Levels of Organization

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List the three particles in an atom, what their charge is , and where they are found in the atom
List the 6 most abundant elements in the human body. Draw a Bohr model of one of the smallest ones.
ATOM (definition)
Define ELEMENT, COMPOUND
List in table form the four major macromolecules, the elements in them, example(s) in organisms, the functions
Define INORGANIC and List 2 examples used by organisms
MOLECULE (macromolecules) (definition)
Define PROKARYOTE. List the 1 group found in this type of cell. List 3 characteristics for this group. List 5 or more structures
found in this type of cell.
Define EUKARYOTE. List the 3 groups found in this type of cell. List 6 example organisms for the simplest group.
Compare and contrast structures found in the other 2 groups
CELL (definition)
List 4 types of tissue found in humans. List an example of each type of tissue.
List 6 organs found in the human. Choose 3 of those and list the tissues found in each organ.
List 6 organ systems. Choose 3 of those and list the organs and other structures found in each organ system.
GROUPS OF CELLS—TISSUE, ORGAN, ORGAN SYSTEM (definition for each)
List 8 characteristics of life
List the 6 kingdoms and an example organism from each
Choose 1 of those example organisms and describe how they demonstrate each of the 8 characteristics of life
Draw an example cell from your chosen organism
ORGANISM (definition)
List 3 characteristics of populations; Define POPULATION DENSITY; List 3 factors that affect the size of a population
Define IMMIGRATION, EMIGRATION, EXPONENTIAL GROWTH
Draw a diagram for exponential growth; Explain why it is happening
Define LOGISTIC GROWTH; Draw a diagram for logistic growth; Explain why it is happening
Define CARRYING CAPACITY; Label this on the logistic diagram
Define LIMITING FACTORS and list 6 examples
Define DENSITY-DEPENDENT LIMITING FACTOR, and list 3 examples
Define DENSITY-INDEPENDENT LIMITING FACTOR, and list 3 examples
Draw an example diagram of a predator-prey relationship. Describe what is happening
Define DEMOGRAPHY, DEMOGRAPHIC TRANSITION; List 3 countries each that are developed, developing and not developed
Draw a diagram for a demographic transition; Draw an age-structure diagram for a developed and undeveloped country
POPULATION (definition)
List 10 populations in our "community"
Choose 1 land biome and 1 water system to explore how organisms interact with one another:
Give an example of predation in each area you chose
Give an example of pretation in each area you chose Give an example for each of the 3 types of symbiotic relationship
Choose 3 resources that organisms need and describe how organisms in your 2 areas compete for them
COMMUNITY (definition)
List 5 biotic factors; List 10 abiotic factors; List 5 resources an organism needs
Define COMPETITIVE EXCLUSION PRINCIPLE, PREDATION, ECOLOGICAL SUCCESSION, HABITAT, NICHE, COMPETITION
Complete with the definitions: list 1 example for complex principle, list 3 examples of predation, describe primary and secondary
succession in paragraph form, list 3 examples of habitat, draw a diagram of the warblers and explain what niche each holds
List 3 types of symbiotic relationships, define each, and give an example of each
ECOSYSTEM (definition)
Define TOLERANCE, MICROCLIMATE
List 10 major land biomes and 2 additional land areas that are too small to be considered a separate biome
List 2 different types of freshwater ecosystems and 3 examples of each; List 4 factors that determines the type of water system it is
List 2 types of estuaries and describe what makes an estuary what it is; List 5 different marine ecosystems or parts of the ocean
Compare and contrast 3 land biomes in table form; describe the characteristics of 1 water system
BIOME (definition)
Define WEATHER, CLIMATE; List the 4 types of biogeochemical cycles; on separate paper Draw & describe each of the 4 cycles
Draw a diagram of the greenhouse effect; Explain how it is created and what effects it has
Draw globe(s) labeled with latitudes, wind and ocean currents (use different colored arrows);
Describe(in separate paragraphs) the effects of latitude, wind, and ocean currents on climate
BIOSPHERE (definition)
ON BACK: Define ECOLOGY, FOOD CHAIN, FOOD WEB; Draw an example food chain and food web with 5 trophic levels
(producer, 3 types of consumers, and decomposer) for any type of biome; label the producer, primary-secondary-tertiary consumers,
decomposer; Draw the 3 types of pyramids with example organisms in a biome, describe in paragraph form how each changes from
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