Enlargements and Reductions

Terms to Know

enlargement - an increase in the dimensions of an object by a constant factor

- can be 2-D or 3-D

reduction - a decrease in the dimensions of an object by a constant factor

- can be 2-D or 3-D

scale factor - the constant factor by which all dimensions of an object are enlarged

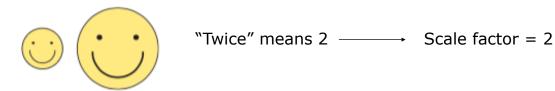
or reduced in a scale drawing

- a scale factor greater than 1 indicates an enlargement

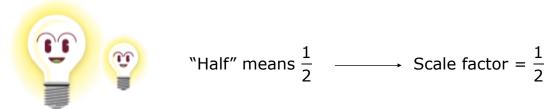
- a scale factor less than 1 indicates a reduction

Examples

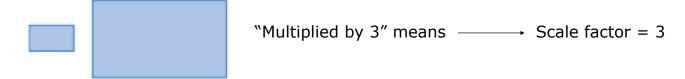
1) This enlargement is twice the length of the original.



2) This reduction is half the length of the original.



3) The dimensions of this rectangle are multiplied by 3 (enlargement).



Outcomes: SS4 - Draw and interpret scale diagrams of 2-D shapes

SS3 - Demonstrate an understanding of similarity of polygons

Next Steps

- 1) Print off the worksheet titled **Intro to Scale Factor Enlarging and Reducing Shapes** (you will need to reference it as you work through the PowerPoint)
- 2) Go through the PowerPoint titled Using Scale Factor to Draw Figures
- 3) Send me a picture of your completed worksheet

Outcomes: SS4 - Draw and interpret scale diagrams of 2-D shapes

SS3 - Demonstrate an understanding of similarity of polygons