Unit 2 Topic 6 – Exponents   Name _____

SLT 32-34   Date _____ Per _____

Web Quest –Exponents

You will be working independently and in small group learning about exponents over the next 2 days. You will use various resources such as videos, interactive websites, non-fiction reading material, flipcharts, and worksheets.

At the end of the two days you will be able to:

- Identify and model the relationship between exponents and repeated addition
- Find the value of an expression using whole number exponents
- Write & evaluate numerical expressions involving whole number exponents

There will be a formative assessment on _____.

Please use Chrome for all activities.

Let's begin… ☺   DAY 1

1) Read about exponents using: https://www.mathsisfun.com/algebra/exponent-laws.html
   As you read this it will go beyond what I will be covering in class, however you are only responsible for mastering the first two Laws of Exponents. We will be working on Laws of Exponents #1 – 5.

   Answer the following questions after you complete the reading.

   1) Which is the exponent and the base in the example 3^4 _____

   2) Write 3^4 in expanded form _____

   3) Write 3^4 in standard form _____

   4) Write 3^4 in words _____

   5) What is the difference between 2x3 and 2^3? (HINT: Think of the operation)

   _____

_____

_____

6) What is the key to understanding the Laws of Exponents? _____

_____

_____

7) Provide an example and explain the meaning of the following laws of exponents. These are the only ones you are required to learn about. (** These are laws that will be on the test)

1) ** $X^1 = x$

2) ** $X^0 = 1$

3) ** $x^n = xxxxx$

4) $x^m x^n = x^{m+n}$

5) $x^m/x^n = x^{m-n}$

6) $(x^m)^n = x^{mn}$

Teacher check in _____

2) Watch the video on Brainpop.com about exponents. You may google it or type in the following web address:
https://www.brainpop.com/math/numbersandoperations/exponents/

To log in: Username: rockyhill
            Password: rockyhill

3) Complete the Brainpop Quiz and record your score: _____. Be sure to review your answers.

Teacher Check In _____

4) Watch the Math Antics video: https://www.youtube.com/watch?v=ZJDb7E6aCrA

5) Complete worksheet SLT 32 Practice and check your answers using the key in the Answer Key folder

6) Complete the "Exponents" worksheet and check your answers using the key in the Answer Key folder

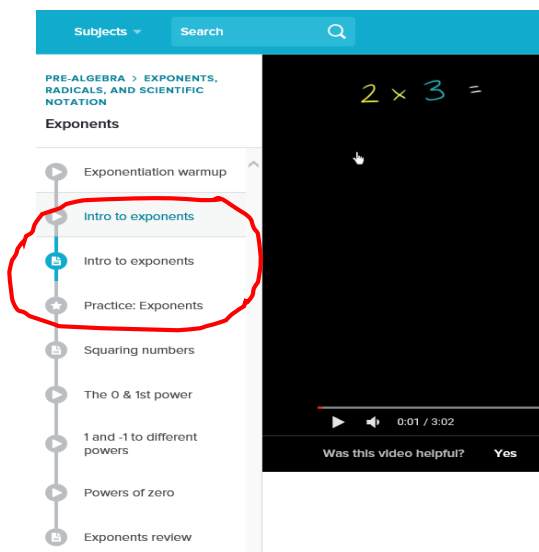7) For Homework complete SLT 32 Homework

Teacher Check In _____

Feel free to review any of this at home!

DAY 2

1) Check your homework (SLT 32 Homework) from last night using the key located in the Answer Key Folder.

2) Go to: https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponents/v/introduction-to-exponents

   And watch the video on exponents.

3) Complete all 3 parts circled in red.
a.   Watch the video

4) What does it mean to evaluate?

5) How many of the practice problems in Pt 2 did you get correct?? _____/6.

Stop at the Ask a Questions Section

6) Complete the Practice: Exponents (Pt 3)

Score: _____

2) Complete the SLT 33-34 Warm-up and check your work using the key located in the answer key folder.

3) Complete the SLT 33-34 Practice Worksheet and check your work the key located in the answer key folder.

Teacher Check In _____

4) Go to: http://www.mathworksheets4kids.com/exponents.php

a) Download the Identify Base and Exponents Worksheet – Pre-Algebra – medium. Pick any 9 of these. Copy the problem and answer the questions in your spiral. Scroll down to page 2 and check your work. Be sure to put checks and X's!!

b) Download the Expanded Form & Exponent Form Worksheet – Difficult – Sheet 2. Pick any 5 problems from each section. Copy the problems in your spiral and record the answers. Scroll down to page 2 to check your answers. Be sure to put checks and X's!!

c) Download the Product Rule Worksheet – Pre-Algebra – Easy. Pick any 10 problems. Copy the problems in your spiral and record the answers. Scroll down to page 2 to check your answers. Be sure to put checks and X's!!

d) Download the Quotient Rule Worksheet – Pre-Algebra – Easy. Pick any 10 problems. Copy the problems in your spiral and record the answers. Scroll down to page 2 to check your answers. Be sure to put checks and X's!!

e) Download the Power Rule Worksheet – Pre-Algebra – Easy.   Pick any 10. Copy the problems in your spiral and record the answers. Scroll down to page 2 to check your answers. Be sure to put checks and X's!!

Teacher Check In _____

7) Play a few of these games for additional practice.

http://www.mathplayground.com/ASB_Otter_Rush.html

http://www.math-play.com/Exponents-Jeopardy/Exponents-Jeopardy.html

http://www.math4childrenplus.com/games/exponents/

8) Homework: SLT 33-34 Extra Practice

Answer questions about the webquest activity

Test next class on exponents

Post Webquest Activity Questions:

Please answer each question and give this back to your teacher.   Names NOT required.
Please be honest!

    1) Did you enjoy this type of learning ?   Yes   No

    2) Which activity did you enjoy the most and why?

    3) Which activity helped you learn the material the best and why?

    4) Would you want to do this type of learning activity again?

    5) Were these lessons to hard, to easy, or just right?

    6) Did you feel there was adequate time to complete everything?

    7) Please add anything else that you would like to share about this learning experience.