

## SQUARE NUMBERS

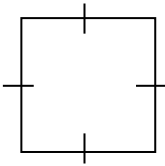
Name: \_\_\_\_\_ Class: \_\_\_\_\_ Due Date: \_\_\_\_\_

Family Member Signature: \_\_\_\_\_

### Objective:

In math, we are exploring the idea of perfect squares and calculating their roots.

### Necessary Information:



A perfect square is a number that when you take that many tiles, you can make a square with them.

Eg. 16 is a perfect square because 16 tiles makes a 4 by 4 square.  $4 \times 4 = 16$  or we can write it,  $4^2 = 16$ ,  $\sqrt{16} = 4$

### Practice Section:

1. Is 36 a perfect square? Explain why using a model, words and symbols.

Model/Diagram	Symbols	Words

2. Determine the side length of a square with each area.

a.  $36 \text{ cm}^2$        $s =$  \_\_\_\_\_  $\text{cm}$       c.  $400 \text{ km}^2$        $s =$  \_\_\_\_\_

b.  $64 \text{ mm}^2$        $s =$  \_\_\_\_\_      d.  $121 \text{ mm}^2$        $s =$  \_\_\_\_\_

3) Find the square of:

a) 4

b) 14

4) Find the square root of:

a) 225

b) 64

5) Fill in both blanks in a way that doesn't look the same but means the same.

$$\underline{\hspace{2cm}} = 3 \times 3 = \underline{\hspace{2cm}}$$

6) William bought a bag of lawn fertilizer that will cover 400 sq. ft. What are the dimensions of William's square lawn if he buys 4 bags?



**In Your Real World:**

In construction, carpenters often use a 'square'. With a family member, discuss what this could look like and be used for. Use a resource such as the internet, book, or family friend to find these answers if you need to.