers, including calculating intervals across zero and comparing and ordering. Click <u>here</u> for more lessons that seek to consolidate this step.

Learning Sequence						
	Remember It: Children look for the Negative Number Cards hidden around the classroom. Children return to their groups with their cards and stand in order. Children look at other groups and decide if they are in ascending or descending order. Challenge the children to get in order as a whole class.					
	Computer Conundrums: Introduce the context of the lesson referring to the Lesson Presentation, explaining that the number line shows the children's scores on a computer game. Go through the following slides to demonstrate how to work out each player's score. Explain that players can get negative scores if they lose points. Use the Lesson Presentation to model how to work out the players' negative scores. Can children identify the different players' scores on the number line?					
Windle Class	Different Scales: Referring to the number lines shown on the Lesson Presentation, click through the slides to explain how to identify numbers on number lines with different scales. Solve contextual problems based on computer scores, giving clear reasoning to support answers.					
	Computer Conundrums Activity: Children solve the problems to identify the different players' scores using the scales on the number lines shown on the differentiated Computer Conundrums Activity Sheet. Can children identify the negative numbers on the different scales?					
	Scales go in steps of twos, fives and tens. Scales go in steps of threes, sixes and tens. Some players' scores are between points on the number line. Scales go in steps of threes, sixes and tens. Some players' scores are between players' scores. Scales are not given. Children should work them out by using the given difference between players' scores.					
	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 use number lines to support their understanding of positioning negative numbers.					
	Children progress to estimating and calculating points on a number line with unmarked intervals.					
	Children explore negative numbers in the context of computer game scores and look at identifying whether statements are true or false, using reasoning to support their opinions.					





The Answer Is...: Give each partner in a pair either Blank Number Line A or Blank Number Line B. Children use their Blank Number Line to create their own scale, and add an arrow to show where negative five is on their scale. Children swap number lines with their partner and check that their partner's arrow does actually point to negative five, then complete the rest of the scale.



ExploreIt			
Solvelt:	Challenge children to solve the problems in this handy in context.		which involve negative numbers
Asklt:	Children use these	to pose negative number questions for their partner.	
LearnIt:	Children will find this	a useful tool for strengthening their knowledge of negative numbers.	

