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## Perfect Squares Tiles Activity

Learning Target: $\qquad$

1. Using the square tiles, make the smallest perfect square you can.
a. How many tiles did you use?
b. What are the dimensions of your square (length and width)?
2. Using more tiles, make the next smallest perfect square you can.
a. How many tiles did you use?
b. What are the dimensions of your square (length and width)?
3. Make the next smallest perfect square you can.
a. How many tiles did you use?
b. What are the dimensions of your square (length and width)?

| A Number that is a Perfect | Dimensions of the Square <br> (length $x$ width) | What is the Square Root of the <br> Perfect Square Number? |
| :---: | :---: | :---: |
| Example: 1 | 1X1= $1^{2}$ | 1 |
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4. What does it mean to square a number?
5. What does it mean to take the square root of a number? Think back to your tiled squares, what part of the diagram represents the square root?
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## Perfect Cubed Sugar Activity

1. Using the sugar cubes, make the smallest perfect cube you can.
a. How many cubes did you use?
b. What are the dimensions of the cubes length?
2. Using more sugar cubes, make the next smallest perfect cube you can.
a. How many cubes did you use?
b. What are the dimensions of the cubes length?
3. Make the next smallest perfect cube you can.
a. How many cubes did you use?
b. What are the dimensions of the cubes length?

| A Number that is a Perfect | Dimensions of the Cube <br> $\left(\mathrm{a}^{3}\right)$ | What is the Cube Root of the <br> Perfect Cube Number? |
| :---: | :---: | :---: |
| Example: 1 | $1 \times 1 \times 1=1^{3}$ | 1 |
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Cube
Solve for volume -
$V=a^{3}$
$a$ Edge Entervalue
4. What does it mean to cube a number?
5. What does it mean to take the cube root of a number? Think back to your sugar cubes, what part of the diagram represents the cubed root?

