KS5 APPLIED SCIENCE
SUBJECT MAP

Post-16 Immanuel College

Immanuel SCIENCE — Sparking imagination to ignite discoveries

Y12

UNIT 1: PERIODICITY AND PROPERTIES OF ELEMENTS
UNIT 1: STRUCTURE AND FUNCTIONS OF CELLS AND TISSUES

- STRUCTURE & FUNCTION
- IONIC & COVALENT
- BONDING IN APPLICATIONS
- CELLS & ELECTRONS
- ORGANELLES PROKARYOTIC EUKARYOTIC

UNIT 2: AIM A - CONCENTRATE ON KEEPING UP YOUR STANDARDS

- TITRATION & COLORIMETRY
- INDICATOR
- MOLES
- CONCENTRATION OF STANDARD SOLUTIONS
- EVALUATION

UNIT 2: AIM B - KEEPING UP THE STANDARDS
UNIT 2: AIM C - SEPARATE TO IDENTIFY

- DISSOLVING
- ENERGY & HEAT
- COOLING CURVES
- PIGMENTS
- CHROMATOGRAPHIC TECHNIQUES
- CALORIMETRY

UNIT 2: AIM D - HOW AM I DOING?
UNIT 1: STRUCTURE AND FUNCTIONS OF CELLS AND TISSUES

- ADAPTATION & IMPROVEMENTS
- CELL SPECIALISATION
- RETENTION FACTOR
- COMPETENCIES
- STRUCTURE & FUNCTION
- ANALYSIS & EVALUATION SKILLS

UNIT 1: PERIODICITY AND PROPERTIES OF ELEMENTS
UNIT 1: WAVES IN COMMUNICATION

- PROPERTIES
- LONGITUDINAL & TRANSVERSE
- REACTIONS
- PRODUCTION & SUBSTANCES
- PERIODICITY
- ELECTROMAGNETIC

UNIT 10: AIM A - BIOLOGICAL MOLECULE AND BIOCHEMICAL PROCESSES

- STRUCTURE & FUNCTION
- WATER
- PROTEINS
- LIPIDS
- LIVING ORGANISMS
- CARBOHYDRATES

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UNIT 3: SCIENCE INVESTIGATION SKILLS

- PEPTIDE LINK
- ABSOLUTE ZERO
- CONCENTRATION GRADIENT
- SEMI-PERMEABLE MEMBRANE
- FUELS
- ENVIRONMENT
- LIMITING FACTOR
- DIFFUSION OF MOLECULES
- ELECTRICAL CIRCUITS
- ENZYME SUBSTRATE
- ENERGY CONTENT
- PLANTS

UNIT 10: BIOLOGICAL MOLECULES & METABOLIC PATHWAYS

- DISEASES
- GLYCOLYSIS
- OXIDATIVE PHOSPHORYLATION
- STRUCTURE & FUNCTION
- LINK REACTION
- KREBS CYCLE
- CHEMIOSMOSIS

UNIT 10: BIOLOGICAL MOLECULES & METABOLIC PATHWAYS

- INVESTIGATE CAUSE & EFFECT
- DATA ANALYSIS
- OXIDATIVE PHOSPHORYLATION
- HUMAN RESPIRATORY PATHWAY
- GLYCOLYSIS
- LINK REACTION

UNIT 10: BIOLOGICAL MOLECULES & METABOLIC PATHWAYS

- HEXOSE SUGAR
- ELECTRON TRANSPORT CHAIN
- LIGHT DEPENDENT REACTION
- INVESTIGATE
- CALVIN CYCLE
- COENZYME
- COMMERCIAL IMPORTANCE
- PHOTOSYNTHESIS

COMPLETION OF COURSEWORK