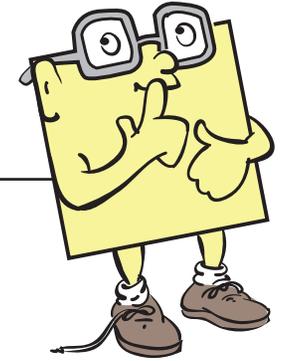


Sigmund Square and the Common Core State Standards for Mathematical Practices



The story of Sigmund Square includes numerous opportunities to build mathematical proficiency using the standards of mathematical practice. See “Lesson Seeds” for over 200 specific examples.

1. Make sense of problems and persevere in solving them.

- Try to make sense of the geometrical classification system.
- Look for meaning within the relationships of shapes.
- Analyze situations, givens, and constraints to guide problem solving.

2. Reason abstractly and quantitatively.

- Typify math situations with symbols, equations, and models.
- Create representations of geometry situations.
- Understand and apply properties of shapes and operations.

3. Construct viable arguments and critique the reasoning of others.

- Use definitions and classifications to develop and support claims.
- Find and fix flaws in erroneous conjectures.
- Use reasoning to clarify, explain, and justify responses.

4. Model with mathematics.

- Describe and interpret math situations using equations, expressions, diagrams, tables, graphs, formulas, etc.
- Map and analyze math relationships and properties with tools.
- Evaluate and improve math models as needed.

5. Use appropriate tools strategically.

- Gain familiarity and comfort with geometry tools.
- Evaluate the effectiveness of geometry tools used for specific purposes.
- Use geometry tools to deepen understanding of geometrical properties and relationships.

6. Attend to precision.

- Use correct math vocabulary.
- Calculate, measure, and identify shapes and attributes accurately.
- Utilize explicit definitions and formulas.

7. Look for and make use of structure.

- Analyze patterns and structure.
- Recognize and understand geometric figures within geometric figures.
- Use logical reasoning to understand geometric relationships and calculations.

8. Look for and express regularity in repeated reasoning.

- Identify repetitive calculations.
- Apply general formulas and repeated reasoning.
- Evaluate reasonableness of responses.