

Platon School

Scholarship exams for prospective Diploma students – Sciences

A. Biology

- Cell theory
- Prokaryotic and eukaryotic cells
- Organelles
- Differences between prokaryotic/eukaryotic and plant/animal cells
- Cells/tissues/organs/organ systems
- Genetic material/genes/alleles
- Autosomes/sex chromosomes
- Genes and alleles
- Genotypes/phenotypes
- Inheritance of dominant and recessive alleles
- Circulatory system
- Anatomy and function of the heart
- Blood vessels (similarities and differences)

B. Physics

- Physical Quantities & SI Units
https://drive.google.com/file/d/1DID_GkZ8grBx5JA6h9F-NuJFCI1isqQq/view?usp=sharing
- Motion in a straight line
- Pages 1-14 and 19-37 from the following file:
https://drive.google.com/file/d/1Ykjh0fj5pncNgCr7C4Uqq6RHC0EIT3af/view?usp=drive_link

C. Chemistry

- Periodic table (oxidation number of elements linked to the groups in the periodic table)
- Oxidation number of compounds and ions
- Electron arrangements of elements and ions
- Type of bonding between metals and non metals
- Chemical formulas of compounds
- Displacement reactions

D. Computer Science

- Programming in Python (variables, conditions, iterations)