Multiplication and Division: Gardening

Aim:	**Success Criteria:**	**Resources:**
Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. I can solve problems using my knowledge of square and cube numbers.	I can pick out the important information from a word problem. I can calculate square and cube numbers to solve the problem.	**Lesson Pack** Dice
	Key/New Words: Squared, square, multiply, cube, cubed.	**Preparation:** Differentiated **Gardening Activity Sheets** – one per child

Prior Learning:	It will be helpful if the children know the square numbers up to 12^2, can calculate cube numbers and understand the notation for squared and cubed.

Learning Sequence

	**Spiders:** The children roll a dice to generate a number and perform the calculations on each of the spider's legs.	
	**Squares and Cubes:** The children explain how to square and cube numbers to the gardener.	
	**Patios:** Use the problems on the **Lesson Presentation** to demonstrate how to find the important information in the problem and solve it using squaring.	
	**Planters:** Use the problems on the **Lesson Presentation** to demonstrate how to find the important information in the problem and solve it using cubing.	
	**Gardening:** All groups complete differentiated **Gardening Activity Sheets**, solving problems using their knowledge of square and cube numbers.  Children solve word problems using square numbers and cube numbers.  Children solve word problems using square numbers and cube numbers.  Children solve word problems using square numbers and cube numbers.	
	**Flip It:** The children write their own word problems for the calculations on the **Lesson Presentation**, then pass their problems to a partner to solve.	

Masterit

Addit: Children work in pairs to write number sentences where they add two square numbers together, e.g. $3^2 + 2^2 = ?$ They swap sentences and solve the problems.