

Department of Mathematics NP2: Addition & Subtraction

My mathematical journey	*Mathswatch clip in brackets	
What do I need to	What will I learn about in this unit at CEC?	Where does this lead?
remember from before?	Addition and subtraction with integers	Order of operations (NP5)
Place value (NP1)	and decimals (MW N3b, N13b, N4b, N14b)	Directed numbers (NP6)
Vectors on a number line (NP1)	Commutativity & mental methods with integers and decimals	Simplifying expressions (A1)
Adding and subtracting whole numbers with pen	(MW N3a, N4a) Number bonds, complements, working with decimals	Adding & subtracting fractions (NP7)
and paper and mentally	Vectors, inverse operations, equality and zero pairs	Solving linear equations (A2)
(N32)	Perimeter	Adding & subtracting numbers
Using rounding to check	(M W G 8a, G 8b)	in standard form (NP12)
answers to calculations (KS2)	Angle facts (MW G13) Mean and range	Adding and subtracting surds (NP15)
	(MW S6, S7)	

Key words: what I need to say and write accurately

Word	Explanation	
commutative	if you can change the order of the numbers and not change the answer, then the	
	operation is commutative.	
	e.g. $5 + 7 = 12$ and $7 + 5 = 12$, so addition <i>is</i> commutative	
	e.g. $20 - 6 = 14$ and $6 - 20 = -14$, so subtraction <i>is not</i> commutative	
complement of a decimal	the number you add to get to 1, e.g. the complement of 0.7 is 0.3	
inverse operations	operations that 'undo' each other, such as addition and subtraction	
function	a combination of one or more operations	
zero pair	a pair of numbers whose sum is 0, e.g. 3 and -3	
additive inverse	the numbers in a zero pair are called additive inverses of each other	
perimeter	total length of all the sides of a 2D shape	
rectilinear shape	a shape with only right angles and straight lines	



input

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