**AP BIOLOGY 2019-20 March 27, 2020**

**Today’s Agenda (Day 133)** [LU Online #8]

1. HOUSEKEEPING:

🡪 Zoom Meeting ID: 388 751 993; Password: 861661

1. Homework Check:

🡪 Chapter 50 Vocabulary

🡪 Chapter 50 Reading Guide

1. Class Activity:

**🡪 BEGIN:** Chapter 52 Review

1. Section 52.1 – Earth’s climate varies by latitude and season and is changing rapidly
2. Section 52.2 – The structure and distribution of terrestrial biomes are controlled by climate and disturbance
3. Section 52.3 – Aquatic biomes are diverse and dynamic systems that cover most of earth
4. Section 52.4 – Interactions between organisms and the environment limit the distribution of species

\*\*Create Concept Map or Hierarchical Flow Chart to demonstrate the relationship of the concepts discussed in Section 52.1 & 52.2\*\*

🡪 Show finished product (1 page) by end of class!

HOMEWORK:

* Read Unit 8: Ecology – Chapters 52 – 56
* Complete Chapter 52 & 53 Vocabulary
* DAILY: Go to Collegeboard AP Online Resources [youtube videos] 🡪 Answer the questions listed below.
  + 🡪 Please go to this site:  <https://www.youtube.com/user/advancedplacement>
  + What did I already know about the information presented?
  + How do I know that I know it already?
  + What do I need to know/need to relearn?
  + How is this relevant/significant? How does this tie in with previously learned material?
  + What concrete examples do I know that would demonstrate these concepts and the associated processes?
* Continue working on **Coral Reef Campaign:** Phase V – March 30

Chapter 52 – Introduction to Ecology and the Biosphere

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Abyssal zone | Aphotic zone | Benthic zone | Benthos | Biomes | Biosphere | Canopy |
| Chaparral | climate | Climatograph | Community ecology | Coral reefs | Deep-sea hydrothermal vents | Deserts |
| Detritus | Dispersal | Disturbance | Ecology | Ecosystem ecology | Ecotone | Estuary |
| Eutrophic lake | Global ecology | Intertidal zone | Landscape ecology | Limnetic zone | Littoral zone | Macroclimate |
| Marine benthic zone | Microclimate | Neritic | Northern coniferous forest | Oceanic pelagic zone | Oligotrophic lake | Pelagic zone |
| Photic zone | Population ecology | Savanna | Temperate broadleaf forest | Temperate grasslands | Thermocline | Tropical dry forest |
| Tropical rain forest | Tropics | Tundra | Turnover | wetland |  |  |

Chapter 53 – Population Ecology

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Age structure | Carrying capacity | Cohort | Demographic transition | Demography | Density | Density dependent |
| Density independent | Dispersion | Ecological footprint | Emigration | Exponential population growth | Immigration | Iteroparity/  iteroparous |
| k-selection | Life history | Life-tables | Logistic population growth | Mark-capture method | Metapopulation | Population |
| Population dynamics | Reproductive table | r-selection | Semelparity/  Semelparous | Survivorship | Territoriality | Zero population growth |

REMINDERS:

* **Coral Reef Campaign:** Phase V **– March 30; 11:59:59 pm**
* DAILY: YouTube Review Questions [Day 1 & 2] – March 27; 11:59:59 pm
* YouTube Review Questions [Day 3] – March 28
* Chapter 52 Vocabulary – March 29
* Chapter 53 Vocabulary – March 31
* **Chapter 52 & 53 Test 🡪 April 2**
* **Chapter 54 - 56 Test** 🡪 **April 9**

**CORAL REEF PROTECTION CAMPAIGN LAUNCH**

**PROJECT IDEA: TENTATIVE GUIDELINES**

Directions: With your team, research and find answers to the prompts listed below. Slowly develop ideas that we, the people of St. Maarten and the Caribbean, could undertake to help protect our coral reefs. Please be sure to cite ALL references (in proper APA format)

**~~Phase I~~** ~~[Due: Feb. 27]~~

* ~~What is a coral/reef?~~
* ~~How many different types of corals exist in the world?~~
* ~~Where do corals/reefs exist within the world? Which region has the greatest concentration of it?~~
* ~~How does it form? What inhibits its formation? What factors harm their continued existence?~~
* ~~What is its function within the aquatic ecosystem? What is the value of corals/reefs [ie. economically, environmentally, culturally, politically, etc.,]. Who/which groups of people stand to benefit most from the sustained health of coral reefs?~~

**~~Phase II~~** ~~[Due: Feb. 27]~~

* ~~What is the current state of the world’s corals/reefs? Why? How has the health of corals/reefs changed over the last century?~~
* ~~What is the current state of the Caribbean coral reefs? How did this come about? What are the top 3 factors threatening them?~~
* ~~What has the Netherlands historically done to protect coral reefs? Have they been successful? Explain.~~

**~~Phase III~~** ~~[Due: March 2]~~

* ~~Of the 5 greatest threats to corals/reefs, further investigate any three factors in which you believe you are instrumental in an approach to protect them.~~
* ~~What are some strategies that nations have undertaken to protect corals/reefs?~~
* ~~Of the myriad of ways one can protect coral reefs, investigate no less than 3 nations where they have achieved success in maintaining/protecting their coral reefs.~~

**~~Phase IV~~** ~~[Due: March 16]~~

* ~~With your team members, devise a strategy/approach to protect the Caribbean coral reefs from more than one perspective. Be sure to note which significant people/groups of people you will need to recruit to successfully implement ideas.~~

~~-education/awareness (locally, regionally, globally)~~

~~-making best use of social media format, targeting towards various demographic groups (youth, teens, early adulthood, middle adulthood, late adulthood)~~

~~-from the water/underwater~~

~~-changes to our current way of life (ie. how we live)~~

~~-economically~~

~~-politically~~

**Phase V** [Due: March 23]

Project products: a) slide presentation (between 5 – 10 minutes in length; must incorporate audio)

b) PSA (no less than 2 minutes in length—audio or video)

c) a working timeline strategy/proposal [3-month, 6-month, 1 year, 18 months, 2 years, 3 years, 5 years implementation]