

Curriculum Map
Math Success Block 7th Grade
Saugus Belmonte Middle School
Saugus Public Schools

Week 1	
<i>Massachusetts Performance Standards</i>	
<i>The students will:</i>	
EXPLORATORY ACTIVIES	
1. Getting to know students.	
Objectives (Students will...)	Essential Question
1. To get to know our students.	How can getting to know our students help plan this school year?
Teacher Resources <i>Holt Mathematics Course 1 ©2007</i>	Media and Technology Resources <i>Holt Mathematics Course 1 ©2007</i>
	<ol style="list-style-type: none"> 1. PowerPoint Presentations 2. Textbook On-Line 3. Homework Help (on-line) 4. Test ExamPro Generator 5. One-Stop CD Planner
Evaluation/Activities	Lesson Completion Date:
<p>Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.</p> <p>Class work: To be done on each topic/concept as needed for understanding.</p> <p>Homework: To be given daily on each introduced topic as determined by the teacher.</p> <p>Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.</p> <p>Quiz: Formal assessments will be given as warranted by the curriculum.</p>	<p>Technology Used/ Date Used:</p> <p>Completed By:</p> <p>Comments:</p>

Week 2

*Massachusetts Performance Standards**The students will:*

7.D.1 Select, create, interpret, and utilize the following tabular and graphical representations of data: circle graphs, Venn diagrams, stem-and-leaf plots, tables, tables and charts.
7.D.2 Find, describe, and interpret appropriate measures of central tendency (mean, median, and mode) and spread (range) that represent a set of data. Use these notions to compare different sets of data.

**UNIT ONE
COLLECTING AND ANALYZING DATA**

1. Measures of Central Tendency and Range
2. Frequency Tables, Stem and Leaf Plots, Line Plots

Objectives (Students will...)

1. To find the mean, median, mode, and range of a data set.
To organize and interpret data in frequency tables, stem-and-leaf plots, and line plots.

Essential Question

What is the best measure of central tendency for a given set of data?

Teacher Resources

Holt Mathematics Course 1 ©2007

1. Chapter Four lessons
2. Chapter Four Practice Worksheets
3. Chapter Four Pre-Made Assessments

Media and Technology Resources

Holt Mathematics Course 1 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.

Class work: To be done on each topic/concept as needed for understanding.

Homework: To be given daily on each introduced topic as determined by the teacher.

Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.

Quiz: Formal assessments will be given as warranted by the curriculum.

Lesson Completion Date:**Technology Used/ Date Used:****Completed By:****Comments:**

Week 3

*Massachusetts Performance Standards**The students will:*

7.D.1 Select, create, interpret, and utilize the following tabular and graphical representations of data: circle graphs, Venn diagrams, stem-and-leaf plots, tables, tables and charts.

**UNIT ONE
COLLECTING AND ANALYZING DATA**

1. Bar Graphs and Histograms
2. Circle Graphs

Objectives (Students will...)

1. To display and analyze data in bar graphs and histograms.
1. To read and interpret data presented in circle graphs.

Essential Question

How do you interpret data given in a variety of displays?

Teacher Resources

Holt Mathematics Course 1 ©2007

1. Chapters Four and Five lessons
2. Chapters Four and Five Practice Worksheets
3. Chapters Four and Five Pre-Made Assessments

Media and Technology Resources

Holt Mathematics Course 1 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.

Class work: To be done on each topic/concept as needed for understanding.

Homework: To be given daily on each introduced topic as determined by the teacher.

Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.

Quiz: Formal assessments will be given as warranted by the curriculum.

Lesson Completion Date:

Technology Used/ Date Used:

Completed By:

Comments:

Week 4

*Massachusetts Performance Standards**The students will:***7.D.1** Select, create, interpret, and utilize the following tabular and graphical representations of data: circle graphs, Venn diagrams, stem-and-leaf plots, tables, tables and charts.

**UNIT ONE
COLLECTING AND ANALYZING DATA**

1. Line Graphs
2. Scatter Plots
3. Misleading Graphs
1. Choosing an appropriate display

Objectives (Students will...)

1. To display and analyze data in line graphs.
2. To display and analyze data in scatter plots
3. To interpret misleading data.
1. To select and use the appropriate representations for displaying data.

Essential Question

What is the best and most appropriate display for any given data set?

Teacher Resources*Holt Mathematics Course 1 ©2007*

1. Chapter Three lessons
2. Chapter Three Practice Worksheets
3. Chapter Three Pre-Made Assessments

Media and Technology Resources*Holt Mathematics Course 1 ©2007*

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities**Lecture/Demonstration:** Each concept/topic will be introduced by the teacher using any resources that are available.**Class work:** To be done on each topic/concept as needed for understanding.**Homework:** To be given daily on each introduced topic as determined by the teacher.**Review:** All weekly concepts will be reviewed and connections to concepts should be made by the students.**Quiz:** Formal assessments will be given as warranted by the curriculum.**Lesson Completion Date:****Technology Used/ Date Used:****Completed By:****Comments:**

Week 5

*Massachusetts Performance Standards**The students will:***6.M.3** Solve problems involving proportional relationships and units of measurement.**UNIT TWO****SCIENTIFIC NOTATION AND UNITS OF MEASUREMENT**

1. Scientific Notation
2. Introduction to Customary Units of Measure
3. Introduction to Metric Units.
4. Conversion from One Unit of Measure to another Unit of Measure.

Objectives (Students will...)

1. **Express** large numbers using scientific notation.
2. **Understand** and **select** the appropriate customary units of measure for each given situation.
3. **Understand** and **select** the appropriate metric units of measure for each given situation.
4. **Convert** from various customary and metric units.

Essential Question

How do you convert from one unit of measure to another?

Teacher Resources*Holt Mathematics Course 1 ©2007*

1. Chapters Three and Nine lessons
2. Chapters Three and Nine Practice Worksheets
3. Chapters Three and Nine Pre-Made Assessments

Media and Technology Resources*Holt Mathematics Course 1 ©2007*

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities**Lecture/Demonstration:** Each concept/topic will be introduced by the teacher using any resources that are available.**Class work:** To be done on each topic/concept as needed for understanding.**Homework:** To be given daily on each introduced topic as determined by the teacher.**Review:** All weekly concepts will be reviewed and connections to concepts should be made by the students.**Quiz:** Formal assessments will be given as warranted by the curriculum.**Lesson Completion Date:****Technology Used/ Date Used:****Completed By:****Comments:**

Week 6	
<i>Massachusetts Performance Standards</i>	
<i>The students will:</i>	
7.D.3 Use tree diagrams, tables, organized lists, area models to compute probabilities for simple compound events, e.g., multiple coin tosses or rolls of number cubes	
UNIT THREE PROBABILITY	
<ol style="list-style-type: none"> 1. Probability 2. Experimental Probability 3. Sample Space 	
Objectives (Students will...)	Essential Question
<ol style="list-style-type: none"> 1. Use informal measures of probability. 2. Find experimental probability. 3. Use counting methods to determine possible outcomes. 	How do you determine the experimental probability of a given situation and why can you not guarantee that the result happens again?
Teacher Resources <i>Holt Mathematics Course 2 ©2007</i>	Media and Technology Resources <i>Holt Mathematics Course 2 ©2007</i>
<ol style="list-style-type: none"> 1. Chapter Eleven lessons 2. Chapter Eleven Practice Worksheets 3. Chapter Eleven Pre-Made Assessments 	<ol style="list-style-type: none"> 1. PowerPoint Presentations 2. Textbook On-Line 3. Homework Help (on-line) 4. Test ExamPro Generator 5. One-Stop CD Planner
Evaluation/Activities	Lesson Completion Date:
<p>Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.</p> <p>Class work: To be done on each topic/concept as needed for understanding.</p> <p>Homework: To be given daily on each introduced topic as determined by the teacher.</p> <p>Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.</p> <p>Quiz: Formal assessments will be given as warranted by the curriculum.</p>	<p>Technology Used/ Date Used:</p> <p>Completed By:</p> <p>Comments:</p>

Week 7

*Massachusetts Performance Standards**The students will:***7.D.3** Use tree diagrams, tables, organized lists, area models to compute probabilities for simple compound events, e.g., multiple coin tosses or rolls of number cubes**UNIT THREE
PROBABILITY**

1. Theoretical Probability
2. Probability of Independent and Dependent Events

Objectives (Students will...)

1. **Find** the theoretical probability of an event.
2. **Find** the probability of independent and dependent events.

Essential Question

Why does the theoretical probability not necessarily match the experimental probability of the same event?

Teacher Resources*Holt Mathematics Course 2 ©2007*

1. Chapter Eleven lessons
2. Chapter Eleven Practice Worksheets
3. Chapter Eleven Pre-Made Assessments

Media and Technology Resources*Holt Mathematics Course 2 ©2007*

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.

Class work: To be done on each topic/concept as needed for understanding.

Homework: To be given daily on each introduced topic as determined by the teacher.

Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.

Quiz: Formal assessments will be given as warranted by the curriculum.

Lesson Completion Date:**Technology Used/ Date Used:****Completed By:****Comments:**

Week 8

*Massachusetts Performance Standards**The students will:*

7.D.3 Use tree diagrams, tables, organized lists, area models to compute probabilities for simple compound events, e.g., multiple coin tosses or rolls of number cubes

**UNIT THREE
PROBABILITY**

1. Combinations
2. Permutations

Objectives (Students will...)

1. **Find** the number of possible combinations of a situation.
2. **Find** the number of possible permutations of a situation.
3. **Decide** whether a given situation describes of combination or a permutation.

Essential Question

How do you decide whether a given situation describes a combination or a permutation?

Teacher Resources

Holt Mathematics Course 2 ©2007

1. Chapter Eleven lessons
2. Chapter Eleven Practice Worksheets
3. Chapter Eleven Pre-Made Assessments

Media and Technology Resources

Holt Mathematics Course 2 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.

Class work: To be done on each topic/concept as needed for understanding.

Homework: To be given daily on each introduced topic as determined by the teacher.

Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.

Quiz: Formal assessments will be given as warranted by the curriculum.

Lesson Completion Date:

Technology Used/ Date Used:

Completed By:

Comments:

Week 9

Performance Standards

The students will:

7.P.1 Extend, represent, analyze, and generalize a variety of patterns with tables, graphs, words, and when possible, symbolic expressions. Include arithmetic and geometric progressions, e.g., compounding.

7.G.4 Graph points and identify coordinates of points on the Cartesian coordinate plane (all four quadrants).

Unit/Topic/Lesson

UNIT FOUR

PATTERNS AND FUNCTIONS

1. The Coordinate Plane
2. Tables and Graphs
3. Interpreting Graphs

Objectives

1. To plot and identify ordered pairs on a coordinate plane.
2. To identify and graph ordered pairs from tables and/or graphs.
3. To relate graph to real world situations.

Essential Question

How do you analyze a graph to make certain that you are interpreting it correctly?

Teacher Resources

Holt Mathematics Course 2 ©2007

1. Chapter Four lessons
2. Chapter Four Practice Worksheets
3. Chapter Four Pre-Made Assessments

Media Resources

Holt Mathematics Course 2 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Homework: To be given daily on each introduced topic

Review: All weekly concepts.

Quiz: Assessments given as warranted by the curriculum.

Lesson Completion Date:

Technology Used/ Date Used:

Completed By:

Comments:

Week 10

Performance Standards

The students will:

7.P.3 Create and use symbolic expressions for linear relationships and relate them to verbal, tabular, and graphical representations.

7.P.4 Solve linear equations using tables, graphs, models, and algebraic methods.

Unit/Topic/Lesson
UNIT FOUR
PATTERNS AND FUNCTIONS

1. Functions, Tables, and Graphs
2. Find a Pattern in Sequences
3. Graphing Linear Functions

Objectives

1. To use function tables to generate and graph ordered pair.
2. To find patterns and continue sequences using function tables.
3. To identify and graph linear equations.

Essential Question

How do you use the concept of an input/output machine to graph a linear equation?

Teacher Resources

Holt Mathematics Course 2 ©2007

1. Chapter Four lessons
2. Chapter Four Practice Worksheets
3. Chapter Four Pre-Made Assessment

Media Resources

Holt Mathematics Course 2 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Homework: To be given daily on each introduced topic

Review: All weekly concepts.

Quiz: Assessments given as warranted by the curriculum.

Lesson Completion Date:

Technology Used/ Date Used:

Completed By:

Comments:

Week 11

*Massachusetts Performance Standards***The students will:**

7.P.5 Identify, describe, and analyze linear relationships between two variables. Compare positive rate of change, e.g., $y = 3x + 1$, to negative rate of change, e.g., $y = -3x + 1$.

7.P.6 Use linear equations to model and analyze problems involving proportional relationships. Use technology as appropriate.

**UNIT FOUR
PATTERNS AND FUNCTIONS**

1. Identify linear relationships.
2. Describe linear relationships.
3. Analyze linear relationships.
4. Compare positive rate of change to negative rate of change.

Objectives

1. To identify linear relationships between two variables
2. To describe linear relationships between two variables.
3. To analyze linear relationships between two variables.

Essential Question

How can we create algebraic relationships to express patterns that we observe?

Teacher Resources

Holt Mathematics Course 2 ©2007

1. Chapter Six lessons
2. Chapter Six Practice Worksheets
3. Chapter Six Pre-Made Assessments

Media and Technology Resources

Holt Mathematics Course 2 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.

Class work: To be done on each topic/concept as needed for understanding.

Homework: To be given daily on each introduced topic as determined by the teacher.

Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.

Quiz: Formal assessments will be given as warranted by the curriculum.

Lesson Completion Date:

Technology Used/ Date Used:

Completed By:

Comments:

Week 12	
<i>Massachusetts Performance Standards</i>	
<p>The students will:</p> <p>7.P.5 Identify, describe, and analyze linear relationships between two variables. Compare positive rate of change, e.g., $y = 3x + 1$, to negative rate of change, e.g., $y = -3x + 1$.</p> <p>7.P.6 Use linear equations to model and analyze problems involving proportional relationships. Use technology as appropriate.</p>	
<p>UNIT FOUR PATTERNS AND FUNCTIONS</p> <ol style="list-style-type: none"> Compare positive rate of change to negative rate of change. Model problems involving proportional relationships. Analyze problems involving proportional relationships. 	
<p>Objectives</p> <ol style="list-style-type: none"> To compare positive to negative rate of change. To model and analyze proportional relationships. 	<p>Essential Question</p> <p>How can we compare the positive and negative rate of change when analyzing linear relationships?</p>
<p>Teacher Resources <i>Holt Mathematics Course 2 ©2007</i></p> <ol style="list-style-type: none"> Chapter Six lessons Chapter Six Practice Worksheets Chapter Six Pre-Made Assessments 	<p>Media and Technology Resources <i>Holt Mathematics Course 2 ©2007</i></p> <ol style="list-style-type: none"> PowerPoint Presentations Textbook On-Line Homework Help (on-line) Test ExamPro Generator One-Stop CD Planner
<p>Evaluation/Activities</p> <p>Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.</p> <p>Class work: To be done on each topic/concept as needed for understanding.</p> <p>Homework: To be given daily on each introduced topic as determined by the teacher.</p> <p>Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.</p> <p>Quiz: Formal assessments will be given as warranted by the curriculum.</p>	<p>Lesson Completion Date:</p> <p>Technology Used/ Date Used:</p> <p>Completed By:</p> <p>Comments:</p>

Week 13	
Performance Standards	
<p>The students will:</p> <p>7.G.7 Identify three-dimensional figures by their physical appearance. Distinguishing attributes, and spatial relationships such as parallel faces.</p> <p>7.M.1 Select, convert (within the same system of measurement), and use appropriate units of measurement or scale.</p>	
Unit/Topic/Lesson UNIT FIVE INTRODUCTION TO MEASUREMENT CONCEPTS THREE-DIMENSIONAL FIGURES	
<ol style="list-style-type: none"> 1. Introduction to Three-Dimensional figures 2. Volume of Prisms and Cylinders 3. Volume of Pyramids and Cones Bar Graphs and Histograms 	
Objectives	Essential Question
<ol style="list-style-type: none"> 1. To identify a variety of three-dimensional figures. 2. To find the volume of prisms and cylinders. 3. To find the volume of pyramids and cones. 	<p>How does the volume of a cylinder and a cone with the same base and height, relate to one another?</p>
Teacher Resources <i>Holt Mathematics Course 2 ©2007</i>	Media Resources <i>Holt Mathematics Course 2 ©2007</i>
<ol style="list-style-type: none"> 1. Chapter Ten lessons 2. Chapter Ten Practice Worksheets 3. Chapter Ten Pre-Made Assessments 	<ol style="list-style-type: none"> 1. PowerPoint Presentations 2. Textbook On-Line 3. Homework Help (on-line) 4. Test ExamPro Generator 5. One-Stop CD Planner
Evaluation/Activities	
<p>Homework: To be given daily on each introduced topic</p> <p>Review: All weekly concepts.</p> <p>Quiz: Assessments given as warranted by the curriculum.</p>	<p>Lesson Completion Date:</p> <p>Technology Used/ Date Used:</p> <p>Completed By:</p> <p>Comments:</p>

Week 14

Massachusetts Performance Standards

The students will:

7.M.1 Select, convert (within the same system of measurement), and use appropriate units of measurement or scale.

7.M.2 Given the formulas, convert from one system of measure to another. Use technology as appropriate.

UNIT FIVE

**INTRODUCTION TO MEASUREMENT CONCEPTS
THREE-DIMENSIONAL FIGURES**

1. Conversion of appropriate units of measure.
2. Conversion from one system of measure to another.

Objectives

1. Select appropriate units of measure.
2. Convert in units of measure using an appropriate scale.
3. Convert from one system of measure to another.

Essential Question

How can we use conversion of units in mathematics to help us in everyday life?

Teacher Resources

Holt Mathematics Course 1 ©2007

1. Chapters Three and Nine lessons
2. Chapters Three and Nine Practice Worksheets
3. Chapters Three and Nine Pre-Made Assessments

Media and Technology Resources

Holt Mathematics Course 1 ©2007

1. PowerPoint Presentations
2. Textbook On-Line
3. Homework Help (on-line)
4. Test ExamPro Generator
5. One-Stop CD Planner

Evaluation/Activities

Lecture/Demonstration: Each concept/topic will be introduced by the teacher using any resources that are available.

Class work: To be done on each topic/concept as needed for understanding.

Homework: To be given daily on each introduced topic as determined by the teacher.

Review: All weekly concepts will be reviewed and connections to concepts should be made by the students.

Quiz: Formal assessments will be given as warranted by the curriculum.

Lesson Completion Date:

Technology Used/ Date Used:

Completed By:

Comments:

Week 15 to 18	
Performance Standards	
<p><i>The students will:</i></p> <p>All state standards</p>	
<p>Unit/Topic/Lesson UNIT SIX CURRICULUM INTERGRATION PROJECT</p> <p>1. Project</p>	
<p style="text-align: center;">Objectives</p> <p>1. To make connections between the 7th grade curriculum standards through project based classroom activities.</p>	<p style="text-align: center;">Essential Question</p> <p>How are the many ideas we studied in mathematics related and connected to one another?</p>
<p style="text-align: center;">Teacher Resources</p> <p><i>Holt Mathematics Course 2 ©2007 and Holt Math Course 2 ©2004</i></p>	<p style="text-align: center;">Media Resources</p> <p><i>Holt Mathematics Course 2 ©2007 and Holt Math Course 2 ©2004</i></p> <ol style="list-style-type: none"> 1. PowerPoint Presentations 2. Textbook On-Line 3. Homework Help (on-line) 4. Test ExamPro Generator 5. One-Stop CD Planner
<p style="text-align: center;">Evaluation/Activities</p> <p>Homework: To be given daily on each introduced topic Review: All weekly concepts. Quiz: Assessments given as warranted by the curriculum.</p>	<p>Lesson Completion Date:</p> <p>Technology Used/ Date Used:</p> <p>Completed By:</p> <p>Comments:</p>