"Unwrapping" the Standards

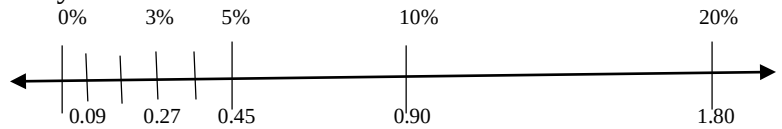
1. Choose a course priority standard for the "unwrapping process".
2. Skills: Circle the verbs – what *students* need to do.
3. Concepts: Underline nouns and noun phrases that represent *teachable concepts*.
4. Compose Big Idea statements

Content Area: Math

Grade Level: 7th

Standard: 7.RP.3

Domain: Ratios and Proportional Relationships (RP)
Cluster: Analyze proportional relationships and use them to solve real-world and mathematical problems.
Standard: 7.RP.3 - Use proportional relationship to solve multistep ratio and percent problems. *Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.* **(DOK 1,2)**

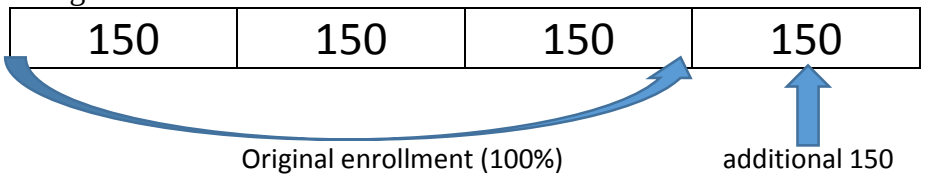
1. Skills (verbs)	**2. Key Concepts (nouns)**	**3. Additional Clarifications / Examples**
Students need to be able to do……	Students need to know…..	
Use Solve	Proportional relationships Multi-step ratio and percent problems	*Example:* All the employees of Joe's Burger Shack earn a 3% raise each year. If Jack made $9.00 per hour last year, how much money will he make this year after he receives his 3% raise?  $w + 0.03w$ = new wage $9 + 0.03(9) = \$9.27$ *Example:* A clothing store offers a discount of 20% off everything in their store. The new price of a shirt in the store is now $25. What was the original price? % of orig. price: 80% \| 40% \| 20% \| 100% Cost of shirt ($): 25 | 12.50 | 6.25 | 31.25 80% + 20% = 100% Equation: $x - x(.20) = 25$ x = orig. price $25 + $6.26 = $31.25

Adapted from *The Leadership and Learning Center*

Example:

Middle School Enrollment		
School	**2010**	**2012**
Central Middle School	450	600
Madison Middle School	429	405

By what percentage did the enrollment at Central Middle School change?



600 - 450 = 150 → $\frac{150}{450} = \frac{1}{3} = 33\frac{1}{3}\%$ increase

4. Big Idea(s) in student language: Students will use proportional reasoning and percents to solve real-world problems.