

YEAR 4 FOUNDATION IB / PRE IB SCIENCE OPTIONS



ACS (International)

A Methodist Institution

Please tick accordingly.

Foundation IB Programme

Pre IB Programme

STUDENT DETAILS

Name (as in Passport/NRIC) (Please underline surname)

Preferred Name

Nationality

Mobile No.

Singapore Citizen Singapore PR Others:

Has the student ever been enrolled in a learning support programme?

Yes No

LANGUAGE DETAILS *Please complete this section only if it is applicable.*

PSLE Aggregate Score

Please attach the results slip showing the result indicated.

SCIENCES DETAILS

Please choose any two sciences.

Chemistry (Please complete the **IB Chemistry Entry level** form) – A.1

Physics (Please complete the **IB Physics Entry level** form) – A.2

Biology (Please complete the **IB Biology Entry level** form) – A.3

FOR OFFICIAL USE ONLY *Admission Test Results*

Chemistry

Physics

Biology

PARENT / GUARDIAN DETAILS

Name (as in Passport/NRIC) (Please underline surname)

Relationship to Student

Mobile No.

Parent's / Guardian's Signature

Date



IB Chemistry

(Entry level to Year 4 Foundation IB / Pre IB Physics)

| | |
|--|----------------|
| Name (as in Passport/NRIC) (<i>Please underline surname</i>) | Preferred Name |
|--|----------------|

Please tick accordingly to ascertain your level of competency on the various topics for IGCSE Physics.

| IGCSE Topics | Completed (Please tick) | Remarks (Please list some concepts learnt previously) |
|---|----------------------------|--|
| The Particulate Nature of Matter | | |
| Experimental techniques (Measurement, purity and methods of purification) | | |
| Atomic structure and Periodic Table | | |
| Bonding and structure (Ionic, covalent, macromolecules and metals) | | |
| Stoichiometry (Mole concept and balancing chemical equation) | | |
| Redox reaction | | |
| Acids, bases and salts (Properties, types of oxides, salts preparation) | | |
| Identification of ions and gases | | |
| The Periodic Table | | |
| Air and water | | |
| Ammonia | | |
| Sulfur | | |
| Carbonates | | |
| Speed of reaction | | |
| Chemical changes (Energies of a reaction and production of energy through simple cells) | | |
| Metals (Properties, reactivity series, extraction and method of rust prevention) | | |
| Electricity and Chemistry (Electrolysis) | | |
| Reversible reactions | | |
| Organic Chemistry (Fuels, alkanes, alkenes, carboxylic acids, alcohols and esters) | | |
| Polymers | | |
| The Particulate Nature of Matter | | |
| Experimental techniques (Measurement, purity and methods of purification) | | |
| Atomic structure and Periodic Table | | |
| Bonding and structure (Ionic, covalent, macromolecules and metals) | | |
| Stoichiometry (Mole concept and balancing chemical equation) | | |
| Redox reaction | | |

English Competency (*Please tick accordingly*)

- First Language Learner (Foundation IB)
 Advanced Second Language Learner (Foundation IB)
 Intermediate levels of written and spoken English (Pre IB)
 Basic levels of written and spoken English (Pre IB)

Any coursework or practical experience (*Please tick accordingly*)

- Yes No

Type of related curriculum (e.g. MYP Chemistry / IGCSE Chemistry / Coordinated Science / GCSE / GCE 'O' Level Pure Chemistry / GCE 'O' Level Sub Chemistry)



IB PHYSICS

(Entry level to Year 4 Foundation IB / Pre IB Physics)

| | |
|--|----------------|
| Name (as in Passport/NRIC) <i>(Please underline surname)</i> | Preferred Name |
|--|----------------|

Please tick accordingly to ascertain your level of competency on the various topics for IGCSE Physics.

| IGCSE Topics | Completed (Please tick) | Remarks (Please list some concepts learnt previously) |
|--|----------------------------|--|
| Year 3 Topics | | |
| General Physics | | |
| Length and Time | | |
| Speed, velocity and acceleration | | |
| Mass and Weight | | |
| Density | | |
| Forces | | |
| Energy, work and power | | |
| Pressure | | |
| Thermal Physics | | |
| Simple kinetic molecular model of matter | | |
| Thermal expansion | | |
| Thermal transfer (Conduction, convection, radiation) | | |
| Simple kinetic molecular model of matter | | |
| Properties of wave | | |
| General wave properties | | |
| Light (Reflection, refraction, converging lens, dispersion, em spectrum) | | |
| Sound | | |
| Year 4 Topics | | |
| Electricity | | |
| Electrical quantities (Electric charge, current, emf, potential difference, resistance) | | |
| Electric circuits (Circuit diagrams, series & parallel circuits, circuit components, digital electronics) | | |
| Dangers of electricity | | |
| Electrical quantities (Electric charge, current, emf, potential difference, resistance) | | |
| Magnetism | | |
| Simple phenomena of magnetism | | |
| Electromagnetic effects (em induction, ac generator, transformer, magnetic effect of current, force on current carrying conductor, dc motor) | | |
| Cathode ray oscilloscope | | |
| Atomic Physics | | |
| Radioactivity (Detection; α & β particles & γ rays; radioactive decay; half-life; safety precautions) | | |
| The nuclear atom (atomic model; nucleus isotopes) | | |

English Competency *(Please tick accordingly)*

- First Language Learner (Foundation IB)
 Advanced Second Language Learner (Foundation IB)
 Intermediate levels of written and spoken English (Pre IB)
 Basic levels of written and spoken English (Pre IB)

Any coursework or practical experience *(Please tick accordingly)*

- Yes No

Type of related curriculum (e.g. MYP Chemistry / IGCSE Chemistry / Coordinated Science / GCSE / GCE 'O' Level Pure Chemistry / GCE 'O' Level Sub Chemistry)

| | |
|---|--|
| Previous grades in the above curriculum | Comments <i>(Any particular areas of weakness)</i> |
|---|--|



IB Biology

(Entry level to Year 4 Foundation IB / Pre IB Physics)

 Name (as in Passport/NRIC) *(Please underline surname)*

Preferred Name

Please tick accordingly to ascertain your level of competency on the various topics for IGCSE Physics.

| IGCSE Topics | Completed (Please tick) | Remarks (Please list some concepts learnt previously) |
|--|----------------------------|--|
| Year 3 Topics | | |
| Characteristics of living things | | |
| Classification and diversity of living organisms | | |
| Cell structure and organisation | | |
| Movement in and out of cells | | |
| Enzymes | | |
| Plant nutrition | | |
| Transport in plants | | |
| Respiration | | |
| Year 4 Topics | | |
| Transport in humans | | |
| Excretion in humans | | |
| Coordination and Response | | |
| Hormones | | |
| Drugs | | |
| Homeostasis | | |
| Topic and Responses | | |
| Nervous Control | | |
| Inheritance | | |
| Reproduction in plants | | |
| Reproduction in humans | | |
| Growth and development | | |
| Ecology | | |

 English Competency *(Please tick accordingly)*

- First Language Learner (Foundation IB)
 Advanced Second Language Learner (Foundation IB)
 Intermediate levels of written and spoken English (Pre IB)
 Basic levels of written and spoken English (Pre IB)

 Any coursework or practical experience *(Please tick accordingly)*

- Yes No

 Type of related curriculum (e.g. *MYP Chemistry / IGCSE Chemistry / Coordinated Science / GCSE / GCE 'O' Level Pure Chemistry / GCE 'O' Level Sub Chemistry*)