Lesson Plan, **6-9pm, Monday, 15 October, 12018 HE rm. 211**, SDCE, North City Campus
Instructor: Ms.   S. D. Jones

In our ***Learning Toolbox***:
Where to find information about **voting**: the local **Public Library**!!

Vocabulary:
Copy into your notes, and ***Mind Map*** each word:

Reading Comp. Vocab.	*Grammar Vocabulary*	*Math Vocabulary*	*Test-taking Skills*
Monday is for your Essay Writing	**Essay Writing Mondays**	**Negative exponents**	**Breaking tasks down into smaller pieces**
	Thesis sentence	Fractions	Noticing details
	Introductory paragraph	Division as repeated subtraction	Around, approximate
	General outline	Exponential form	About, near, close to
	Detailed outline	Fractional form	Planning your time
	Body paragraphs	Decimal form	Eliminate the unlikely

6pm: **Write one sentence telling me the topic of your essay**.

6:02   Continue on work from your folder (on Reading/Literature/Science/Social Studies).

7pm: Stand up & Stretch, if you wish...
 7:00 to 7:07 Reading Comprehension
 7:07 to 7:15 Grammar lecture, using the passage below.
 7:15 to 7:25 Math lecture, also using this same passage.
 7:25-7:30   We do 1st question/problem from each online worksheet together, then you finish
the online activities from all lectures individually on the classroom computers.
Mathematics work online and/or in books from 7:45 until 8:45.

7:00-7:15:   **Reading Comp.**: No reading today.   Continue working on your thesis sentence
and introductory paragraph…

7:15   Mathematics Topic: **Negative exponents**

          Why would we want to convert between forms of expression?   *Sometimes a problem is easier to solve in an equivalent form…*

Relationship between negative exponents, fractions, and decimals:

Rule	Three-Forms Example
Negative Fractions jump the fraction bar	$2^{-3} = 2^{-3}/1 = 1/2^3 = 0.125$

So, negative exponents and **fractions** are just another form of **the same #!**

Let's chart **some Ways to Express Any Number X**

# Quantity	Fractional Exponents	Radical form	multiply	exponent	fraction	decimal	percent	Por Ciento
8	$(64)^{1/2}$	$\sqrt{64}$	4*2	8^1	64/2, 8/1	8.0	800%	800/100
3^{-1}	$(1/9)^{1/2}$	$\sqrt{1/9}$	33/99	**3^{-1}**	**1/3**	.3333	33%	33/100
12	$(144)^{1/2}$	$\sqrt{144}$	$12*1, 3*2^2$	12^1	12/1,24/2	12.000	1200%	1200/100
3	$9^{1/2}$	$\sqrt{9}$	3*1, $3*3^0$	3^1	9/3, 12/4	3.00	300%	300/100
27	$(27*27)^{1/2}$	$\sqrt{(27*27)}$	3*3*3	3^1*3^2	27/1	27.00	2700%	2700/100
½	2^{-1}			2^{-1}	1/2	.5	50%	50/100

Now, let's do the first online math worksheet problem together:
https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-negative-exponents/e/exponents_2

7:30

1.) Please finish your outline, Thesis sentence, and a few sentences of your Introductory Paragraph,

and

2.) Please do the remainder of online math worksheet:
https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-negative-exponents/e/exponents_2

8:40 *Exit Questions*: 1. Please **write** one sentence explaining why a negative exponent is a special kind of fraction. Could you use either form to *express* the same quantity? (yes/no)

2. What is your Thesis sentence?
3. How many body paragraphs does your essay have?
4. Show 1/3 in exponential form.

8:45 Turn in Exit Slip, Dismissal