Subject Combinations for Secondary 3 2022

Mrs Norain Johari

HOD Science

Sec 2 Streaming Exercise

Considerations

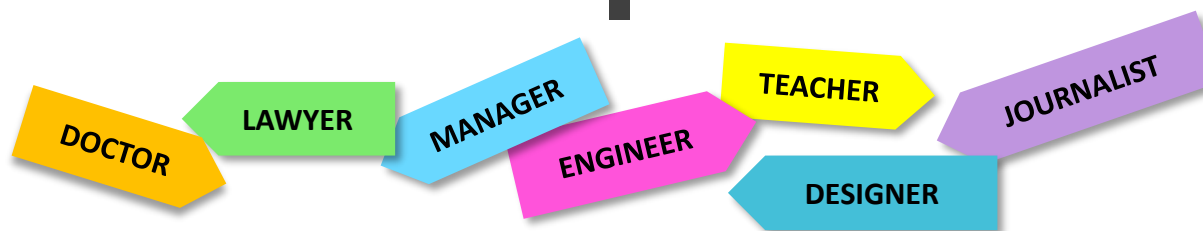**Selecting subjects based on**

Interest, Aptitude, Strength

JC, Pre-U, Poly or ITE?
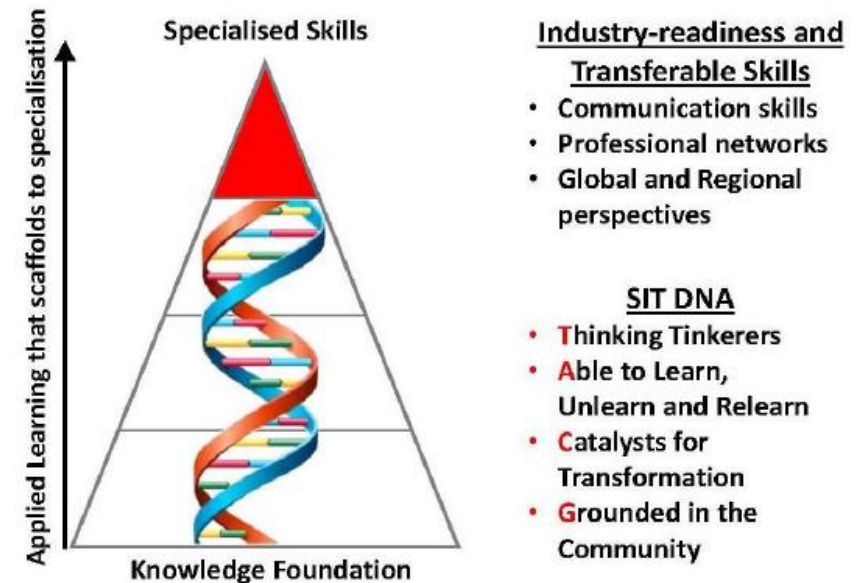
A Level, Diploma, Higher Nitec, Nitec

Career

Career Aspirations & Job of the Future

DOCTOR

LAWYER

MANAGER

ENGINEER

TEACHER

DESIGNER

JOURNALIST

Future Skills in Post-Secondary Study and Work

DBS Partners AWS To Future-Proof Employees With AI & Machine Learning Skills
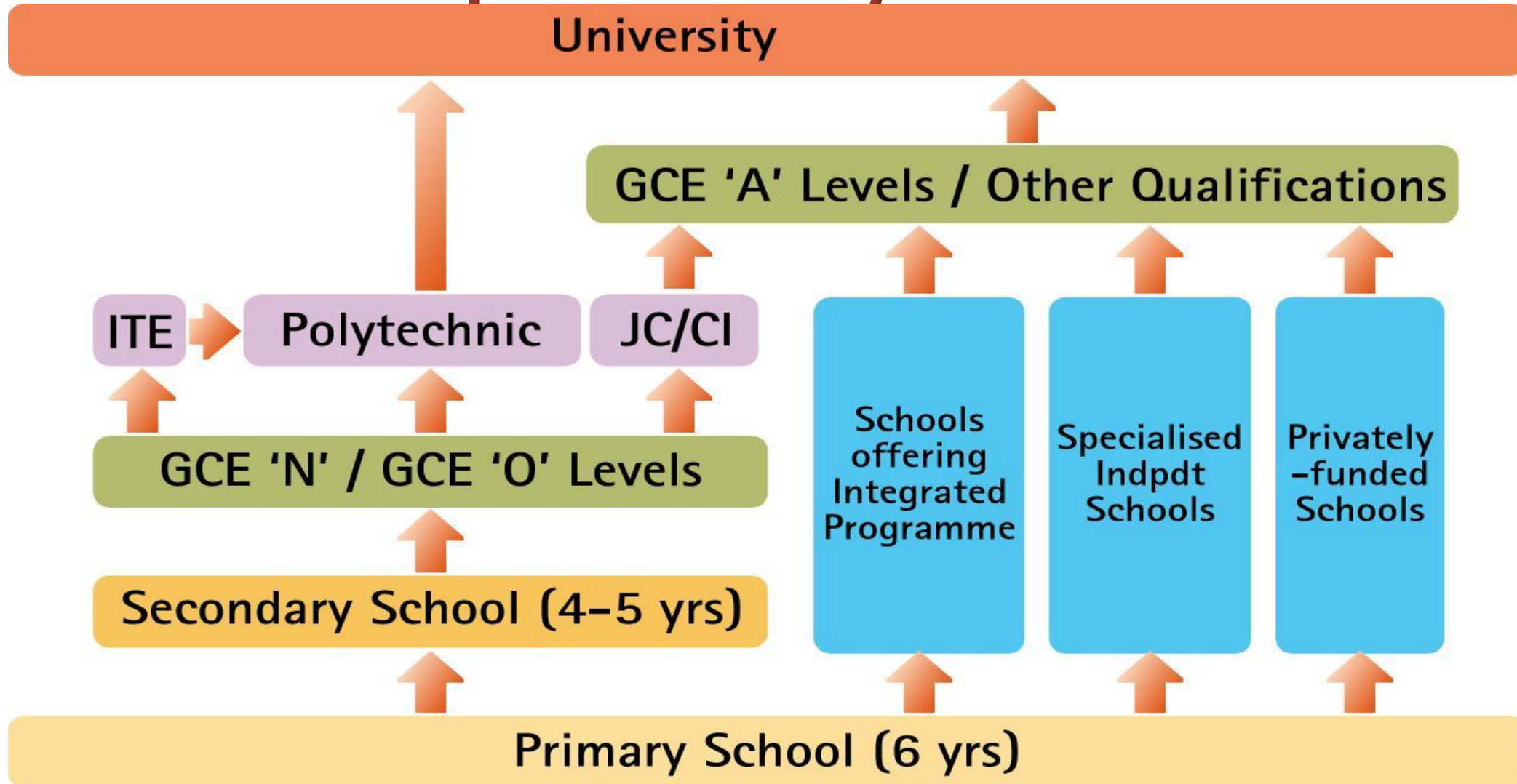
by Fintechnews Singapore / August 18, 2020

THE STRAITS TIMES

BUSINESS > Companies & Markets   Economy   Bankin

Here are the 5 fastest-growing jobs in Singapore, says a LinkedIn survey

Specialised Skills

Applied Learning that scaffolds to specialisation

Knowledge Foundation

Industry-readiness and Transferable Skills
- Communication skills
- Professional networks
- Global and Regional perspectives

SIT DNA
- **T**hinking Tinkerers
- **A**ble to Learn, Unlearn and Relearn
- **C**atalysts for Transformation
- **G**rounded in the Community

Singapore Institute of Technology DNA

3

Multiple Pathways in Education

What are the various Post-Secondary School options available?

3 MAIN TYPES OF OPTIONS

1. Junior Colleges (JCs) or Millennia Institute

Prepares students for the GCE 'A' level examination

3. Institute of Technical Education (ITE)

Equips students with technical knowledge and skills relevant to the industry.

2. Polytechnics / LaSalle / NAFA

Trains students with relevant skills for the workplace in a knowledge-based economy.

FOR STUDENTS ON O-LEVEL COURSE
[SEC 4 EXPRESS & SEC 5 NORMAL (ACADEMIC)]

Aggregate computation

- JC: L1R5 (Target: 6 Very Good & Good Passes in relevant subjects including EL, Humanities, Maths, Science)

- MI: L1R4 (Target: 5 Good Passes incl. EL, Humanities, Maths, Science)

- Polytechnic: ELR2B2 (Target: 5 Very Good and Good Passes including EL, Maths (except Humanities courses, where Maths needs not be included))

- ITE: ELB4, ELR1B3 or ELR2B2 (Target: 5 Passes)

Legend:
L1 = English or Higher Mother Tongue
R5 = 5 Relevant subjects
EL = English Language
B2 = 2 Best subjects

Legend:
Very Good Passes: A1-A2
Good Passes: B3-B4

Bonus Points for computation of net aggregate scores

1) CCA Attainment
Excellent: 2 points
Good: 1 point
(For admission to JC/Poly/ITE)

5) Students who apply for and are accepted into Chinese, Malay or Tamil LEP
2 points

2) Pass in English and Higher Mother Tongue

3) Pass in Malay/Chinese (Special programme) or Bahasa Indonesia (BI) as 3rd Language

4) Affiliation to JC

For students from feeder schools if they **choose their affiliated JC course(s) as**
a) 1st choice <u>or</u>
b) 1st and 2nd choices
2 points

2 points for admission to **JC/MI courses, provided** these choices come **before** any Poly/ITE courses

Limited to maximum of 4 bonus points only for sections (1)-(4).
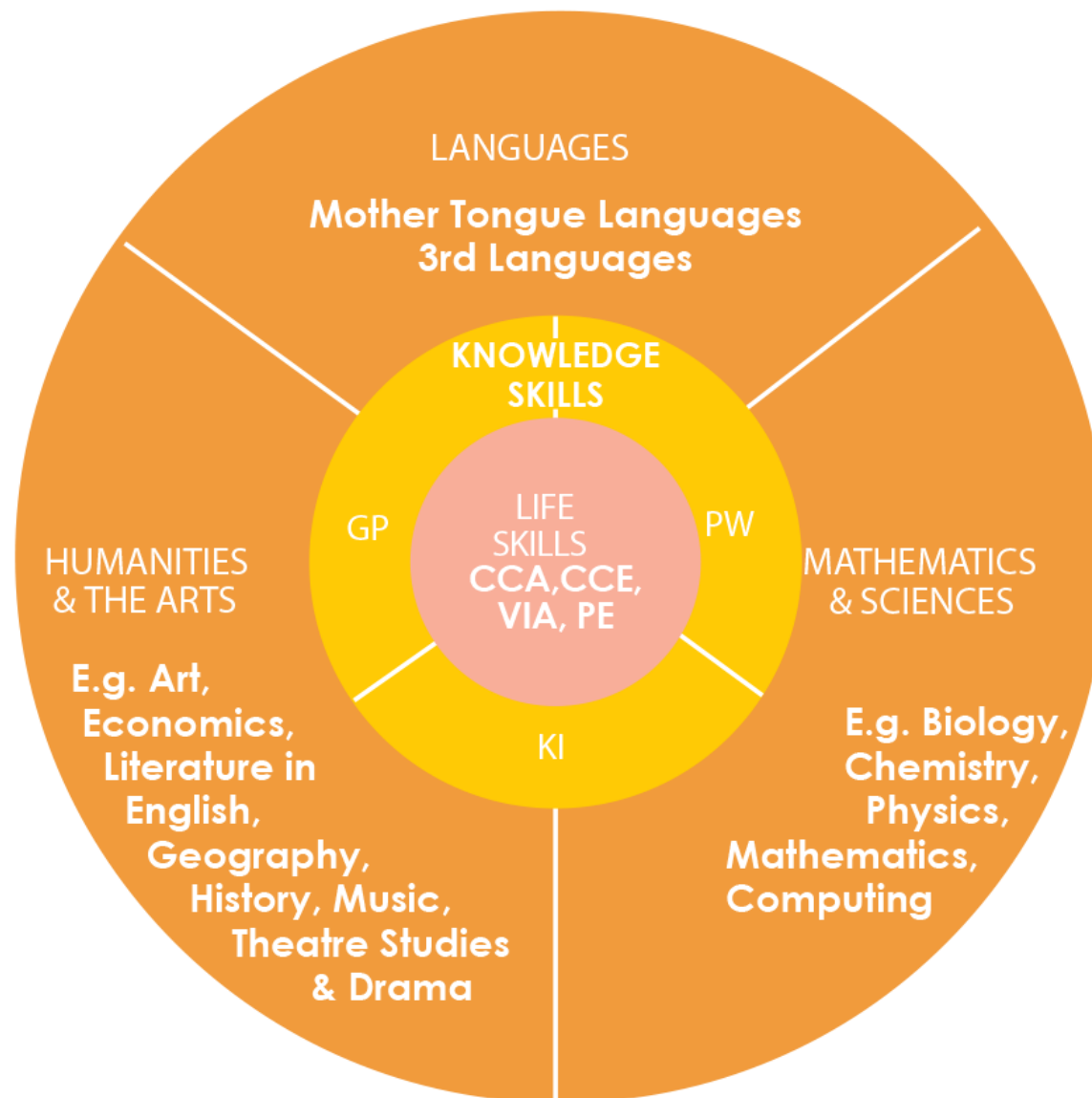*Limited to maximum of 6 bonus points only for sections (1)-(5).*

8

A-LEVEL PATH

What does one study at the A-Level?

Select subjects from three levels of study:

H1	H2	H3
Half of H2 in terms of curriculum time	Equivalent to 'A' level subjects prior to 2006	Subjects with opportunity for in-depth study (e.g. advanced content, research paper, university module)

Usual subject combination: 3H2s + 1H1 (requires 1 contrasting subject)

Admission Criteria to JC

- Eligibility Criteria
  - **JC: L1R5 ≤ 20**

- Requirements on Core Subjects
  - English Language: A1- C6
  - Mother Tongue: A1- D7
  - Mathematics: A1- D7

- L1 : English/Higher Mother Tongue
- R1 : Humanities
- R2 : Maths/Science
- R3 : Humanities/Maths/Science
- R4 & R5 : Best 2 other subjects

Admission Criteria to MI

- Eligibility Criteria
  - **MI: L1R4 ≤ 20**

- Requirements on Core Subjects
  - EL: A1- C6
  - MT: A1- D7
  - Mathematics: A1- D7

- L1 : English/Higher Mother Tongue
- R1 : Humanities/Maths/Science
- R2 : Humanities/Maths/Science
- R3 & R4 : Best 2 other subjects

POLYTECHNIC PATH

How to get into a Poly/LaSalle/NAFA?

2 possible ways
(post GCE O-Level results)

Using O-Level results – Joint Polytechnic Admissions Exercise (JAE)

Through Direct Admissions Exercise (DAE)

To find out more about the different Polytechnic admission exercises, please refer to the "Guide to Polytechnic Education" at www.polytechnic.edu.sg

ELR2B2 (A)

Humanities & Mass Communication Courses

- L1: English

- R1: Art/Humanities

- R2: Mathematics/Mother Tongue/Humanities/Design & Technology/Food & Nutrition/Principle of Accounts

- B1 & B2: Best 2 other subjects excluding CCA

ELR2B2 (B)

Business-Related Courses

- L1: English

- R1: Mathematics

- R2: Art/Humanities/Principles of Accounts

- B1 & B2: Best 2 other subjects excluding CCA

ELR2B2 (C)

Applied Science, Technology & Engineering Courses

- L1: English

- R1: Mathematics

- R2: Science/Design & Technology/Food & Nutrition

- B1 & B2: Best 2 other subjects excluding CCA

ELR2B2 (D)

Design Courses

- L1: English
- R1: Mathematics
- R2: Science/Art/Design & Technology/Food & Nutrition
- B1 & B2: Best 2 other subjects excluding CCA

3 EXPRESS
Subject Combinations
in 2022

MS NEO HUI JUN
SH / PHY

Sec 3 Express (Subjects)

L - LANGUAGE	SCIENCE		MA - MATHEMATICS	H - HUMANITIES	C - COURSEWORK
	PS - Pure Science	SC - Combined Science			
1. *English 2. *Mother Tongue	1. Biology 2. Chemistry 3. Physics	1. Sci (Biology, Chemistry) 2. Sci (Physics, Chemistry)	1. *Mathematics (E Maths) 2. Additional Mathematics (A Maths) 3. Computing 4. Principle of Accounts (POA)	1. *Humanities (Social Studies & Geography/History/Literature) 2. Geography 3. Literature	1. Art 2. Design & Technology (DT) 3. Food & Nutrition (FN)

*Compulsory Subject
 Students are required to select a different Humanities elective if Geography/Literature is offered.
 Students are required to select a different Combined Science component if Biology/Physics is offered.

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3 Express Subject Combinations in 2022

Points of Discussion:

1. Total Number of Subjects
   - 7 Subjects (option 1 and 2)
   - 8 or 9 Subjects (option 3 and 4)

2. Type of Subject Combinations
   - Triple Pure Science (combination 1 and 2)
   - Double Pure Science (combination 3, 4 and 5)
   - 1 Pure Science and 1 Combined Science (combination 6 and 7)
   - 1 Combined Science (combination 8, 9, 10 and 11)

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3 Express Subject Combinations in 2022 (7 Subjects)

SUBJECT	OPTION 1 [1 Combined Science]	OPTION 2 [2 Pure Science]
1	English Language	English Language
2	Mother Tongue	Mother Tongue
3	E Maths	E Maths
4	(SS, Geography) or (SS, History) or (SS, Lit)	(SS, Geography) or (SS, History) or (SS, Lit)
5	Science (Phy, Chem) or Science (Bio, Chem)	Chemistry
6	Coursework (Art or DT or FN) or Computing	Biology or Physics
7	A Maths or POA	A Maths

Choices for Subject 4 to 7

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3 Express Subject Combinations in 2022 (7 Subjects)

Criteria:

Subject	Criteria
Pure Science subjects	At least 70% in Sec 2 Science
Additional Mathematics	At least 70% in Sec 2 Mathematics
#Combination with 3 Mathematics Subjects: E Maths, Computing & A Maths	At least 75% in Sec 2 Mathematics

Sec 3 Express Subject Combinations in 2022 (8 or 9 Subjects)

SUBJECT	OPTION 3	OPTION 4
1	English Language	English Language
2	Mother Tongue	Mother Tongue
3	E Maths	E Maths
4	(SS, Geography) or (SS, History) or (SS, Lit)	(SS, Geography) or (SS, History) or (SS, Lit)
5	Science (Phy, Chem) or Science (Bio, Chem)	Chemistry
6	Coursework (Art or DT or FN) or Computing	Biology or Physics
7	A Maths or POA	A Maths
*8	**Biology or Physics or Geography or Literature**	**Geography or Literature or Computing**
*9	**-**	**3rd Pure Science**

To take an 8th or a 9th subject – a set of additional criteria applies.

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3 Express Subject Combinations in 2022 (8 or 9 Subjects)

SUBJECT	OPTION 3	OPTION 4
*8	**Biology or Physics or Geography or Literature**	**Geography or Literature or Computing**
*9	**-**	**3rd Pure Science**

To take an 8th or a 9th subject – a set of additional criteria applies.

Subject	Criteria
8th Subject: Biology or Physics	• At least 70% in Sec 2 overall • At least 70 % in Sec 2 Science
8th Subject: Geography	• At least 70% in Sec 2 overall • At least 70 % in Sec 2 Geography
8th Subject: Literature	• At least 70% in Sec 2 overall • At least 70 % in Sec 2 Literature
8th Subject: Computing	• At least 70% in Sec 2 overall • At least 75% in Sec 2 Mathematics *[#Combination with 3 Maths Subjects: E Maths, Computing & A Maths]*
9th Subject: 3rd Pure Science	• At least 75% in Sec 2 overall • At least 75% in Sec 2 Science • At least 75% in Sec 2 Mathematics

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3EXP (Triple Pure Science)

Subject Combination	Subject				No. of Subjects
1	2L	3PS	3MA	1H	9
2	2L	3PS	2MA	2H	9
	L - Language * English * Mother Tongue	**PS – Pure Science** * Chemistry * Biology * Physics	**MA - Maths** * E Maths * A Maths • Computing	**H - Humanities** * Humanities (Social Studies & Geography/History/ Literature) • *Geography* • *Literature*	
	* Compulsory subject Students are required to select a different Humanities elective if *Geography/Literature* is offered.				

Example

Student A is offering Subject Combination 2:

1) English Language
2) Malay Language

3) Chemistry
4) Biology
5) Physics

6) E Maths
7) A Maths

8) Humanities
(Social Studies, Geography)
9) Literature

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3EXP (Double Pure Science)

Subject Combination	Subject				No. of Subjects
3	2L	2PS	3MA	1H	**8**
4	2L	2PS	2MA	2H	**8**
5	2L	2PS	2MA	1H	7
	L - Language * *English* * *Mother Tongue*	**PS – Pure Science** * *Chemistry* • Biology • Physics	**MA - Maths** * *E Maths* * *A Maths* • Computing	**H - Humanities** * *Humanities (Social Studies & Geography/History/ Literature)* • *Geography* • *Literature*	
	* *Compulsory subject* *Students are required to select a different Humanities elective if* Geography/Literature *is offered.*				

Example

Student B is offering Subject Combination 4:

1) English Language
2) Chinese Language

3) Chemistry
4) Biology

5) E Maths
6) A Maths

7) Humanities (Social Studies, History)
8) Geography

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3EXP (1 Pure Science, 1 Combined Science)

Subject Combination	Subject						No. of Subjects
6	2L	1PS	1SC	3MA	1H	-	8
7	2L	1PS	1SC	2MA	1H	1C	8
	L - Language * English * Mother Tongue	**PS – Pure Science** • *Biology* • *Physics*	**SC – Combined Science** • Sci (Biology, Chemistry) • Sci (Physics, Chemistry)	**MA - Maths** * E Maths * A Maths/ Principle of Accounts • #Computing	**H - Humanities** * Humanities (Social Studies & Geography / History/ Literature)	**#C - Coursework** • Art • Design & Technology • Food & Nutrition	
	* Compulsory subject # Either Computing or Coursework (i.e. a student cannot offer both Computing & Coursework) Students are required to select a different Combined Science component if *Biology/Physics* is offered.						

Example

Student C is offering Subject Combination 7:

1) English Language
2) Tamil Language

3) Biology
4) Science (Physics, Chemistry)

5) E Maths
6) Principle of Accounts

7) Humanities (Social Studies, Literature)

8) Art

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Sec 3EXP (1 Combined Science)

Subject Combination	Subject					No. of Subjects
8	2L	1SC	3MA	2H	-	**8**
9	2L	1SC	2MA	2H	1C	**8**
10	2L	1SC	3MA	1H	-	7
11	2L	1SC	2MA	1H	1C	7
	L - Language * English * Mother Tongue	**SC – Combined Science** • Sci (Biology, Chemistry) • Sci (Physics, Chemistry)	**MA - Maths** * E Maths * A Maths/ Principle of Accounts • #Computing	**H - Humanities** * Humanities (Social Studies & Geography/History/ Literature) • *Geography* • *Literature*	**#C - Coursework** • Art • Design & Technology • Food & Nutrition	
	* Compulsory subject # Either Computing or Coursework (i.e. a student cannot offer both Computing & Coursework) Students are required to select a different Humanities elective if *Geography/Literature* is offered					

Example

Student D is offering Subject Combination 9:

1)   English Language
2)   Malay Language

3)   Science (Biology, Chemistry)

4)   E Maths
5)   A Maths

6)   Humanities (Social Studies, History)
7)   Geography

8)   Design & Technology

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.

Promotion Criteria

Promotion from 2 Express to 3 Express

Pass in English Language and attain an overall percentage of 50% or more

Schedule

- **Aug-Sept 2021 – Subject Combination Survey**

- **Oct 2021 (After end-of-year examination) – Streaming Exercise**

- **End Oct 2021 – Release of Streaming Exercise Results**

BUILD MINDSET & STRONG FOUNDATION

Help your child develop *Growth MINDSET*

Accomplish BIG Things With a
GROWTH MINDSET!
Success Begins With Believing You Can

Instead of Thinking...		Think This...
I can't do it.	▶	I'm still learning. I'll keep trying!
I'm not good at this.	▶	What can I learn to get better at this?
It's good enough.	▶	Is this the best I can do?
It's too hard.	▶	With more practice it will get easier!
I'm afraid of making a mistake.	▶	Mistakes are how I learn & get better!
They are better at it than I am.	▶	What can I learn from them?
I don't know how.	▶	I can learn how!
I can't make this any better.	▶	I can always find ways to improve!
I don't like challenges.	▶	Challenges make me better!
I give up.	▶	I'll try a different way!

Resilience
Giving Our Children S.P.A.C.E. to Grow

Ministry of Education
SINGAPORE

S Support
Be an adult who is supportive and willing to listen

P Problem-solve
Process setbacks and work with child to develop alternate plans to overcome setbacks

A Affirm
Affirm strengths and encourage efforts (not just abilities or achievements) to enhance resilience and learning

C Cheer
Cheer the child on for renewed effort and share inspirational stories of resilience

E Empower
Provide child with skills and opportunities to try, take risks and experience challenges

We can intentionally role-model resilience & use S.P.A.C.E. language.