Curriculum Expectations Related to Fractions

Grade 4	Grade 5	Grade 6
Overall Expectations By the end of Grade 4, students will: • read, represent, compare, and order whole numbers to 10 000, decimal numbers to tenths, and simple fractions, and represent money amounts to $100; • demonstrate an understanding of magnitude by counting forward and backwards by 0.1 and by fractional amounts; **Specific Expectations** By the end of Grade 4, students will: • represent fractions using concrete materials, words, and standard fractional notation, and explain the meaning of the denominator as the number of the fractional parts of a whole or a set, and the numerator as the number of fractional parts being considered; • compare and order fractions (i.e., halves, thirds, fourths, fifths, tenths) by considering the size and the number of fractional parts (e.g., 4/5 is greater than 3/5 because there are more parts in 4/5; 1/4 is greater than 1/5 because the size of the part is larger in 1/4);	**Overall Expectations** By the end of Grade 5, students will: • read, represent, compare, and order whole numbers to 100 000, decimal numbers to hundredths, proper and improper fractions, and mixed numbers; **Specific Expectations** By the end of Grade 5, students will: • represent, compare, and order fractional amounts with like denominators, including proper and improper fractions and mixed numbers, using a variety of tools (e.g., fraction circles, Cuisenaire rods, number lines) and using standard fractional notation;	**Overall Expectations** By the end of Grade 6, students will: • read, represent, compare, and order whole numbers to 1 000 000, decimal numbers to thousandths, proper and improper fractions, and mixed numbers; **Specific Expectations** By the end of Grade 6, students will: • represent, compare, and order fractional amounts with unlike denominators, including proper and improper fractions and mixed numbers, using a variety of tools (e.g., fraction circles, Cuisenaire rods, drawings, number lines, calculators) and using standard fractional notation (***Sample problem:*** Use fraction strips to show that 1 1/2 is greater than 5/4.);

Curriculum Expectations Related to Fractions (continued)

Grade 4	Grade 5	Grade 6
• compare fractions to the benchmarks of 0, 1/2, and 1 (e.g., 1/8 is closer to 0 than to 1/2; 3/5 is more than 1/2);		
• demonstrate and explain the relationship between equivalent fractions, using concrete materials (e.g., fraction circles, fraction strips, pattern blocks) and drawings (e.g., "I can say that 3/6 of my cubes are white, or half of the cubes are white. This means that 3/6 and 1/2 are equal.")	• demonstrate and explain the concept of equivalent fractions, using concrete materials (e.g., use fraction strips to show that ¾ is equal to 9/12);	
• count forward by halves, thirds, fourths, and tenths to beyond one whole, using concrete materials and number lines (e.g., use fraction circles to count fourths: "One fourth, two fourths, three fourths, four fourths, five fourths, six fourths, …")		
• determine and explain, through investigation, the relationship between fractions (i.e., halves, fifths, tenths) and decimals to tenths, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., decompose 2/5 and 4/10 by dividing each fifth into two equal parts to show that 2/5 can be represented as 0.4).	• determine and explain, through investigation using concrete materials, drawings, and calculators, the relationship between fractions (i.e., with denominators of 2, 4, 5, 10, 20, 25, 50, and 100) and their equivalent decimal forms (e.g., use a 10 x 10 grid to show that 2/5 = 40/100, which can also be represented as 0.4).	• determine and explain, through investigation using concrete materials, drawings, and calculators, the relationships among fractions (i.e., with denominators of 2, 4, 5, 10, 20, 25, 50, and 100), decimal numbers, and percents (e.g., use a 10 x 10 grid to show that 1/4 = 0.25 or 25%).