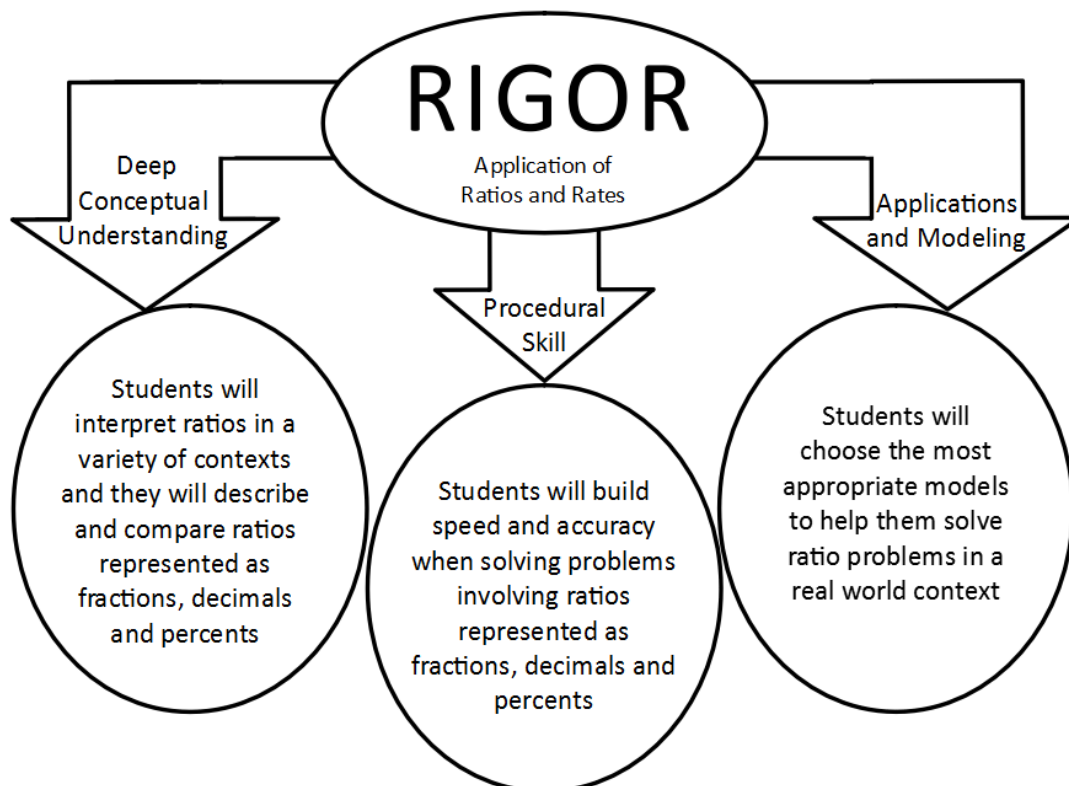# C2.0 Compacted 5/6 Parent Resource

Marking Period 2 – Topic 2:
Application of Ratios and Rates

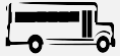| Topic	**Learning Goals by Common Core State Standard** *Students will be able to...*
Application of Ratios and Rates	• Make and interpret tables of equivalent ratios, including finding missing values. • Solve rate and ratio problems using multiple representations such as tape diagrams, double number line diagrams, coordinate planes and equations. • Solve unit rate problems including those involving unit pricing and constant speed. • Convert customary and metric units using ratio reasoning. (Additional specific examples) • Describe and compare ratios represented as fractions, decimals, and percent. • Solve problems involving percent, including finding the percent of a quantity and finding the part or whole. *Instructional videos in the hyperlinks above are meant to support C2.0 content, but may use vocabulary or strategies not emphasized by MCPS.*

The Common Core State Standards require a balance of three fundamental components that result in rigorous mathematics acquisition: deep conceptual understanding, procedural skill and mathematical applications and modeling.

Learning Experiences by Common Core State Standard

In school, your child will…

At home, your child can…

Topic 2: Application of Ratios and Rates

- Make and interpret tables of equivalent ratios, including finding missing values.

Pounds		2	6	7	12		
Cost ($)	$2.50		$15.00		$30.00	$32.50	$45.00

- Solve rate and ratio problems using multiple representations such as tape diagrams, double number line diagrams, graphs, and equations.

  o *Laurel can make 6 glasses of lemonade from two lemons. At this rate, how many glasses of lemonade can be made from 5 lemons?*
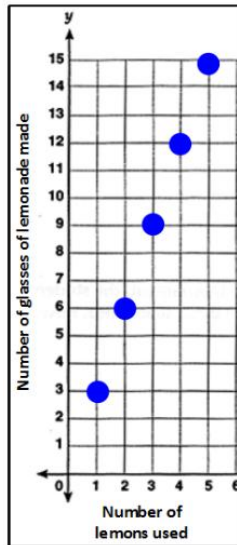
- Convert customary and metric units using ratio reasoning.
  o *Laurel makes 4 gallons of lemonade. If she charges $2.00 per quart, how much money will she make if she sells all of her lemonade?*

- Solve problems involving percent.
  o *Marc needs an 80% or higher on his math test to get a "B". If he answered 13 out of 16 questions correctly, will he earn a "B"?*

- Calculate and compare gas mileage (unit rate)
  o *Between two different vehicles*
  o *City driving vs. highway driving*
  o *Actual gas mileage vs. dealership advertised gas mileage*

- Create a scale model of their house/bedroom using a key
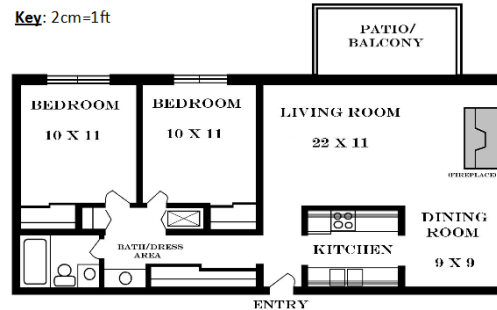
- Use unit rates to comparison shop
  o *Is it cheaper to buy 3 apples for $1.05 or a bag of 10 apples for $3.69?*

- Apply percent in daily life
  o *Calculate tip at a restaurant*
  o *Calculate discount and sale price at a grocery or clothing store*

Additional Practice
- Calculate discount, sale price and percent of discount
- Solving ratio problems with a table
- Which tastes juicier?
- How much does it cost?

Additional Practice links support C2.0 content, but may use vocabulary or strategies not emphasized by MCPS.