# **Grade 7 MATH Benchmarks**

#### 10 week

Solve problems involving the four operations with rational numbers

Solve multi-step mathematical problems posed with positive and negative rational numbers in any form

Recognize and represent proportional relationships between quantities

#### 20 week

Solve multistep percent problems such as simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error

Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients

Solve word problems leading to equations of the form px+q=r and p(x+q)=r

### <u>30 week</u>

Know the formulas for the area and circumference of a circle and use them to solve problem

Use data from a random sample to draw inferences about a population with an unknown characteristic of interest

Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation

## 40 week

Understand that a function from one set (domain) to another set (range) assigns to each element of the domain exactly one element of the range

Calculate and interpret the average rate of change of a function presented over a specified interval

Solve systems of linear equations in two variables both graphically