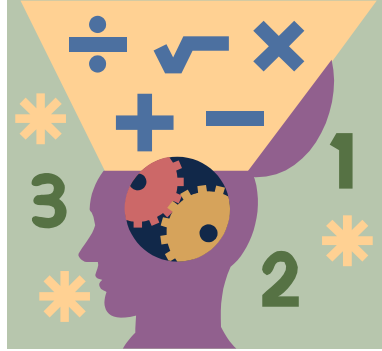


SQUARE NUMBERS AND SQUARE ROOTS

INVESTIGATION

NATURAL NUMBERS



Natural Numbers are the counting numbers 1, 2, 3, 4 and so on.
First complete the table below. Look for patterns.

Number	Cube	Sum of the cubes	Square root of the sum of the cubes
n	n^3	$S(n^3)$	$\sqrt{S(n^3)}$
1	$1^3 = 1$	$1 = 1$	$\sqrt{1} = 1$
2	$2^3 = 8$	$1 + 8 = 9$	$\sqrt{9} = 3$
3	$3^3 = 27$	$1 + 8 + 27 = 36$	$\sqrt{36} = 6$
10			
100			
n			

Now write a formula that expresses the sum of n consecutive cubes.