

## **EXAM EXPECTATIONS MYP Biology**

### **“Unit 7 Classification”**

**STATE** that a single mutation may be enough to cause speciation

**STATE** the rate of speciation varies

**STATE** that over the last 500 million years, 5 mass extinctions occurred that killed nearly half of all species

**STATE** the Linnaean taxonomic levels differ from one another by inclusivity

**STATE** that the best classification systems reflect evolutionary relationships

**DEFINE** systematics

**DEFINE** the biological species concept

**DEFINE** cladistics

**DEFINE** homoplasies

**DEFINE** paedomorphosis

**DEFINE** haploid, diploid, polyploid

**DEFINE** habitat, niche

**DEFINE** transitional fossils

**DEFINE** genetic drift

**DEFINE** exaptation

**LIST** the taxonomic levels from smallest (least inclusive) to largest (most inclusive) or vice versa

**IDENTIFY** the correct form of binomial nomenclature from a list of choices

**IDENTIFY** the scientific discipline involved in naming organisms

**IDENTIFY** the type of organism and the age of the oldest fossils known

**IDENTIFY** an example of homology or analogy from a written description or example

**OUTLINE** the biological species concept and its limitations

**OUTLINE** Linnaean taxonomy

**OUTLINE** what it means to be a “rooted” phylogenetic tree

**OUTLINE** the three domains

**OUTLINE** coevolution

**OUTLINE** the characteristics of earth when it first formed

**OUTLINE** adaptive radiation

**OUTLINE** a key contribution(s) of the punctuated equilibrium model (what does it help explain)

**ANALYZE** phylogenetic tree

**COMPARE** the original classification systems with those today

**COMPARE** allopatric and sympatric speciation

**COMPARE** homology and analogy

**COMPARE** divergent and convergent evolution

**COMPARE** gradualism and punctuated equilibrium

**DETERMINE** the common ancestor from a phylogenetic tree

**EXPLAIN** speciation

**DISCUSS** how populations respond to changing environments and the possible consequences

**DISCUSS** how a tree is used as an analogy for the evolution of organisms over time, include the parts of a tree in your discussion