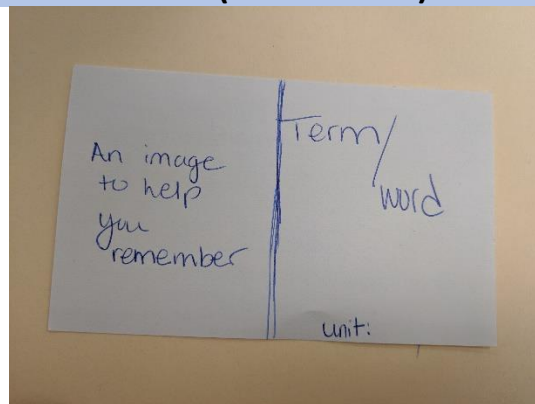


Due Date: The second day of Class (August 16th or 19th depending on the 2019-2020 schedule)

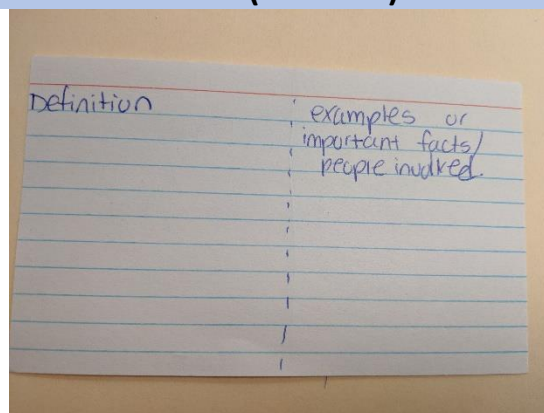
AICE Marine Science Summer Assignment: Study Cards

1. Purchase a pack of Notecards (you will need about 300 total cards for the whole course) you will need 61 note cards for this assignment
2. Follow the notecard making guideline to create study notecards for the Unit 1 and Unit 2 terms
3. When defining the words, remember the definitions must be in the context of the Unit/Class
4. Here is a link to a video describing the assignment: <https://youtu.be/cw0Jna61LX0>

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Back (line side)



Important Terms to Know

1. Scientific Method

2. Scientific Method
3. Hypothesis
4. Theory
5. Scientific law
6. Variables
7. Refute
8. Qualitative observations
9. Quantitative observations
10. Prediction
11. Inference
12. Independent variable
13. Dependent variable
14. Control group
15. Constants
16. Experimental group
17. Control variables
18. Confounding variables
19. Reliable
20. Anomalous/anomaly
21. Meniscus
22. Graduate cylinder
23. Beaker
24. Pipette
25. Darwin-Dana-Daly Theory

2. Marine Ecosystems and Biodiversity

1. Oceans-also list the 5 oceans
2. Seas
3. Estuaries/estuary
4. Ecosystems
5. Biotic
6. Abiotic
7. Habitat
8. Species
9. Population
10. Community
11. Biodiversity
12. Binomial nomenclature
13. Ecological Niche
14. Symbiosis
15. Mutualism
16. Parasitism
17. Competition
18. Predation
19. Chemosynthesis
20. Ectoparasites
21. Endoparasites
22. Producers
23. Photoautotrophs
24. Chemoautotroph
25. Consumer
26. Food chain
27. Food web
28. Trophic level
29. Predator
30. Prey
31. Shellfish
32. Keystone species
33. Shoaling
34. Succession
35. Coral reefs
36. Hydrothermal vents
37. Whale fall

Due Date: To Be Determined (TBD)

For the students who wish to move ahead, here are the words that we will define throughout the rest of the course! The study cards will be due at the start of each unit.

Important Words to Know

3. Energetics of Marine Ecosystems

- Autotrophic
- Photosynthetic
- Chemosynthetic
- Heterotrophic
- Primary productivity
- Carbohydrates
- Lipids
- Proteins
- Nucleic acids
- Phytoplankton
- Chlorophyll
- Nutrients
- Chloroplasts
- Thermocline
- Pycnocline
- Deep chlorophyll maximum
- Abyssal plain
- Photic zone
- Dead Zone
- Extremophile
- Respiration
- Gross primary production
- Net primary production
- Secondary production
- Compensation point
- Biomass
- Algal bloom
- Hypoxic
- Oligotrophic
- Eutrophic
- El Nino
- La Nina
- Ectothermic
- Endothermic
- Decomposers
- Pyramid of numbers
- Pyramid of biomass
- Pyramid of energy

4. Nutrient Cycles in Marine Ecosystems

- Nutrient Cycles
- Nutrients
- Decomposers
- Reservoir
- Abiotic
- Biotic
- Run-off
- Upwelling
- Assimilated
- Residence time
- Sinks
- Sources
- Infiltration
- Leaching
- Amino acids
- Inorganic ions
- Precipitation
- Condensation
- Evaporation
- Marine snow
- Dissociation/dissociates
- Diazotrophs
- Saprophytic/saprophyte
- Denitrification
- Nitrogen fixation
- Magnesium cycle
- Carbon cycle
- Calcium cycle
- Phosphorus cycle

5. Coral Reefs and Lagoons

- Coral bleaching
- Physiology
- Hermatypic
- Ahermatypic
- Zooxanthellae
- Coral polyp
- Geomorphology
- Fringing reef
- Barrier reef
- Atoll
- Patch reef
- Reef erosion
- Ocean acidification
- Climate change
- Anchorage
- Artificial reefs
- Radiocarbon dating
- Subsidence
- Darwin-Dana-Daly Theory

6. The Ocean Floor and the Coast

- Plate tectonics
- Continental drift
- Lithosphere
- Asthenosphere
- Mantle
- Theory of plate tectonics
- Seabed spreading
- Magnetic polarity reversal
- Convection current
- Convergent boundary
- Subduction
- Trench
- Volcano
- Earthquake
- Tsunami
- Divergent boundary
- Mid-ocean ridge
- Transform boundary

- Abyssal plain
- Hydrothermal vent
- Continental margin
- Continental shelf
- Continental slope
- Continental rise
- Isostasy
- Littoral zone
- Morphology
- Rocky shores
- Sandy shores
- Muddy shores
- Estuaries/estuary
- Delta
- Erosion
- Deposition
- Zonation
- Desiccation
- High-tide zone
- Middle-tide zone
- Low-tide zone
- Infauna
- Mangroves
- Anoxic
- Sedimentation
- Beach re-nourishment
- Deforestation
- reforestation

7. Physical and Chemical Oceanography

- Salinity
- Evaporation
- Total Dissolved Solids (TDS)
- Electrical Conductivity
- Dissolution
- Solubility
- Precipitation
- Run-off
- Biomagnification
- Hypersaline
- Dissolved oxygen (DO)
- Oxygen minimum layer
- Density
- Thermocline
- Gradient
- Halocline
- Tide
- Semi-diurnal
- Diurnal
- Tidal range
- Spring tide
- Neap tide
- Ocean bulge
- Tidal surge
- Current
- Coriolis effect
- Upwelling
- El Nino
- La Nina
- Monsoon
- Tropical Cyclones
- Hurricanes
- Typhoons
- Condense/Condensation
- Latent heat