

# Rush-Henrietta APPR Lesson Plan Form

**Grade Level/Subject:** 10-12/Algebra I

- **1. Class Data** –This Algebra I class has 18 students total. 9 students have IEPs and 1 with a 504. 11 students receive either tier 2 or 3 math supports. This class meets every day of the 6 day cycle for 40 minutes. Students who are enrolled in this course, at this time, have previously taken Algebra I and have not shown success in meeting course requirements yet. This is an integrated co-taught class with a general education teacher and special education teacher, there is also a paraprofessional in the classroom. The Gen Ed teacher and I conducted a learning profile activity in the beginning of the school year and found that the majority of our students are strong visual learners and most are independent workers. The results of this inventory showed interest in working quietly and independently, so we provide this opportunity in the warm up activity and lesson instruction. For the students whose learning profile showed a more extroverted preference we provide opportunities to work with a partner/small group when there is time for skill strengthening and practice.
- **2. Common Core Standards Applicable** –Performance Indicator A.N.05 Solve algebraic problems arising from situations that involve fractions, decimals, percents (decrease/increase and discount), and proportionality/direct variation. Common Core Math Shift 5---Application: Students are expected to use math and choose the appropriate concept for application even when they are not prompted to do so. Common Core Math Shift 3---Fluency: Students are expected to have speed and accuracy with simple calculations; teachers structure class time and/or homework time for students to memorize, through repetition, core functions. Common Core ELA/Literacy Shift 6---Academic Vocabulary ---building student's ability to access words, work with words students will use frequently.
- **3. Lesson Objectives (Students will...)** Students will be able to answer the following learning objective“ What are the steps to solving money related word problems?” and “When/where might you use these particular steps/skills in your life?” Students will convert percents to decimals, calculate sales tax, markups, tip, sales, discounts and then calculate total price/cost. Students will identify and underline key words within given word problems, determine the correct mathematical operation, and then complete the 3 step calculation process.
- **4. Prior/Subsequent Learning Connection** –Previous skills used in this lesson are changing percents to decimals, looking for and underlining key words in a word problem, determining calculation before set up and being sure to answer the question being asked. Subsequent learning connections are using these skills in real world applications.

**5. Lesson Activities (As Applicable)**

**A. Introduction** –Students will independently work on a warm up where they change percents to decimals. This skill is necessary in completing the first step in money related word problems.

**B. Individual Work** –Students will work through identifying addition or subtraction steps in each given word problem- based on key words in the given problems. Students will underline key words that help to determine the correct operation.

**C. Group Work** –There will be whole group instruction, with scaffolded notes and modeling of processes, on Money Related Word Problems. Students will participate in the guided notes and then work on practice problems individually or in a group, if they choose.

**D. Closure** –We will look at our learning objectives for the lesson and answer the two questions we identified at the beginning...“ What are the steps to solving money related word problems?” and “When/where might you use these particular steps/skills in your life?” 2 minute multiplication facts: Each day students work on basic multiplication facts to strengthen this skill that is necessary for all subsequent learning in Algebra.

**6. Materials** –Percent to Decimal warm up sheet, Money Related Word Problems guided notes, Unit 3---Markup, Discount, Sales Tax practice, basic multiplication facts sheet, calculator

## **7. Assessments (As Applicable)**

**A. Formative** –There will be a lot of informal assessment taking place throughout the 40 minute period. Including: teacher/para circulation during warm up with individual student conversations and checks for understanding, teacher check of addition and subtraction calculations and corresponding key word underlining, checks for understanding and correct setup/calculation on the practice worksheet. At the beginning of the following class students will independently work on a 4 question warm up (Mixed Money Word Problems uploaded document) to show their understanding of this lesson. This formative assessment will provide Chris and I with information of their understanding and if/what we need to continue to work on. We will ask students to work independently and not use their notes---as a way for us to assess understanding and comprehension of the previous lesson.

**B. Summative** –

**8. Possible Adjustments to Lesson –** Reading comprehension---of the 9 students with IEPs 6 of them have tests read as part of their IEP testing accommodations. Working with word problems might prove to be difficult for some of these students as their reading levels and comprehension are below grade level. A possible adjustment to independently reading/working with these problems will be to read quietly to individual students if needed or perhaps reading aloud to the whole group, as to not make students feel uncomfortable or on the spot. However, in the past these students have responded well to teacher support and will advocate for help with reading if/when they need it.

**TIME!** With this class meeting for only 40 minutes time can sometimes be a factor in adjusting to student need. All 9 of the students with disabilities have extended time as part of their testing accommodations, meaning extra time is sometimes necessary in order to process information. Changing percents to decimals is a skill students have done in the past, however could possibly be a struggle. For students who have retention and memory recall deficiencies more reteaching and opportunities for practice might be necessary.