



## MB2 Beginner Learning Objectives

### Week 1

- Students should be able to identify basic metric prefixes and their meanings
- Students should be able to convert between various metric units/customary units
- Students should have a sense of the size of various metric/customary units and when to use them

### Week 2

- Students should be able to identify place values involving decimals.
- Students should be able to compare decimals using diagrams
- Students should be able to write decimals in words
- Students should be able to identify the parts and types of a fraction
- Students should be able to do arithmetic operations with fractions

### Week 3

- Students should be able to simplify fractions
- Students should be able to find greatest common divisor and least common multiple of two numbers

### Week 4

- Students should be able to define what a ratio is and how to express it
- Students should be able to identify ratios using a diagram
- Students should be able to define what a proportion is
- Students should be able to solve for an unknown in a given proportion
- Students should be able to set up proportions for word problems
- Students should be able to use proportions to solve similar figures problems

### Week 5

- Students should be able to define absolute value
- Students should be able to find absolute values and solve absolute value arithmetic problems
- Students should be able to do arithmetic with integers
- Students should be able to compare quantities with absolute values

### Week 6

- Students should be able to identify various shapes and figures
- Students should be able to find area and perimeter of various shapes and figures

## Week 7

- Students should know how to use basic divisibility rules
- Students should be able to identify the difference between prime and composite numbers
- Students should be able to prime factor a number using a factor tree
- Students should be able to find greatest common factor (GCF) and least common multiple (LCM) of 2 numbers

## Week 8

- Students should be able to identify alternate ways of solving problems, including bar models and making equations

## Week 9

- Students should be able to identify the pattern in various sequences
- Students should know about the Fibonacci sequence

## Week 10

- Students should be able to compare data using bar graphs
- Students should be able to see change over time using line graph
- Students should be able to see portion sizes using pie charts

## Week 11

- Students should be able to use order of operations to evaluate expressions and solve equations

## Week 12

- Students should be able to use number sense tricks to quickly evaluate expressions

## Week 13

- Students should be able to define “percent”
- Students should be able to set up percent proportion

## Week 14

- Students should be able define square numbers
- Students will use their knowledge of squares to solve questions related to geometric squares
- Students should be able to identify the parts of a square root
- Students will use their knowledge of squares to find the circumference or radius of circle
- Students should be able to find the area of polygons such as trapezoid, parallelogram, triangle, and rhombus
- Students should apply their knowledge of area to find volume of rectangular solids

- Students should be able to find cubes and cubic roots
- Students should be able to identify parts of an angle, types of angles, and important angle values
- Students should be able to find arithmetic mean for a set of data
- Students should know about additive and multiplicative inverse

## Week 15

Students will review all concepts covered in the MB2 Beginner Course