A completed example of a Short-term Plan for Stage 8: Unit 2A, Algebra and Geometry

Week beginning:			UNIT:Unit Algebra & Geometry2A lesson 1 of unit			CLASS:Year 8 set 1/5	
Timing	Framework Ref:	Learning Objectives	Success Criteria	Activities (see notes below re: differentiation details, etc) W: whole class; G: group; I: individual;		Resources	Evidence of Achievement
				Description	W/G/I		
10–15 min

25min

15min

5min | 8Ni2 | Identify and use multiples, factors, common factors, highest common factors, lowest common multiples and primes; write a number in terms of its prime factors, e.g. $500 = 2^2 \times 5^3$. | I can list all the factors of 20.

I can list all the prime factors of 20.

I can list all the multiples of 5 up to 50.

I can find the HCF & LCM of 24 and 56.

I can write 300 as a product of its prime factors i.e. $300 = 2^2 \times 3 \times 5^2$

All students can identify Factors and multiples. **Most** students can find HCF and LCMs.

Some students can write a number as a product of its prime factors. | Make clear definitions: Factors, Multiples, Prime Numbers – maybe prior knowledge. List on board sets of multiples for different numbers draw from the lists Lowest Common Multiples. Similarly create lists of factors of different numbers draw from them Highest Common Factors. Demonstrate a factor tree for each of two numbers and how it can help find HCF & LCM using prime factorisation. i.e. Probably many examples will be needed – encourage students to come out to the board and try some. Students try some HCF & LCM questions on their own.

Plenary: what simple HCF and LCMs can the class recall – quick questions. | W

W

G

I

W | Venn diagram for factors of 24 and 56

Shows common factors better.

Factor tree for 10 shows Prime Factors only

Prepared text questions or textbook exercise | **Q&A**: question / answer **D**: discuss'n **O**: observ'n **M**: marked work |

Organisation: Details of differentiation/groups/adult role (linked to activities)	Notes/extension opportunities/homework	
Prepare Venn diagrams and Factor trees for weaker students to complete as scaffolding, more able students need to produce their own. Writing a number as a product of its prime factors should arise from the Factor Tree exercise.

This class does not have a teaching assistant. | More able students can be given 3 digit numbers or a set of three 2 digit numbers to find HCF and LCM of.
Homework could be used to reinforce the ideas of factors and multiples and /or HCF and LCM depend upon the teachers assessment of progress. | |