

Correlation of Pearson Mathematics Makes Sense Grade 6 to The Curriculum

Number

General Outcome

- Develop number sense.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
1. Demonstrate an understanding of place value for numbers: <ul style="list-style-type: none"> • greater than one million • less than one thousandths. 	Unit 2, Lesson 1, pp. 46–50; Unit 3, Lesson 1, pp. 88–91
2. Solve problems involving large numbers, using technology.	Unit 2, Lesson 2, pp. 51–54; Unit 2, Unit Problem, pp. 84, 85
3. Demonstrate an understanding of factors and multiples by: <ul style="list-style-type: none"> • determining multiplies and factors of numbers less than 100 • identifying prime and composite numbers • solving problems involving multiples. 	Unit 2, Lesson 3, pp. 55–58; Unit 2, Lesson 4, pp. 59–62; Unit 2, Lesson 5, pp. 63–66; Unit 2, Game, p. 67; Unit 2, Lesson 6, pp. 68, 69
4. Relate improper fractions to mixed numbers.	Unit 5, Lesson 1, pp. 162–165; Unit 5, Lesson 2, pp. 166–169; Unit 5, Game, p. 170; Unit 5, Lesson 3, pp. 171–175; Unit 5, Lesson 6, pp. 184, 185; Unit 5, Unit Problem, pp. 196, 197
5. Demonstrate an understanding of ratio concretely, pictorially and symbolically.	Unit 5, Lesson 4, pp. 176–179; Unit 5, Lesson 5, pp. 180–183; Unit 5, Lesson 6, pp. 184, 185; Unit 5, Unit Problem, pp. 196, 197

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
6. Demonstrate an understanding of percent (limited to whole numbers) concretely, pictorially and symbolically.	Unit 5, Lesson 7, pp. 186–189; Unit 5, Lesson 8, pp. 190–193; Unit 5, Unit Problem, pp. 196, 197
7. Demonstrate an understanding of integers, concretely, pictorially and symbolically.	Unit 2, Lesson 8, pp. 74–77; Unit 2, Lesson 9, pp. 78–81; Unit 2, Unit Problem, pp. 84, 85
8. Demonstrate an understanding of multiplication and division of decimals (1-digit whole number multipliers and 1-digit natural number divisors).	Unit 3, Lesson 2, pp. 92–94; Unit 3, Lesson 3, pp. 95–98; Unit 3, Lesson 4, pp. 99–102; Unit 3, Lesson 5, pp. 103–107; Unit 3, Lesson 6, pp. 108–111; Unit 3, Lesson 7, pp. 112–114; Unit 3, Game, p. 115; Unit 3, Lesson 8, pp. 116, 117; Unit 3, Unit Problem, pp. 120, 121
9. Explain and apply the order of operations, excluding exponents, with and without technology (limited to whole numbers).	Unit 2, Lesson 7, pp. 70–73

Patterns and Relations (Patterns)

General Outcome

- Use patterns to describe the world and solve problems.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
1. Demonstrate an understanding of the relationships within tables of values to solve problems.	Unit 1, Lesson 1, pp. 6–10; Unit 1, Lesson 2, pp. 11–15; Unit 1, Lesson 3, pp. 16, 17; Unit 1, Game, p. 18; Unit 1, Lesson 4, pp. 19–23; Unit 1, Unit Problem, pp. 42, 43
2. Represent and describe patterns and relationships using graphs and tables.	Unit 1, Lesson 4, pp. 19–23; Unit 1, Lesson 6, pp. 29–32; Unit 1, Unit Problem, pp. 42, 43

Patterns and Relations (Variables and Equations)

General Outcome

- Represent algebraic expressions in multiple ways.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
3. Represent generalizations arising from number relationships using equations with letter variables.	Unit 1, Lesson 4, pp. 19–23; Unit 1, Lesson 7, pp. 33–35; Unit 1, Unit Problem, pp. 42, 43 Unit 6, Lesson 7, pp. 226–230; Unit 6, Lesson 8, pp. 231–234
4. Demonstrate and explain the meaning of preservation of equality concretely, pictorially and symbolically.	Unit 1, Lesson 8, pp. 36–39

Shape and Space (Measurement)

General Outcome

- Use direct or indirect measurement to solve problems.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
1. Demonstrate an understanding of angles by: <ul style="list-style-type: none"> • identifying examples of angles in the environment • classifying angles according to their measure • estimating the measure of angles using 45°, 90° and 180° as reference angles • determining angle measure in degrees • drawing and labelling angles when the measure is specified. 	Unit 4, Lesson 1, pp. 126–129; Unit 4, Lesson 2, pp. 130–132; Unit 4, Lesson 3, pp. 133–138; Unit 4, Lesson 4, pp. 139–142; Unit 4, Game, p. 143; Unit 4, Lesson 5, pp. 144, 145; Unit 4, Unit Problem, pp. 156, 157
2. Demonstrate that the sum of interior angles is: <ul style="list-style-type: none"> • 180° in a triangle • 360° in a quadrilateral. 	Unit 4, Lesson 6, pp. 146–149; Unit 4, Lesson 7, pp. 150–153; Unit 4, Unit Problem, pp. 156, 157
3. Develop and apply a formula for determining the: <ul style="list-style-type: none"> • perimeter of polygons • area of rectangles • volume of right rectangular prisms. 	Unit 6, Lesson 7, pp. 226–230; Unit 6, Lesson 8, pp. 231–234; Unit 6, Lesson 9, pp. 235–238; Unit 6, Game, p. 239; Unit 6, Unit Problem, pp. 242, 243

Shape and Space (3-D Objects and 2-D Shapes)

General Outcome

- Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
4. Construct and compare triangles, including: <ul style="list-style-type: none"> scalene isosceles equilateral right obtuse acute in different orientations.	Unit 6, Lesson 1, pp. 200–204; Unit 6, Lesson 2, pp. 205–208; Unit 6, Lesson 3, pp. 209–213; Unit 6, Unit Problem, pp. 242, 243
5. Describe and compare the sides and angles of regular and irregular polygons.	Unit 6, Lesson 4, pp. 214–218; Unit 6, Lesson 5, pp. 219–223; Unit 6, Lesson 6, pp. 224, 225; Unit 6, Unit Problem, pp. 242, 243

Shape and Space (Transformations)

General Outcome

- Describe and analyze position and motion of objects and shapes.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
6. Perform a combination of translations(s), rotation(s) and/or reflection(s) on a single 2-D shape, with and without technology, and draw and describe the image.	Unit 8, Lesson 3, pp. 303–307; Unit 8, Lesson 4, pp. 308–312; Unit 8, Lesson 6, pp. 318, 319; Unit 8, Game, p. 321; Unit 8, Unit Problem, pp. 324, 325
7. Perform a combination of successive transformations of 2-D shapes to create a design, and identify and describe the transformations.	Unit 8, Lesson 5, pp. 313–317; Unit 8, Technology Lesson, p. 320; Unit 8, Unit Problem, pp. 324, 325
8. Identify and plot points in the first quadrant of a Cartesian plane using whole number ordered pairs.	Unit 1, Lesson 5, pp. 24–28; Unit 1, Unit Problem, pp. 42, 43; Unit 8, Lesson 1, pp. 290–294
9. Perform and describe single transformations of a 2-D shape in the first quadrant of a Cartesian plane (limited to whole number vertices).	Unit 8, Lesson 2, pp. 295–300; Unit 8, Technology Lesson, pp. 301, 302; Unit 8, Game, p. 321

Statistics and Probability (Data Analysis)

General Outcome

- Collect, display and analyze data to solve problems.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
1. Create, label and interpret line graphs to draw conclusions.	Unit 7, Lesson 3, pp. 259–262; Unit 7, Lesson 4, pp. 263–266
2. Select, justify and use appropriate methods of collecting data, including: <ul style="list-style-type: none"> • questionnaires • experiments • databases • electronic media. 	Unit 7, Lesson 1, pp. 248–251; Unit 7, Technology Lesson, pp. 252–254; Unit 7, Lesson 2, pp. 255–258
3. Graph collected data and analyze the graph to solve problems	Unit 7, Lesson 4, pp. 263–266; Unit 7, Lesson 5, pp. 267–270; Unit 7, Unit Problem, pp. 286, 287

Statistics and Probability (Chance and Uncertainty)

General Outcome

- Use experimental and theoretical probabilities to represent and solve problems involving uncertainty.

It is expected that students will:

Specific Outcomes	<i>Pearson Mathematics Makes Sense 6</i>
4. Demonstrate an understanding of probability by: <ul style="list-style-type: none"> • identifying all possible outcomes of a probability experiment • differentiating between experimental and theoretical probability • determining the theoretical probability of outcomes in a probability experiment • determining the experimental probability of outcomes in a probability experiment • comparing experimental results with the theoretical probability for an experiment. 	Unit 7, Lesson 6, pp. 271–275; Unit 7, Lesson 7, pp. 276–279; Unit 7, Technology Lesson, p. 280; Unit 7, Game, p. 281; Unit 7, Lesson 8, pp. 282, 283; Unit 7, Unit Problem, pp. 286, 287