

Grade 8: Term 2

Math Curriculum Overview

Unit 3: Operations with Fractions

In this unit: Students multiply and divide whole numbers with fractions, fractions and fractions, mixed numbers (improper fractions) . They practice questions where they add, subtract, multiply, and divide fractions in multi-step questions.

Unit 7: Data Analysis

In this unit: Students will learn what the characteristics of different graphs are and they will learn how to choose the right graph and how information can be misrepresented on a graph. (The second half of unit 7 will be completed near the end of term two.) Students will learn about the probability of independent events.

Unit 4: Measuring Prisms and Cylinders

In this unit: Students will create nets for various 3-D shapes, they will calculate the surface area of these shapes, and they will find the volume of the same shapes.

Unit 5: Percent, Ratio, and Rate

In this unit: Students will explore the relationship between fractions, decimals and percents. They will work with ratios and with rates as well in this unit.

Unit 3: Operations with Fractions

General outcome: Develop number sense

Specific Outcomes:

N6: Demonstrate an understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially and symbolically

Lessons:

Using models to multiply fractions and whole numbers

Using models to multiply fractions

Multiplying fractions and mixed numbers

Dividing whole numbers and fractions with models

Dividing fractions

Dividing mixed numbers

Problem solving with fractions

Order of operation with fractions

Unit 4: Measuring Prisms and Cylinders

General Outcome: Exploring nets and surface area

Use direct or indirect measurements to solve problems

Specific Outcomes:

SS2: Draw and construct nets for 3D objects

SS3: Determine the surface area of:

- right rectangular prisms
- right triangular prisms
- right cylinders
to solve problems

Lessons

Exploring Nets –

Creating Objects From Nets

Finding Surface Area Of A Right Triangular Prism

Finding Surface Area Of A Right Rectangular Prism

General Outcome 2: Measuring Volume and Capacity

Use direct or indirect measurement to solve problems

Specific Outcomes:

SS4: Develop and apply formulas for determining the volume of right prisms and right cylinders

Lessons:

Find the Volume Of Right Rectangular Prisms

Find The Volume Of Right Triangular Prisms

General Outcome 3: Extending to Cylinders

Use direct or indirect measurement to solve problems

Specific Outcomes:

**SS3: Determine the surface area of:
right rectangular prisms**

- right triangular prisms
- right cylinders
to solve problems

SS4: Develop and apply formulas for determining the volume of right prisms and right cylinders

Lessons:

Find The Surface Area Of A Right Cylinder

Find The Volume Of A Right Cylinder

Unit 5: Percent, Rate and Ratio

General Outcome Develop number sense

Specific Outcomes:

N3: Demonstrate an understanding of percents greater than or equal to 0%

Lessons:

Provide A Context Where A Percent May Be More Than 100% Or Between 0% And 1%

Represent A Given Fractional Percent Using Grid Paper

Represent A Given Percent Greater Than 100 Using Grid Paper

Determine The Percent Represented By A Given Shaded Region On A Grid, And Record It In Decimal, Fractional And Percent Form

Express A Given Percent In Decimal Or Fractional Form

Express A Given Decimal In Percent Or Fractional Form

Express A Given Fraction In Decimal Or Percent Form

Solve A Given Problem Involving Percents

Solve A Given Problem Involving Combined Percents