

What to Know – Ch 3 quiz

Biology B

- Ecology – define
- Levels of organization – from species → biosphere
- Energy in ecosystems
 - Source
 - How energy moves through ecosystems
 - Energy pyramid – explain
 - Producers, consumers (1st, 2nd, 3rd level, etc.) – define, examples
 - Decomposers – define, examples
 - Autotroph, heterotroph – define, examples
 - Food chains & food webs – define, interpret diagrams
 - Trophic level – define
 - Biomass pyramid – explain
 - Primary productivity – define
- Matter in ecosystems
 - How movement in ecosystems is different from energy
 - Matter cycles – water, carbon, nitrogen – describe generally
 - Nitrogen fixation - explain
 - Nutrient – define, examples
 - Carbon dioxide and water vapour are the most significant greenhouse gases.
 - Other gases including methane and nitrogen oxides have less impact.
 - The impact of a gas depends on its ability to absorb long wave radiation as well as on its concentration in the atmosphere.
 - The warmed Earth emits longer wavelength radiation (heat).
 - Longer wave radiation is absorbed by greenhouse gases that retain the heat in the atmosphere.
 - Global temperatures and climate patterns are influenced by concentrations of greenhouse gases.
 - There is a correlation between rising atmospheric concentrations of carbon dioxide since the start of the industrial revolution 200 years ago and average global temperatures.
 - Recent increases in atmospheric carbon dioxide are largely due to increases in the combustion of fossilized organic matter.