Learning Target Template

8.E.E.A.1

Learning Target #1: Know and apply the properties of integer exponents.

"I can" Statement: I will know the properties of integer exponents. I will apply the properties of integer exponents.

of Days to Teach: 5 *

xAssessment:

Students will have a quiz at the end of day 5 to evaluate progress. Students need to be 80% proficient.

Essential Questions (Monitoring):

- What is an integer?
- What is an exponent?
- What is a coefficient?
- What is another name for exponent?
- What is another name for coefficient?
- What is the Product of powers property?
- What is the Power of a power property?
- What is the Power of a Product property?
- What is the Quotient of powers property?
- What is the Zero exponent property?
- What is the Negative exponents property?
- When are exponents used and why are they important?
- Can you explain the process of changing a negative exponent to positive?
- How can you use the properties of exponents to solve: $3^2 \times 3^3$

Method of Instruction:

(Day 1)-Students will get introduced to properties of exponents. They will work on taking notes as the teacher walks them through each concept. Vocabulary will be introduced as well as the mathematical formulas for each property. (Day 2)- Students will use a graphic organizer to label the base and the exponent as well as the formulas for the different properties.

(Day 3)- Students will continue notes and will be expected to put the properties of exponents to use. They will work on examples as a whole group as well as with a peer.

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(Day 4)-Students will create notecards of the properties of exponents to keep as reference. They will also work in small groups. They will practice applying the properties.

(Day 5)-Assessment day! Students are expected to pass the quiz with 80% proficiency or better. In case $\frac{1}{2}$ of the class doesn't hit the 80%, the unit will be repeated since this essential standard is the base for the next.

Resources: Online <u>Content</u> Worksheets Small white boards Textbook Poster board Notepad

Intervention: Small group: Review properties of exponents and formulas.

One-on-One intervention: Demonstrate to students how to use formulas when applied to a problem. Students will be expected to follow steps and explain the process in their own words.