

# FRIDAY, MAY 3<sup>rd</sup>

## DO NOW

There are just over 3 miles in 5 kilometers and Speed equals Distance divided by Time. These are equations of Motion!

**Know:**  $3mi = 5km$

$$Speed = \frac{dist}{time}$$

**Asked:** What Speed (in mph) would a turtle have if it goes a distance of 6 miles in a time of 10 hours?

## TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!
  - Today's **QP** = DRAW what you think a TIME MACHINE would look like and then DESCRIBE 2 things you'd use it for (one must relate to something in ECOLOGY!)
2. Open books, **WORK** on today's **AO!**
3. \***HW** = Read & Do Pg. 18-19 + CHECK your Grades on the Portal!

## TODAY'S ACADEMIC OBJECTIVE

Today you will **FINALIZE** your Environmental Trackers in order to **STUDY** Ecology in action within our **WORLD!**

# MONDAY, MAY 6<sup>th</sup>

## DO NOW

There are about 1000 Watts per centimeter squared in 1 Watt per meter squared and 1,000,000 Watts per meter squared in 1 Megawatt per meter squared. These are units of Intensity!

**Know:**

$$1000 \frac{W}{cm^2} = 1 \frac{W}{m^2}$$
$$1,000,000 \frac{W}{m^2} = 1 \frac{MW}{m^2}$$

**Asked:** How many  $\frac{W}{m^2}$  are in  $54 \frac{MW}{m^2}$ ?

## TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!
  - Today's **QP** = SKETCH your "Spirit Beast" and write what you think its ROLE is in nature and then DRAW the "Food Chain" on Pg. 22-23 & "Food Web" on Pg. 25 of your books!
2. Open books, **WORK** on today's **AO**!
3. \***HW** = Read & Complete Pg. 18-23!

## TODAY'S ACADEMIC OBJECTIVE

Today you will **FINALIZE** your Environmental Trackers in order to **STUDY** Ecology in action within our **WORLD**!

# TUESDAY, MAY 7<sup>th</sup>

## DO NOW

There are just over 3 miles in 5 kilometers and Speed equals Distance divided by Time. These are equations of Motion!

**Know:**  $3mi = 5km$

$$Speed = \frac{dist}{time}$$

**Asked:** What Distance in miles will a person run with a Speed of  $9km/hr$  after a time of 5 hours?

## TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!

- Today's **QP** = QP BOOK REVIEW = REDEFINE the terms "Producer", "Decomposer", "Consumer", "Herbivore", "Carnivore", and "Omnivore" and then give an EXAMPLE of each!

2. Open books, **WORK** on today's **AO**!

3. \***HW** = Read & Do Pg. 24-29!

## TODAY'S ACADEMIC OBJECTIVE

Today you will **REVIEW** and **REINFORCE** your Scientific Math skills in order to **PREPARE** for our future **QUIZ**!

# WEDNESDAY, MAY 8<sup>th</sup>

## DO NOW

There are just over 4 Joules in 1 calorie, around 250 calories in 1 BTU, and about 4 BTU in 1 kilocalorie. These are units of Energy!

**Know:**  $4J \approx 1cal$   
 $250cal \approx 1BTU$

$4BTU \approx 1kcal$

**Asked:** How many Joules are in 4kcal?

## TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!
  - Today's **QP** = QP QUIZ PREP = REDEFINE the term "Population" and then LIST 4 Pop. INCREASING and 3 Pop. DECREASING events that could happen to a population of TURTLES!
2. Open books, **WORK** on today's **AO!**
3. \***HW** = STUDY FOR VOCAL QUIZ!

## TODAY'S ACADEMIC OBJECTIVE

Today you will **REVIEW** and **REINFORCE** your Scientific Math skills in order to **PREPARE** for our future **QUIZ!**

# ***THURSDAY, MAY 9<sup>th</sup>***

## **DO NOW**

**Know:** Both “Food Chains” and “Food Webs” represent the flow of energy in an ecosystem.

**Asked:** Which statement **best** explains how a “Food Web” more completely represents the flow of energy in an ecosystem than a “Food Chain”?

**A:** Food Chains include more energy

**B:** Food Webs show more relationships

**C:** Food Chains can change quickly

## **TODAY’S PLAN**

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!

▪ Today’s **QP** = QP VOCAL PREP = WRITE each of the 18 TERMS on Pg. 5 & 19 for today’s Vocal Quiz and then SKETCH a picture for each that conveys its MEANING!

2. Open books, **WORK** on today’s **AO!**

3. \***HW** = Read & Complete Pg. 30-35!

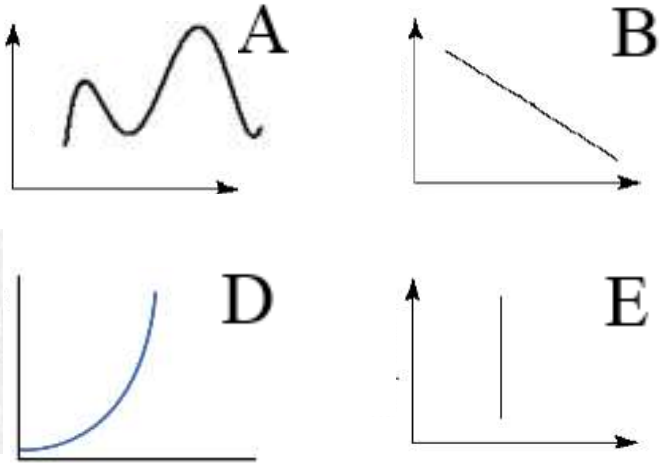
## **TODAY’S ACADEMIC OBJECTIVE**

Today you will **JUSTIFY** your knowledge of Ecological **VOCAB** in order to **TOPPLE** today’s Vocal Quiz!

# FRIDAY, MAY 10<sup>th</sup>

## DO NOW

Know:



**Asked:** Which graph **best** shows a population growing out of control?

**A:** A      **B:** C      **C:** B

**D:** D      **E:** J

## TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!

- Today's **QP** = QP BOOK REVIEW = DESCRIBE how a Pop. Can INCREASE or DECREASE, then REDEFINE the terms "Carrying Capacity" & "Limiting Factor", and then LIST 1 BIOTIC and 1 ABIOTIC factor that limits POPULATION size!

2. Open books, **WORK** on today's **AO**!

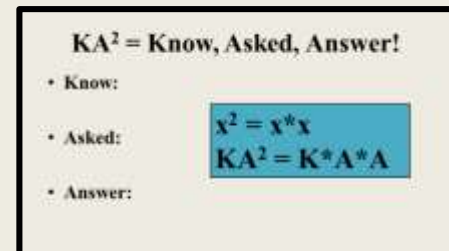
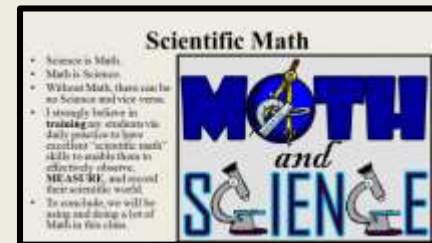
3. \***HW** = Read & Do Pg. 36-41!

## TODAY'S ACADEMIC OBJECTIVE

Today you will **OBSERVE** and **IDENTIFY** factors that determine a Population's **SIZE**!

# SCIENCE QUIZ ALERT

- Students, listen UP!!!
  - We will be having a **DO NOW** Quiz soon to assess our SCIENTIFIC MATH skills!
  - This quiz will require you to LET THE UNITS GUIDE YOU by solving various SCIENTIFIC MATH problems!
  - You are responsible for NOT ONLY finding the answer but ALSO using  $KA^2$  format as well!



# Tech Chex Steps – Citizen Science

1. FIRST, take out your DEVICE, and head on over to the following website!
  - <https://www.zooniverse.org/projects>
- If you do not have a DEVICE, don't worry! You can borrow one of these LAPTOPS!
2. Next, LOOK UP to learn just what “Citizen Science” is and how we'll be using it to learn about POPULATION DYNAMICS!
3. Your job is to CONTRIBUTE to a scientific study related to **POPULATION DYNAMICS**, so **choose wisely** from the available projects!
4. Finally, use your Citizen Science Adventure to ANSWER the HW Problems and Questions!



A screenshot of a website page. At the top left is the Nature NB logo, which includes a stylized bird and the text "Nature NB". To the right of the logo is the word "Definition" in blue. Below this is a paragraph of text: "Citizen science is defined as the participation of non-scientists in data collection for scientific investigations (Trumbull, D. J., R. Bonney, D. Bascom, and A. Cabral. 2000. Thinking scientifically during participation in a citizen-science project. Science Education 84:265-275.)". There is a small image of a person in a field to the right of the text. At the bottom left of the page is the "naturenb.ca" logo.

A slide titled "Factors that affect Population Size" in purple. It lists three categories of factors: "Abiotic factors" (sunlight &amp; temperature, precipitation / water, soil / nutrients), "Biotic factors" (other living organisms: prey (food), competitors, predators, parasites, disease), and "Intrinsic factors" (adaptations). To the right of the text is a world map showing population density. Below the map is a photograph of a savanna with various animals like giraffes and zebras.

A screenshot of the Zooniverse website's "Projects" page. The page has a teal header with the word "Projects" and sub-headers for "Active", "Paused", and "Retired". Below the header is a navigation bar with icons for "ALL RESEARCH", "ARTS", "HEALTHY", "PLANET", "WORLD", "LANGUAGE", "LITERATURE", "RESEARCH", and "HW". A search bar is visible. The main content area displays several project cards, including "ARANAKI MOUNG" with a blue bird icon, "diamond science scribbler" with a black circle icon, and "SABANOT WANGHAT YEDA" with a zebra icon.



## Tech Chex –HW Problems and Questions

1. What Citizen Science Project did you choose?  
What organism did it involve, and what task did it require you to do? Why did you pick this one?
2. *How does your selected Citizen Science Project relate to what we've been learning about Population Dynamics (aka Carrying Capacity, Limiting Factors, Competition, and Cooperation)!*
3. Create an illustrative diagram detailing what your Citizen Science Project was about and asked you to do!

# Tech Chex –HW Problems and Questions

4. Tiger Sharks live near Sea Turtles. Make a GRAPH to show the relationship between the populations of each species! (*\*Put the TIME on the x-axis and make TWO y-axes, one for the # of Sea Turtles and one for the # of Tiger Sharks!*)

<b>Year</b>	<b># of Sea Turtles</b>	<b># of Tiger Sharks</b>
<b>1950</b>	400	25
<b>1960</b>	500	23
<b>1970</b>	1200	20
<b>1980</b>	1000	40
<b>1990</b>	1300	15
<b>2000</b>	700	25
<b>2010</b>	500	30
<b>2020 (projected)</b>	900	25

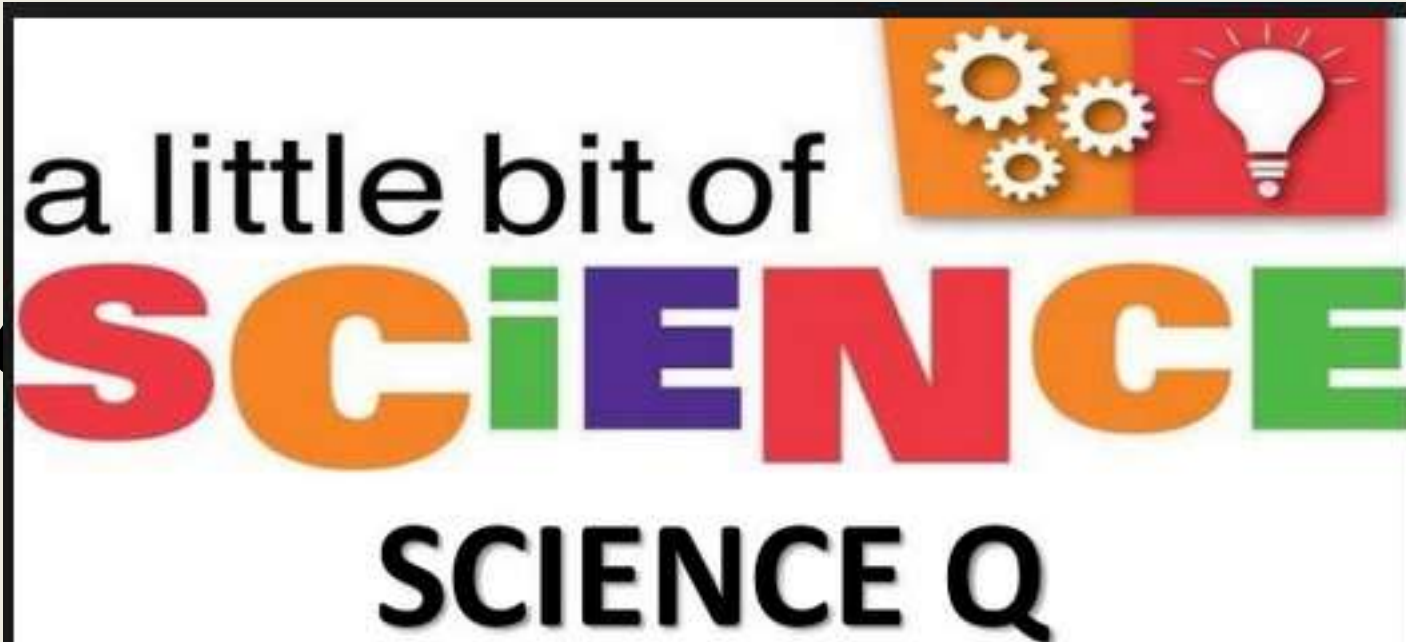
# Tech Chex –HW Problems and Questions

5. Write an EXPLANATION as to why Sea Turtle and Tiger Shark populations tends to increase and decrease the way it does, and then GRAPH the following data regarding the population of a NEW Species of SEA TURTLE recently introduced to the area!

<b>Year</b>	<b># of New Species Sea Turtles</b>
<b>2006</b>	0
<b>2008</b>	4
<b>2010</b>	16
<b>2012</b>	256
<b>2014</b>	536
<b>2016</b>	214
<b>2018</b>	278
<b>2020 (projected)</b>	256

# Bell 2 Bell

- We work what in this class?!?!?!
  - **BELL 2 BELL**
- Every single precious **SECOND** of academic instructional time is thus utilized in this classroom!
- You students will thus be vocally quizzed **EVERY DAY** until I **DISMISS** you at the end of class (with a positive greeting and a thank-you of course!).



# Bell 2 Bell

- We work **BELL 2 BELL** in Mr. Floyd's class!
- I will thus quiz you about the science we learned today until the very end!
- Let us begin!

