

**X** - no coverage

**L** - very limited coverage

**P** - partial coverage

**✓** - covered

Subject	Coverage in common school examination systems				
	GCSE	IB Standard	SAT	A-level	IB Higher
<b>1. Cell</b>					
Cell function and structure Eukaryotic and prokaryotic cells Cellular transport and cell membrane permeability Cell function and enzymes	✓	✓	✓	✓	✓
<b>2. Reproduction and embryonic development</b>					
a) Reproductive cell formation and fertilization Kinds of reproduction Gametogenesis and fertilization in animals Gametogenesis, fertilization, and embryogenesis in plants	P	✓	✓	✓	✓
b) Mechanism of animal development The development process The development mechanism	X	P	✓	✓	✓
<b>3. Heredity</b>					
a) Law of inheritance Mendel's law of inheritance Examples of inheritance	✓	✓	✓	✓	✓
b) Genes and chromosomes Linkage, recombination, and chromosome maps Sex chromosomes and sex determination Sex-linked inheritance Transformation, bacteriophage infection in host cells The DNA double helix structure	L	✓	✓	✓	✓
<b>4. Environment and animal response</b>					
Body fluid and homeostasis The role and circulation of body fluid Principle of homeostasis Autonomic nervous system and hormones Defense of the body against infection	P	✓	✓	✓	✓
<b>5. Environment and plant response</b>					
Plant life and environment Water absorption and transpiration Photosynthesis and environment	P	✓	✓	✓	✓
<b>6. Proteins and their functions in organisms</b>					
a) Biochemical reactions and enzymes Metabolism and enzymes Properties of enzymes	P	✓	✓	✓	✓
b) Assimilation and dissimilation Energy metabolism and ATP	X	✓	✓	✓	✓
<b>7. Genetic information and its expression</b>					
Genetic information and protein synthesis Structure and replication of DNA Genetic code and protein synthesis Mechanism of phenotypic expression Difference in phenotypic expression between prokaryotic and eukaryotic cells	X	P	✓	✓	✓