## Grade 7 PLANNING GUIDE: Stretching & Shrinking – Similarity & Proportion

### Power Standards:

- **7.2.4** Develop and use scale factors and proportional relationships to solve problems, including similarity and congruence.
- **7.2.6** Apply scale factor to analyze how the change in one measure (e.g., length, area, volume) affects another.

### Core Concepts:

- **7.2.4** VOCABULARY: congruent, corresponding angles, corresponding parts, corresponding sides, scale factor, similar, proportional relationship, congruence
  - What is scale factor?
  - Knowledge of proportional relationships
  - Distinguish the difference between similarity and congruence
  - Use scale factor to determine similar figures
  - Use proportional relationships to solve problems

- **7.2.6** VOCABULARY: area, length, ratio, scale factor, volume
  - How to find a scale factor
  - Dimensions
  - How to find area and volume
  - How to analyze and justify patterns
  - Use scale factor to scale a figure up or down
  - Analyze the change in length, area, and/or volume after a scale factor has been applied
  - Explain the relationship between the changes in measures (why does doubling the length and width result in an area 4 times greater?)

### Formative (Pre-)Assessment:

- Unit Test (Stretching & Shrinking)
- CMP Assessment Resources: Multiple Choice Questions & Test Bank Questions

### Student Assessment Checkpoints

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**Summative (Post) Assessment:**
- Parallel to Pre-Assessment OR Unit Test (Stretching & Shrinking)
- Multiple Choice Questions & Test Bank Questions

**Further Intervention:**
- **Who?**
- **What to do?**

**Enrichment & Extension**