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

In our ***Learning Toolbox***:
LearnStorm via Khan Academy (ways to grow your brain…): The 3 Rs

- **Recognize:** What are some indications that you are frustrated?
- **Remind:** What can you say to remind yourself that frustration is ok?
- **Reset:** a short walk, count to 10, deep breaths, imagine…

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

| ***Reading Comp. Vocab.*** | ***Grammar Vocabulary*** | ***Math Vocabulary*** | ***Test-taking Skills*** |
|---|---|---|---|
| **Separation of powers: Law Makers** | **Essay Writing**: **Body paragraphs** | **Exponent products/quotients** | **Breaking task down into smaller pieces** |
| Legislative Branch | Pros/supporting reasons for your thesis | X, Y coordinates (*foreshadowing*…) | Distribute like tasks among all parts of pjct |
| legislation | Cons/counterarguments | Cartesian coordinates | Structure: *word counts* |
| legislators | Supporting sentences | Area and exponents | Content: *word counts* |
| legislature | Rebuttal | product rule (multiply) | Literature & math voc. |
| Branches (three) | Transition | Quotient Rule (divide) | Monitoring progress |

**6pm**: 1.
**Write** one or two sentences explaining what you think might be the differences between the Congress and the California State Assembly.

2. optional **easy** math warm-up: (This activity is on Area and exponents, to *foreshadow* X,Y coordinates via estimation of square roots.)
https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-square-roots/e/square_roots_2

**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**.

7:00-7:07: **Reading Comp.**: use Closed Captions on videos

Today's Passage: https://www.youtube.com/watch?v=tyeJ55o3El0. *(Today's reading comes from Closed Captions for the Hard of Hearing…)*

Write three sentences explaining what a bill is, please.

**7:07 Grammar** lecture part2/4: **Essay Writing –the Body Paragraphs:**

**Section II of your essay outline will be the first Body paragraph: your Pros paragraph.**

-Note: this paragraph should **match**

1.) the second sentence of your Introductory Paragraph, which will match
2.) the second clause or phrase in your Thesis sentence, in greater detail.

Please write

1.) one thesis sentence to show me at the end of class or for tomorrow, and
2.) one essay outline that matches this thesis sentence, with *word counts*…

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**7:15** Mathematics Topic: multiplying and dividing **Exponents**

Because, *Sometimes a problem is easier to solve in an equivalent form…*

## Exponents rules and properties

| Rule name | Rule | Example |
|---|---|---|
| Product rules | $a^n \cdot a^m = a^{n+m}$ | $2^3 \cdot 2^4 = 2^{3+4} = 128$ |
| | $a^n \cdot b^n = (a \cdot b)^n$ | $3^2 \cdot 4^2 = (3 \cdot 4)^2 = 144$ |
| Quotient rules | $a^n / a^m = a^{n-m}$ | $2^5 / 2^3 = 2^{5-3} = 4$ |
| | $a^n / b^n = (a / b)^n$ | $4^3 / 2^3 = (4/2)^3 = 8$ |

(Source: https://www.rapidtables.com/math/number/exponent.html and https://www.homeschoolmath.net/teaching/md/division-repeated-subtraction.php)

Multiplication is repeated addition, so $a^n \cdot a^m = a^{n+m}$

Division is repeated subtraction, so $a^n / a^m = a^{n-m}$
(Source: https://web.northeastern.edu/seigen/1250DIR/Handout-ExponentsandRadicals1.pdf)

**Today**, we have **two different math activities to choose from**: an easier one and a more challenging one.

*First*, let's do the first online math worksheet problem together:
https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponent-properties/e/powers-of-products-and-quotients-sp

*Now*, let's do the first problem from the more challenging one:
https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponent-properties/e/powers-of-products-and-quotients

**7:30 Please**

1.) Finish your outline and thesis sentence, and
2.) do the remainder of the easier online math worksheet:
https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponent-properties/e/powers-of-products-and-quotients-sp

8pm: continue to work on mathematics

8:40 ***Exit Questions***:

1. Please **write** one sentence explaining how you can use outline to organize your essay.
2. What is a body paragraph?
3. Which sentence (in the introductory paragraph) tells us what the body paragraphs will discuss?
4. Write in mathematical terms and show: what is the approximate length of the side of a field which is 46 square feet?

8:45 Turn in Exit Slip, Dismissal