Lesson Plan, 6-9pm, Tuesday, 11 September, 12018 HE rm. 211, SDCE, North City Campus
Instructor: Shira Destinie Jones

In our Learning Toolbox:

**Pre-reading** means skimming the question, or paragraph or chapter before you start to read closely (to take notes), so that you have an idea of what you are about to read before you begin.

**Vocabulary:**

<table>
<thead>
<tr>
<th></th>
<th>equation</th>
<th>indefinite pronouns</th>
<th>prime factorization</th>
<th>Process of Elimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>influential</td>
<td>singular</td>
<td>integer</td>
<td>Get a “Ballpark idea” of the likely answers</td>
<td></td>
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<tr>
<td>founder</td>
<td>plural</td>
<td>natural #, even/odd</td>
<td>PTranslate the question into smaller steps</td>
<td></td>
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<tr>
<td>astronomy</td>
<td>specific</td>
<td>negative number</td>
<td>Check the solution for correctness</td>
<td></td>
</tr>
<tr>
<td>tone</td>
<td>refer to</td>
<td>0</td>
<td>State “your final answer” in correct units</td>
<td></td>
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6pm-6:02: Reflect on who might have invented Algebra. 

**Write** one or two sentences explaining what an equation is, and who you think invented equations. Why do you think so? (If you want to hear a story, write “Yes, I would like to hear a story” on your paper, as well.) **Please raise your hand when done.**

Imagine you are a young girl living long ago, and what could **motivate** her to risk her life for others. (Pg 15?, Tales from the Arabian Nights, D. Jo Napoli)

(*Curiosity Questions:* ??)

**Why** do you think the characters made the choices they did in this story?)

7pm: Stand up & Stretch!
7:00-7:07 Reading Comprehension: What does **tone** tell you about the author’s intentions or biases?

By the early 600s, Muhammad, the founder of Islam, had become an influential leader. Muslims encouraged trade, communications and developed standards and techniques for research used today. Muslim contributions include algebra.

What tone does this paragraph seem to have: negative, positive?
What can the tone of a piece tell you about how the author may want readers to feel?
7:07 Grammar lecture: **Indefinite pronouns**
What is singular? What does specific mean? (that one!)
A pronoun that does not refer to a specific person/thing is an **Indefinite pronoun**.
A pronoun that refers to only one non-specific person or thing is a **Singular Indefinite pronoun**, but a pronoun that refers to more than one (people/things) is a **Plural Indefinite pronoun**:

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
<th>Depends on reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>anyone, anybody, everyone, everybody, no one, nobody, someone, somebody</td>
<td>few</td>
<td>some, all</td>
</tr>
<tr>
<td>either, neither</td>
<td>both</td>
<td>any</td>
</tr>
<tr>
<td>each</td>
<td>many</td>
<td>none</td>
</tr>
<tr>
<td>one</td>
<td>several</td>
<td>most</td>
</tr>
<tr>
<td>Nobody is going to like that.</td>
<td>Both of those books are great gifts.</td>
<td>All of my <strong>mind</strong> is focused.</td>
</tr>
<tr>
<td>Either book is a great gift.</td>
<td>Both books are great gifts.</td>
<td>All of my <strong>ideas</strong> are fantastic.</td>
</tr>
</tbody>
</table>

Do first question together, then online **Indefinite pronouns** exercise, Khan Academy (or request paper)...

7:15 Continue with Language Arts work from folders until 7:45; **Break if desired, from 7:30-7:45**

7:45 Math review warm-up Question: ? **Ask any math questions!!!**

Work on your mathematics from folders...

8:20: Stand up, stretch, and think about 0: is it a number?

Please **write** one sentence explaining what you think or imagine that zero is used for. Why do you think we need it?

8:22 Mathematics: **Operations with Negative numbers**

If you wanted to subtract 10 from 17 (i.e. 17-10=x), but there was no zero, could you do it?

Remember that 0 (zero) is not a number, but a place holder. It allows us to be able to add and subtract, and also to tell natural numbers (or counting numbers) from negative numbers.

Like this: {..., -3, -2, -1, 0, 1, 2, 3...}

The entire set of negative numbers, 0, and natural numbers is called **Integers**.

An even number is any multiple of 2 (what does that mean?). So then what is an odd number?

What factor does any even number always have? Why?

As an equation, that looks like **x = 2 * y**, if x is an even number.
How can you tell if a number has 2 as a factor?

**Prime Factorization!! :-)** Let’s factor the number 20 down to its prime factors: 

20 = 2 * x
20 = 2 * 10 = 2 * 5 * 2, so the prime factors of 20 are 2 and 5.

That’s how we prove that 20 is an even number.

Let’s try some more if you want to...

Other things to remember about negative numbers:

- \(-x = x\)
- \(x - (-y) = x + y\)
- \(-x * -y = xy\) [or \(-x(-y) = xy\), since a negative times a negative = positive]
- \(-x * y = xy\) [a negative times a positive = negative]

Do online Negative numbers exercise on Khan Academy or request paper...

8:40 **Exit Questions:**
1. From where did Europe get Algebra?
2. How do you know that 40 is an even number?
3. What is \(-8 \times 3\)?
4. What are the prime factors of 15?

8:45 Turn in Exit Slip, Dismissal