Lesson Plan 2

1. Content: Describe ***what*** it is you will teach. What is the content?

In this lesson, we will review the exponent rules that students taught each other. We will practice using them to simplify more complicated exponential expressions that entail the application of multiple rules.

1. Learning Goal(s): Describe what specifically students will ***know*** and ***be able to do*** after the experience of this class.

Students will know the six different exponent rules (including scientific notation) and be able to simplify expressions that entail using multiple rules at once. They will also be able to refer back to their notes for help, since after this class they will have all the rules written down with examples.

1. Rationale: Explain how the content and learning goal(s) relate to your Curriculum Unit Plan learning goals.

I anticipate that students will need a review of the exponent rules they just learned in the jigsaw. Since a major goal of my unit is for students to be able to simplify expressions using exponent rules, reviewing the rules will help them commit them to memory. In the jigsaw, students learned to use the exponent rules in isolation, so they have not yet worked with expressions that necessitate the use of a few different rules. This lesson helps them get comfortable working with those sorts of more complicated expressions.

1. Assessment: Describe ***how*** you and your students will know they have reached your learning goals.

Because this is a transitional lesson meant to just help with review, I do not expect students to fully know the exponent rules at this point. However, they should all have the notes written down and be able to work through examples with me. Their participation throughout the class will help me see how comfortable they are with the material, and I will be calling on students throughout the lesson to supplement the notes. At the end of both periods I will collect their worksheets to see their progress, and I will ask students to check their answers against an answer key so that they can monitor their own progress.

1. Personalization and equity: Describe how you will provide for individual student strengths and needs. How will you and your lesson consider the needs of each student and scaffold learning? How specifically will ELL students and students with learning disabilities gain access and be supported?

This lesson is designed to serve as a future scaffold for students who like to refer to notes when completing assignments. I’ve noticed that many students struggle to remember content, so by asking students to take notes/summarize what they just learned in the jigsaw, it helps the information stick. I will show written notes with examples on the Elmo so that students will have visuals to draw from in addition to my oral explanations. The worksheets that students will work on will be tiered, which allows for differentiation among students.

1. Activity description and agenda
   1. Describe the activities that will help your students understand the content of your class lesson by creating an agenda with time frames for your class. Be prepared to explain why you think each activity will help students on the path toward understanding.

See attached timed agendas.

* 1. What particular challenges, in terms of student learning or implementing planned activity, do you anticipate and how will you address them?

Sometimes my students have a hard time sitting through full-class notes for an extended period of time. However, they specifically asked me for notes on the two pervious topics we studied and said that they found them very helpful, so I plan to remind them of that if I see them losing focus.

When we move on from the notes to simplifying expressions, I anticipate that some students might struggle to put the notes into practice, even though they did that during the jigsaw. To address this, I plan to go over a few problems that I think might be challenging with the class, and then let them work on other problems on their own.

1. List the Massachusetts Learning Standards this lesson addresses.
2. CCSS.MATH.CONTENT.8.EE.A.1

Know and apply the properties of integer exponents to generate equivalent numerical expressions.