## Northern College

## **SECTION A: WHOLE NUMBERS**

TOPIC	STRATEGY	SPECIFIC EXAMPLES	RATIONALE
WHOLE NUMBERS			
Reading and writing numbers	Card matching See APPENDIX A1	Match numbers written as words with numbers written as figures	<ul> <li>Having combinations of three numbers enables learners to focus on differences between similar numbers</li> </ul>
Classifying numbers	Card matching See APPENDIX A2	Ask learners in pairs or small groups to match sets of cards	promotes collaborative learning     gives learners opportunities to     make connections for themselves
	Card sorting	Make random number cards between 1 and 100, ensuring there are various multiples and square numbers included. Ask students to sort out the cards into groups; do not specify the type of groups or the number of cards in the groups. Snowball feedback to ensure as many multiples relations and squares have been collected. (You can also extend this activity to include factors and primes.)	
Recognising different ways of expressing operations	Using multiple representations See APPENDIX A3 for sample set of cards.	Ask learners individually or in groups to match different cards which show representations of the same mathematical idea.  The cards should include incorrect representations to enable learners to explore errors.  Uneven numbers of matches avoids learners guessing.	<ul> <li>Learners make connections between different representations</li> <li>Common misconceptions can be explored e.g. why is 8 - 4 not the same as 4 - 8?</li> </ul>
Place value	Team game	Make 10 digit cards (see APPENDIX A4). Divide learners into two teams and ask each team to select five cards at random. Teams race against each other to use the digit cards to create numbers according to given criteria, e.g. make the nearest number you can to 490.	Allows for differentiation

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