** Hanover Heights Community School**

**2012-2013 Long Range Plan**

**Teacher: Matthew Patterson Grade: 8P Subject: Grade 8 Mathematics**

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| **Day** | **Chapter** | **Category** | **Topic** |
| 1 |  |  | Introduction |
| 2 | One | Number Relationships | Getting Started: Filling Boxes / ***Mad Minute*** |
| 3 |  |  | 1.1 Identifying Prime and Composite Numbers |
| 4 |  |  | 1.2 Prime Factorization |
| 5 |  |  | 1.3 Common Factors and Common Multiples |
| 6 |  |  | 1.4 Calculating Powers |
| 7 |  |  | **The Real Game / *Mad Minute*** |
| 8 |  |  | 1.5 Expanded Form and Scientific Notation |
| 9 |  |  | Mid-Chapter Review |
| 10 |  |  | Math Game: Determining Prime Factors / ***Mad Minute*** |
| 11 |  |  | **The Real Game / *Mad Minute*** |
| 12 |  |  | 1.6 Square Roots |
| 13 |  |  | 1.7 Exploring Square Roots and Squares |
| 14 |  |  | 1.8 Order of Operations |
| 15 |  |  | 1.9 Communicating about Number Problems |
| 16 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Describing Numbers / ***Mad Minute*** |
| 17 |  |  | **Chapter Test** |
| 18 | Two | Proportional Relationships | Getting Started: Buying Fish / ***Mad Minute*** |
| 19 |  |  | 2.1 Expressing Fractions as Decimals |
| 20 |  |  | **The Real Game / *Mad Minute*** |
| 21 |  |  | 2.2 Multiplying and Dividing Decimals |
| 22 |  |  | 2.3 Exploring Ratios |
| 23 |  |  | Math Game: Equivalent Concentration / ***Mad Minute*** |
| 24 |  |  | 2.4 Ratios |
| 25 |  |  | Mid-Chapter Review |
| 26 |  |  | 2.5 Rates |
| 27 |  |  | 2.6 Representing Percent |
| 28 |  |  | 2.7 Solving Percent Problems |
| 29 |  |  | 2.8 Solving Percent Problems Using Decimals |
| 30 |  |  | **The Real Game / *Mad Minute*** |
| 31 |  |  | 2.9 Solve Problems by Changing Your Point of View |
| 32 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: An Unexpected Inheritance! / Math in Action: Coach / ***Mad Minute*** |
| 33 |  |  | **Chapter Test** |
| 34 | Three | Collecting, Organizing, and Displaying Data | Getting Started: The Biggest Handful – Up or Down? / ***Mad Minute*** |
| 35 |  |  | 3.1 Organizing and Presenting Data |
| 36 |  |  | **The Real Game / *Mad Minute*** |
| 37 |  |  | 3.2 Exploring Sample Size |
| 38 |  |  | **The Real Game / *Mad Minute*** |
| 39 |  |  | 3.3 Using Electronic Databases |
| 40 |  |  | Mid-Chapter Review |
| 41 |  |  | 3.4 Histograms |
| 42 |  |  | 3.5 Mean, Median, and Mode |
| 43 |  |  | Math Game: What’s the Average? / ***Mad Minute*** |
| 44 |  |  | 3.6 Communicating about Graphs |
| 45 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Jumping Ability / ***Mad Minute*** |
| 46 |  |  | **Chapter Test** |
| 47 |  |  | Prime Review |
| 48 |  |  | **Prime Test** |
| 49 | Four | Patterns and Relationships | Getting Started: Calendar Patterns / ***Mad Minute*** |
| 50 |  |  | 4.1 Exploring Relationships in the Fibonacci Sequence |
| 51 |  |  | 4.2 Creating Pattern Rules from Models |
| 52 |  |  | **The Real Game / *Mad Minute*** |
| 53 |  |  | 4.3 The General Term of a Sequence |
| 54 |  |  | Mid-Chapter Review |
| 55 |  |  | 4.4 Solve Problems by Examining Simpler Problems |
| 56 |  |  | **The Real Game / *Mad Minute*** |
| 57 |  |  | 4.5 Relating Number Sequences to Graphs |
| 58 |  |  | Math Game: Sprouts / ***Mad Minute*** |
| 59 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Pyramid Patterns / ***Mad Minute*** |
| 60 |  |  | **Chapter Test** |
| 61 | Five | Measurement of Circles | Getting Started: Designing a Label / ***Mad Minute*** |
| 62 |  |  | 5.1 Exploring Circles |
| 63 |  |  | 5.2 Exploring Circumference and Diameter |
| 64 |  |  | **The Real Game / *Mad Minute*** |
| 65 |  |  | 5.3 Calculating Circumference |
| 66 |  |  | Mid-Chapter Review |
| 67 |  |  | 5.4 Estimating Area |
| 68 |  |  | 5.5 Calculating Area |
| 69 |  |  | 5.6 Solve Problems by Working Backward |
| 70 |  |  | **The Real Game / *Mad Minute*** |
| 71 |  |  | Math Game: Rolling Circles / ***Mad Minute*** |
| 72 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Designing a Camp / Math in Action: Architect / ***Mad Minute*** |
| 73 |  |  | **Chapter Test** |
| 74 | Six | Integer Operations | Getting Started: Spinning Numbers / ***Mad Minute*** |
| 75 |  |  | 6.1 Exploring Integer Addition and Subtraction |
| 76 |  |  | 6.2 Relating Integer Subtraction to Addition |
| 77 |  |  | 6.3 Exploring Integer Multiplication |
| 78 |  |  | 6.4 Multiplying Integers |
| 79 |  |  | Mid-Chapter Review |
| 80 |  |  | **The Real Game / *Mad Minute*** |
| 81 |  |  | 6.5 Exploring Integer Division |
| 82 |  |  | 6.6 Dividing Integers |
| 83 |  |  | 6.7 Order of Operations with Integers |
| 84 |  |  | 6.8 Communicating about Calculations |
| 85 |  |  | **The Real Game / *Mad Minute*** |
| 86 |  |  | Math Game: Target Zero / ***Mad Minute*** |
| 87 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Mystery Integers / ***Mad Minute*** |
| 88 |  |  | **Chapter Test** |
| 89 |  |  | Prime Review |
| 90 |  |  | **Prime Test** |
| 91 | Seven | Transformations | Getting Started: Tessellating Tiles / ***Mad Minute*** |
| 92 |  |  | 7.1 Coordinates of Points on a Grid |
| 93 |  |  | 7.2 Translations on a Coordinate System |
| 94 |  |  | 7.3 Reflections and Rotations |
| 95 |  |  | Mid-Chapter Review |
| 96 |  |  | **The Real Game / *Mad Minute*** |
| 97 |  |  | 7.4 Exploring Similar Shapes |
| 98 |  |  | 7.5 Communicating about Transformations |
| 99 |  |  | **The Real Game / *Mad Minute*** |
| 100 |  |  | Math Game: Coordinate Racing / ***Mad Minute*** |
| 101 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Animation / ***Mad Minute*** |
| 102 |  |  | **Chapter Test** |
| 103 | Eight | Equations and Relationships | Getting Started: Understanding Number Tricks / ***Mad Minute*** |
| 104 |  |  | 8.1 Solving Equations by Graphing |
| 105 |  |  | 8.2 Representing Pattern Relationships |
| 106 |  |  | **The Real Game / *Mad Minute*** |
| 107 |  |  | 8.3 Creating and Evaluating Algebraic Expressions |
| 108 |  |  | Mid-Chapter Review |
| 109 |  |  | 8.4 Solving Equations I |
| 110 |  |  | 8.5 Solving Equations II |
| 111 |  |  | **The Real Game / *Mad Minute*** |
| 112 |  |  | Math Game: Alge-Scrabble / ***Mad Minute*** |
| 113 |  |  | 8.6 Communicating about Equations |
| 114 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: The Chocolate Equation / Math in Action: Entrepreneur / ***Mad Minute*** |
| 115 |  |  | **Chapter Test** |
| 116 | Nine | Fraction Operations | Getting Started: Pattern Block Designs / ***Mad Minute*** |
| 117 |  |  | 9.1 Adding and Subtracting Fractions Less Than 1 |
| 118 |  |  | 9.2 Adding and Subtracting Fractions Greater Than 1 |
| 119 |  |  | 9.3 Exploring Fraction Patterns |
| 120 |  |  | **The Real Game / *Mad Minute*** |
| 121 |  |  | 9.4 Fractions of Fractions |
| 122 |  |  | 9.5 Multiplying Fractions |
| 123 |  |  | Mid-Chapter Review |
| 124 |  |  | 9.6 Multiplying Fractions Greater Than 1 |
| 125 |  |  | 9.7 Dividing Fractions I |
| 126 |  |  | **The Real Game / *Mad Minute*** |
| 127 |  |  | 9.8 Dividing Fractions II |
| 128 |  |  | 9.9 Communicating about Multiplication and Division |
| 129 |  |  | Math Game: Target 2/3 / ***Mad Minute*** |
| 130 |  |  | 9.10 Order of Operations |
| 131 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Parts of Canada / ***Mad Minute*** |
| 132 |  |  | **Chapter Test** |
| 133 |  |  | Prime Review |
| 134 |  |  | **Prime Test** |
| 135 | Ten | Angles and Triangles | Getting Started: Determining Location / ***Mad Minute*** |
| 136 |  |  | 10.1 Exploring Points on a Circle |
| 137 |  |  | 10.2 Intersecting Lines, Parallel Lines, and Transversals |
| 138 |  |  | 10.3 Angles in a Triangle |
| 139 |  |  | 10.4 Exploring Quadrilaterals |
| 140 |  |  | Mid-Chapter Review |
| 141 |  |  | 10.5 Exploring Right Triangles |
| 142 |  |  | **The Real Game / *Mad Minute*** |
| 143 |  |  | 10.6 Applying the Pythagorean Theorem |
| 144 |  |  | 10.7 Solve Problems Using Logical Reasoning |
| 145 |  |  | **The Real Game / *Mad Minute*** |
| 146 |  |  | Math Game: Needle in a Haystack / ***Mad Minute*** |
| 147 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Transmission Towers / Math in Action: Theatre Technician / ***Mad Minute*** |
| 148 |  |  | **Chapter Test** |
| 149 | Eleven | Geometry and Measurement Relationships | Getting Started: Designing a Juice Container / ***Mad Minute*** |
| 150 |  |  | 11.1 Exploring Cylinders |
| 151 |  |  | **The Real Game / *Mad Minute*** |
| 152 |  |  | 11.2 Surface Area of a Cylinder |
| 153 |  |  | 11.3 Volume of a Cylinder |
| 154 |  |  | 11.4 Solve Problems Using Diagrams |
| 155 |  |  | **The Real Game / *Mad Minute*** |
| 156 |  |  | Mid-Chapter Review |
| 157 |  |  | 11.5 Exploring the Platonic Solids |
| 158 |  |  | 11.6 Polyhedron Faces, Edges, and Vertices |
| 159 |  |  | Math Game: The Volumizer Game! / ***Mad Minute*** |
| 160 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Storage Capacity of a Silo / ***Mad Minute*** |
| 161 |  |  | **Chapter Test** |
| 162 | Twelve | Probability | Getting Started: Which Is More Likely? / ***Mad Minute*** |
| 163 |  |  | 12.1 Exploring Theoretical and Experimental Probabilities |
| 164 |  |  | **The Real Game / *Mad Minute*** |
| 165 |  |  | 12.2 Theoretical and Experimental Probabilities |
| 166 |  |  | 12.3 Calculating Probabilities |
| 167 |  |  | **The Real Game / *Mad Minute*** |
| 168 |  |  | Mid-Chapter Review |
| 169 |  |  | 12.4 Solve Problems Using Organized Lists |
| 170 |  |  | 12.5 Using Simulations to Determine Probability |
| 171 |  |  | 12.6 Designing a Probability Model |
| 172 |  |  | Math Game: On a Roll / ***Mad Minute*** |
| 173 |  |  | Chapter Self-Test / Chapter Review / Chapter Task: Free Throw / ***Mad Minute*** |
| 174 |  |  | **Chapter Test** |
| 175 |  |  | Math Common Assessment Review |
| 176 |  |  | **Math Common Assessment Test** |