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| Converting ratio to percentage | 3.20.2019 |

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| Subject |  | Overview |
| |  | | --- | | Mathematics | | Prepared By | | [Instructor Name] | | Grade Level | | 5 | |  | This lesson plan covers teaching content for;   1. Converting ratio to percentage |

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| Materials Required -White board  -Marker |
| Additional Resources  * <https://sciencing.com/teach-math-percentages-6th-grade-7921917.html> * <https://betterlesson.com/lesson/594914/converting-with-percents?from=mtp_lesson> * <http://www.spokaneschools.org/Page/35523> * <https://www.brighthubeducation.com/middle-school-math-lessons/128710-solving-problems-using-percent/> * <http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47909> |
| Additional Notes |

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| **Objectives** Students should be able to:   1. Convert ratio to percentage |  | **Activity Starter/Instruction**  1. Teacher explains that to get percentage   The formula = part = percent  Whole 100   1. Teacher can draw a rectangle or any shape and ask the students to do the same and tell them to put it into different fraction then start to solve for their percentage. 2. Shade 5 box in the rectangle   = 5/12  5 = percent  12 100  Percent = 5 Χ 100  12  = 5 Χ 25 = 125 = 41.666 ~ 41.7%  3 3  **Guided Practice**  **Day 2/ Lesson 2: 15 Mins**   1. Ashley is retiling a bathroom and she runs into this problem: A bathroom requires 470 tiles. If Ashley has 355 tiles, what percent of the bathroom tiling can she complete? 2. Let's think about our steps. We read the problem. And what's the question? We're trying to find the percent of the bathroom she can tile. What details do we know? We know the whole; that's 470. That's the total number of tiles she should have. We also know the part: 355. 3. Compare the part to the whole, so we have 355/470 = *x*/100. Here, x is the percent of the tiles. 100 would be all the tiles, which is 470. To figure out what *x* is, just cross multiply. So 470*x* = 35,500. Divide by 470, and *x* = 75.5%. 4. Ashley can complete 75.5% of the bathroom tilling. |  | **Teacher Guide** **Day 1/ Lesson 1: 15 Mins** Describe to your pupils the importance of being able to find the percentage of a specific number by introducing the notion of a ratio.  1. Instruct your pupils to choose any number and to find 43 percent of that number by first multiplying the number by the percentage they need to find. 2. If the pupils choose 22, they would multiply 22 by 43 to equal 946. Next, tell the students to divide the answer by 100 or to move the decimal place two spaces to the left to obtain the answer of 9.46, which is then rounded to the nearest whole number 9%.  Guided Practice **Day 3/ Lesson 3: 20mins**   1. When you want to turn a ratio into a percentage, you must choose just one part to compare against the whole. 2. Teacher can give an example; 22 (students who passed) / 30 (students in the entire class). This can also be written as 22 : 30 3. Work the division represented by the fraction you just wrote.   22÷30 = 0.7333 (This is a repeating decimal; teacher will tell pupils which decimal point to round to)   1. Multiply 0.7333 by 100 to convert it into a percentage.   0.7333 Χ 100 = 73.33%  Of the entire class, 73.33% passed the last test. |
|  |  | **Assessment Activity** Ask students questions to assess and deepen their understanding of converting between ratio and percent. |  | **Assessment Activity** Assess if pupils can:   1. Convert ratio to percentage. |
|  |  | **Summary**  Randomly select pupils to share their thoughts and answers with the class |  |  |
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