NEWSELA

Math Lesson Plan

Teacher(s): Beneventano / Janikis	Subject: Math	Grade: 7

Lesson Title	Test it Out : Ratios and Proportions
Featured Newsela Article	[Too much school time spent on tests? Obama looks for limits (1070L)](#)
Newsela Reading Standards	Word Meaning and Choice Multimedia

Learning Objective Example statements about what students will learn from this particular activity.	<u>Student will be able to</u> interpret data presented in a chart. <u>Students will be able to</u> … solve proportional equations based on data presented in a real world text.
Learning Standard Include the standard that this activity helps teach.	[Common Core Standards](#) [Next Generation Science Standards](#) CCSS.MATH.CONTENT.7.RP.A.3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.

Lesson Content
How will you introduce the lesson to your students? How will you teach them the skills they need to be successful? How will you allow students to practice the skills they learned with Newsela's Write + Quiz feature? How will you assess mastery?
	Teacher Notes: If you have already set up your class on Newsela you can skip that step. Edit Write Prompt and provide / share guided Annotations on 3 levels.
	
	<u>Direct Instruction:</u>
	● Review Learning Objectives (~5 min)
	  ○ POLL: Thumbs up Thumbs Down : Do you think you spend too much time testing?
	  ○ DO NOW: By the time Nicolle graduates, she will spend 120 total hours testing. If she spend 40 hours on math tests, what percent of testing is spent on math?
	  ○ Is/ Of = % / 100
	    ■ Cross Multiplication
	    ■ Simplification
	    ■ Equation
	  ○ Answer: Nicolle spends ~33% of her testing on math.
	● Set up Class (~5 min)
	  ○ Send email with Quick Join / Class Link: newsela.com/join/#_____
	  ○ Class Code: _____
	● Review Newsela features
	  ○ Annotations
	  ○ Quiz
	  ○ Write
	
	<u>Modeling</u>:
	● Answering Do Now

- ○ Show steps to answer question
  - ■ Is/ Of = % / 100
    - ● Cross Multiplication
    - ● Simplification
    - ● Equation
  - ■ Answer: Nicolle spends ~33% of her testing on math.
- ● Read first paragraph together.
  - ○ Highlight: (1040L) "The correct answer is "B", according to a new study of 66 of the nation's big- city school districts by the Council of the Great City Schools."
    Annotate: Is this answer greater or less than you expected? Why?
    - ■ Answer first annotation question as a class.

Student Practice: (~10)
- ● Students will read article at their level.
- ● Instructions *(Teacher Note: Edit when you Assign)*
  - ○ First, read the entire article (1070L) for meaning and take the Quiz independently.
  - ○ Then, go back and answer the teacher annotations based on our studies of ratios, proportions, and percents.
  - ○ Highlight in GREEN any other math connections and explain your reasoning. (At least 2)
  - ○ Highlight in RED any confusions or questions for additional research. (At least 1)
  - ○ Finally, answer the Write prompt. Use your math notebook for calculations.
- ● Additional Article Annotations: (1040L)
  - ○ HIghlight: In connection with the study's release Saturday, President Barack Obama said schools should limit standardized testing to 2 percent of classroom time.
  - ○ Annotate: If there are 7 hours in the school day, how many hours are spent testing of the day?
  - ○ Highlight: Study Results Don't Include Prep Time
  - ○ Annotate: Based on the chart, how many mandated tests, on average, will you take in your middle school (6-8) career?

- ● Teacher(s) will circulate.

Guided Questions:
- ● How did you solve for the number of hours spent testing?
- ● How did you use the chart to help determine the average number of tests?
- ● How can the chart help you to check your work?

Assessment:
- ● Students will complete Quiz and Write Prompt.
  - ○ Based on the information presented in the article and chart, how many total hours are students testing each year, if there are 180 school days. Use an equation to show your work.

  - ○ Does the chart either support or reject your calculated answer? Explain your reasoning.

	● Students will show understanding through small group discussion.
Accommodations What scaffolds can be included to support learners? Can you anticipate different reading levels for students?	Provide lower level (850L) for 5 students. Provide additional Annotations at 850L to support comprehension. Provide sample proportion to help solve Write prompt.
Extensions How can you support high level learners? Can you anticipate reading levels and Writing Prompt to challenge?	Provide higher level (1240L) for 3 students Have students convert the number of hours to minutes, days, and years spent on testing.