Lesson Plan, **6-9pm, Monday, 8 October, 2018 HE rm. 211, SDCE, North City Campus**

Instructor: Ms. S. D. Jones

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**In our *Learning Toolbox*:**

LearnStorm via Khan Academy (ways to grow your brain…): *scheduling tasks by breaking large projects into smaller chunks*, using a spreadsheet to organize your project (see shiradest.wordpress.com on *today’s lesson plan for sample xls sheet…*)

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**Vocabulary:**

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

<table>
<thead>
<tr>
<th>Reading Comp. Vocab.</th>
<th>Grammar Vocabulary</th>
<th>Math Vocabulary</th>
<th>Test-taking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separation of powers</td>
<td>Essay Writing</td>
<td>exponential forms</td>
<td>Breaking down into</td>
</tr>
<tr>
<td>Separation of church and state</td>
<td>Essay Writing: Introductory paragraph</td>
<td>Zero Exponent rules</td>
<td>Dividing work into smaller chunks</td>
</tr>
<tr>
<td>Checks and balances</td>
<td>Thesis sentence</td>
<td>Power of Zero</td>
<td>Time management</td>
</tr>
<tr>
<td>Separation of powers</td>
<td>Supporting sentences</td>
<td>Raised to power of 0</td>
<td>scheduling</td>
</tr>
<tr>
<td>Branches authority</td>
<td>Rebuttal sentences</td>
<td>Zeroeth Power</td>
<td>Monitoring progress</td>
</tr>
<tr>
<td></td>
<td>Transitional sentences</td>
<td>Product and Quotient of Exponents</td>
<td>Keeping track of progress</td>
</tr>
</tbody>
</table>

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**6pm:**

*Write* one or two sentences explaining what you think might be the differences between the Congress and the Supreme Court.

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

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**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.**

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7:00-7:07: Reading Comprehension & Grammar: Commas in a series/list

**Today’s Passage:** At the Constitutional Convention, the Framers decided to **separate** the powers of government among three branches—legislative executive and judicial—so that each branch had
to cooperate with the others in order to accomplish policymaking goals.  (Today’s reading comes from https://www.khanacademy.org/humanities/ap-us-government-and-politics/foundations-of-american-democracy/principles-of-american-government/article …)

Where are the missing commas?

Let’s do the first question on commas in lists:

7:07 Grammar lecture part1/4: Essay Writing –the intro. Paragraph:

An essay should have at least four paragraphs (¶):

Introductory paragraph with your Thesis Sentence,
Two Body paragraphs, pros cons
Conclusion paragraph, summarizing your argument or topic.
(https://www.uvu.edu/writingcenter/docs/handouts/writing_process/basicessayformat.pdf has a nice summary…)

To map out your introductory paragraph, use an outline or a mind map, which ever you prefer, to show your:
1. Thesis or main idea, which will become your topic sentence
2. Your pro ideas/arguments, which will become one sentence per “pro”
3. The ideas against your argument, a sentence for each “con” to your thesis,
4. Your transition sentence that glides into your first Body Paragraph.

Let’s outline a Thesis sentence together, then you make an outline to show me at the end of class or for tomorrow, organizing your thesis sentence.

Notice that when you outline your thesis or topic sentence, you are also outlining your entire essay at the same time, but as an overview. The details will come in the outline for your body paragraphs.

7:15 Mathematics Topic: Exponents and Radicals, good friends that go together.

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

Exponents rules and properties

<table>
<thead>
<tr>
<th>Rule name</th>
<th>Rule</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero rules</td>
<td>$b^0 = 1$</td>
<td>$5^0 = 1$</td>
</tr>
<tr>
<td><strong>One rules</strong></td>
<td><strong>Negative one rule</strong></td>
<td></td>
</tr>
<tr>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>(0^n = 0), for (n&gt;0)</td>
<td>((-1)^n = \begin{cases} 1, &amp; n \text{ even} \ -1, &amp; n \text{ odd} \end{cases})</td>
<td></td>
</tr>
<tr>
<td>(b^1 = b)</td>
<td>((-1)^5 = -1)</td>
<td></td>
</tr>
<tr>
<td>(1^n = 1)</td>
<td>(5^1 = 5)</td>
<td></td>
</tr>
<tr>
<td>(1^5 = 1)</td>
<td>()</td>
<td></td>
</tr>
</tbody>
</table>

Sources:

- [https://www.rapidtables.com/math/number/exponent.html](https://www.rapidtables.com/math/number/exponent.html)

Now, let’s do the online math worksheet problem together:
[https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponents/e/exponents-in-expressions](https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponents/e/exponents-in-expressions)

7:30

1.) Please do the rest of our online grammar worksheet:

and

2.) Please do the remainder of online math worksheet:
[https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponents/e/exponents-in-expressions](https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-exponents/e/exponents-in-expressions)

8:40  **Exit Questions:**  1. Please write one sentence explaining how you can use a chart to show various forms of the same number.
   2. What is an introductory paragraph?
   3. What is the sentence that introductory paragraphs generally start with called?
   4. Write in mathematical terms and show: what is the sum of \(5^{\text{zeroth power}}\) and \(5^{\text{first power}}\)?

8:45  Turn in Exit Slip,  Dismissal