

Global Science A Final Study Guide

Chemistry

1. What is in an atomic nucleus and what are their charges?
2. What is the charge of an electron?
3. What determines an atom's mass?
4. Describe the characteristics of alkali metals. Where are they found on the periodic table?
5. What is a covalent bond?
6. What is an ionic bond?
7. Which electron level is involved when atoms bond?
8. Which electron level is used in a Lewis dot diagram?
9. Is Na^+ an anion or a cation? How many electrons did Na lose or gain to be an ion? How can you tell?
10. What is the order of the periodic table based on?
11. Using the periodic table, know how to find the atomic number, number of protons, number of electrons, number of neutrons, and atomic mass of an element.
12. What is an isotope?
13. What makes noble gases inert?

Waves

1. What do waves transport?
2. What is the crest, trough, amplitude, and wavelength of a wave? Be able to identify these parts in a diagram.
3. In which direction do particles move in a transverse wave?
4. What do seismic waves travel through?
5. What type of waves require a medium?
6. What is reflection, refraction, diffraction, and interference?

Biodiversity

1. Define species, population, community, and ecosystem?
2. What is biodiversity?
3. What is a decomposer?
4. What is a scavenger?
5. How can the introduction of an exotic species change an ecosystem?
6. What is carrying capacity?

Biogeochemical Cycles

1. Define the following: evaporation, condensation, precipitation, and transpiration.
2. What is the chemical equation for photosynthesis (what goes in and what comes out)?
3. What is the chemical equation for respiration?
4. How is carbon cycled through ecosystems?
5. Where does photosynthesis occur? How do plants get the carbon they need to make sugar?

I & E

Be able to interpret graphs and tables.