

GRADE 8 SCOPE AND SEQUENCE

There are MANY good ways to structure and organize the curriculum. This is one way that I think ties topics together well, and follows a logical progression of skills. All of the curricular content areas are listed below and the competencies are the vehicles through which we teach the content so they would be connected to each content standard.

1) Perfect Squares and cubes

- Using square tiles you can also review area, perimeter, multiples and factors
- Square roots and cube roots
- Pythagorean Theorem – this is a great application for the square numbers and square roots

2) Operations with Fractions

- Theoretical probability utilizes operations with fractions so it's a great contextual way (and fun if you use games) to apply fraction operations

3) Numerical Proportional Reasoning (rates, ratios, percent)

- Financial literacy – finding best buys and comparison shopping. Also looking at budgets (30% of income should pay for housing for example) – you can give students actual salaries for different jobs and look at how much of their income should be spent on living needs
- Percents less than 1 and greater than 100

4) Discrete Linear Relations – these can be directly related to rates so are a nice way to connect the previous concepts to these ones

- Expressions – writing and evaluating using algebra tiles and visual patterns
- Two-step equations

5) Surface area and Volume of prisms and cylinders – students can create their own formulas based on the generalization of area of base x height

- Construction, views, and nets of 3D shapes

6) Central Tendency – mode, median and mean – this one can often be looked at in Social Studies or other contexts

