Number

Activity 4 Assessment Investigating Perfect Squares and their Square Roots

Investigating Perfect Squares and their Square Roots			
Uses the area of a square to identify perfect squares	Identifies a perfect square using the number of factors	Identifies the square root of a number from a list of its factors and records using square root symbol	Solves problems involving squares or square roots
"25 is a perfect square because it can be represented by a square with area 25 units ² .	"The factors of 16 are: 1, 2, 4, 8, 16 16 is a perfect square as it has an odd number of factors. The factors of 17 are: 1, 17 17 is not a perfect square because it has an even number of factors."	"The factors of 36 are: 1, 2, 3, 4, 6, 9, 12, 18, 36 $\sqrt{36}$ = 6, because 6 × 6 is the only pair of factors that are equal."	A square field has perimeter 48 m. What is the area of the field? The side length is 12 m, so the area is 122 m ² = 144 m ² .
24 is not a perfect square because it can't be represented by a square."			
Observations/Documentation			