

EARTH SCIENCE

Calendar: – CP (2018-2019) – Unit 1

August 2018

Monday	Tuesday	Wednesday	Thursday	Friday
20 Staff development day	21 Teacher Prep day	22 1 st Day of Classes CPT Intro 1. Seating Chart 2. Welcome to TOHS & *Intro about teacher 3. Clip: Introduction to Earth Science (Vimeo) from Frank Gregorio *4:45 https://vimeo.com/31583801 4. H: Syllabus - H: Bathroom Passes *class pass 4. H: Safety Rules (Flinn) 5. H: ALL Contracts *GET SIGNED by Fri. 6. H: Donation Letter 7. Demo: Teacher Website & Book site 8. Chromebooks – Expectations... ----- 9. Activity: Puzzle (baggies & red pieces) GRIT Lesson (PPT and video) HW: Get Supplies Get contracts signed	23 1. Sign up for Schoolology (need access code) HS-ETS1-2 2. Engineering Activity: Water Bottle Tower (See PPT) <i>make the tallest tower that can hold the water bottle for a certain amount of time..</i> HW: Schoolology Online Discussion – Q's	24 1. Finish Analysis of activity from yesterday... ----- Math 1. WU#1: Which is bigger? 2. Engage – Andromeda Galaxy intro... 3. Notes: Scientific Notation PPT - (w/ practice) 4. WS: Sci. Notation Practice Q's HW: Finish CW Activity: Websurf online – due Tuesday

Monday	Tuesday	Wednesday	Thursday	Friday
27	28	29	30	31
<p>1. WU#2: Metric System</p> <ul style="list-style-type: none"> List everything you know about the metric system. Describe everything that confuses you about the metric system. Why do you think most countries use the metric system? Why do you think America doesn't use the metric system? <p>2. Clip: Why Don't Americans Use The Metric System? (2:54 stop) https://youtu.be/izKHWPxxTYA</p> <p>3. Notes: Metric System (NEW) – slides #1-16</p> <p>4. Clip: Metric Conversions using the ladder method (4:18) https://www.youtube.com/watch?v=PLmCGG3HMS208_40_2UPLAE1A4_7A3B2</p> <p>5. WS: Conversion Challenge</p> <p>HW: Finish CW</p>	<p>1. WU#3: Read – Science World – Why did FL go metric? - do 2 Q's</p> <p>2. Clip: Science of the Summer Olympics: Measuring a Champion (5:34) https://science360.gov/obj/video/1289a2c6-50cd-4102-8c57-84886571c426/science-summer-olympics-measuring-champion</p> <p>3. Notes: Dimensional Analysis (copy & go over)</p> <p>4. WS: Dimensional Analysis Scaffolding</p> <p>HW: Finish CW</p> <p>HW: Finish CW</p>	<p>Sign up for REMIND APP (need class code) -----</p> <p>1. WU#4: Scientific Notation / Conversion Mania</p> <p>3. Clip: Dimensional Analysis/Factor Label Method - Chemistry Tutorial (11:13) https://youtu.be/DsTg1CeWchc</p> <p>4. Lab: Dimensional Analysis (ruler, meter stick, tootsie roll)</p> <p>5. WS: Dimensional Analysis Practice Problems (#1-10 only)</p> <p>HW: Finish CW</p>	<p>1. Computers: Gizmo – Dimensional Analysis (start)</p> <p>HW: At least finish through end of part B</p>	<p>1. Computers: Gizmo – Dimensional Analysis (Finish) **Turn in</p> <p>3. WS: Reading Instruments w/ Sig Figs</p> <p>HW: Finish WS</p>

Can we eat the marshmallow now?

Objective: Students will be able to:

- 1) identify discrete steps that will lead to a solution to the Marshmallow Challenge;
- 2) effectively collaborate with each other to develop a prototype solution to the Marshmallow Challenge;
- 3) persevere in developing a solution to the Marshmallow Challenge even though there is no single correct solution;
- 4) discuss each others' ideas about the habits of engineering design collaboration using evidence from the Marshmallow Challenge.

5. WS: Multiplying and Dividing World Problems Using Scientific notation

Lab: Metric Olympics

September 2018

Monday	Tuesday	Wednesday	Thursday	Friday
3	4	5	6	7
<p>NO School</p> <p>(Labor Day)</p>	<p>Leadership Mtg</p> <p>Graphing</p> <p>1. WU#5: From memory, draw & label the stair step AND write the 5 rules of Scientific Notation</p> <p>2. Notes: Graphing (copy & go over) "What are some key characteristics of a great graph?"</p> <p>3. Clip: NASA BEST: Graphing (2:59) https://youtu.be/ssXPrG0PGDY</p> <p>4. Clip: How to spot a misleading graph - Lea Gaslowitz - TedEd (4:09) https://youtu.be/E91bGT9BjYk</p> <p>5. Just Mention intro for...: Graphing – Part 1 (Excel Graph) *skip this graph</p> <p>6. Activity: Graphing – Part 2 (Graph by hand) **need graph paper, rulers, colored pencils</p> <p>Note: In order to move on to the questions, graphs need to be checked by teacher!</p> <p>4. Activity: Graphing – Part 2 Q's</p>	<p>1. WU#6: WS: Intro to graphs</p> <p>2. Discuss – common mistakes with descriptive titles *Share titles in group – come to consensus with share out which is most descriptive</p> <p>3. Activity: Graphing – Part 3 (Comparing Graphs)</p> <p>4. Discuss – common mistakes with graphing *units, variables, spacing, x/y axis</p> <p>6. Brainstorm – What do you think will happen to world population numbers in the future?</p> <p>7. Clip: World Population *5:46 https://youtu.be/khFidmp9sZk</p> <p>8. Activity: World Population (start – do Part 1 ONLY)</p> <p>HW: Finish Part 1 Q's</p>	<p>1. Clip: TedEd - Population pyramids: Powerful predictors of the future - Kim Presheff (5:01) https://youtu.be/RLmKJXwW02I?list=PLr7W_Ambd08_vkIkguFY0P0U_2m3124X1</p> <p>2. Activity: World Population (go over part 1, DO parts 2, 3, 4)</p> <p>HW: Finish CW</p>	<p>1. Go over HW</p> <p>2. Clip: The Nexus of Climate Change, Migration and Security (6:45) https://youtu.be/pyccoZOKBLk</p> <p>3. Computers: (Big Data) Emerging or Developed? (START)</p> <p>Lab: Drop Height vs. Bounce Height</p> <p>HW: WS: World Population Graph</p>

	HW: Finish CW			
NO School	10	11	12	13
	Dept. Mtg 1. Computers: (Big Data) Emerging or Developed? (FINISH) Scale 1. WU#7: You have 5min to measure your row of desks with your lab partner. Once complete, write down how you measured and why you did what you did. 2. Intro: Have you ever heard of a unit of measure called a smoot? 3. Audio NPR Interview: Smoot, Namesake of a Unit of Length, Retires *4:06 4. Activity: Types of Scale (<i>green cards</i>) * Computers 5. Activity: What is Scale – Fact of Fiction: HW: Finish CW	BTSN 1. WU#8: Article: Size & Scale w/ Q's 2. Clip: Scale of the Universe 2 (interactive) http://htwins.net/scale2/ 3. Activity: Sort it Out (class set – pairs - cards) *purple & pink HW: Finish CW	CPT 1. WU#9: Write down what you think the definitions are for “Direct & Indirect” Measurements 2. Review HW 3. Activity: Indirect Measurement *penny, ruler, calculator 4. WS: Review Guide 5. H: Packet Slip HW: Study for test	14 1. Test: Graphing, Math, Metrics, Size & Scale 2. Turn in Packets ----- 3. Science World Read Articles: - Stellar tasting Space Food (10-2012) - Treetop Scientist (4-18-2016) - From Peels to plastics (10-7-2013) Q's – For each article... A. What does this have to do with Earth Science? B. Describe the issue being solved and the rationale for the sequence of how each problem was solved. HW: Finish CW

Clip: Tutorial - Excel 2013 Charts - How to (9:15) https://youtu.be/2St4a_zpaNY

Using Excel graph from yesterday...

a. What do you notice about your data?

b. What were some of the challenges you encountered as you created your graph on the computer?
(share w/ groups & out)