

# Science is equally important for your PSLE T-Score!

## Frequently Asked Questions (FAQs)

### 1) Are different methods of solving mathematics problems acceptable?

All correct methods are acceptable as long as the method is sound and logically presented

### 2) Since the total marks for English is 200, it carries a double weighting in PSLE T-Score. Is it true?

No, each of the 4 subjects namely, English, Science, Maths and Mother Tongue carries an **equal weighting**.

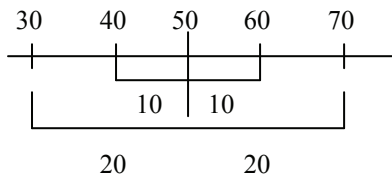
### 3) Is T-Score the same as aggregate score?

No, they are not the same. The aggregate score is the sum of the T-Score of the 4 subjects

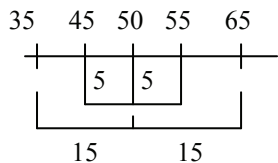
### 4) What does 'the spread of marks around the average mark' in the formula mean?

Consider 2 sets of Marks which have the same average mark (Mean) of 50.

#### Set A: 30,40,50,60,70



#### Set B: 35,45,55,65



Set A has a larger spread of marks around the average mark because the marks are further away from the average marks compared to those in Set B.

### 5) Why do we use T-Score instead of the mark obtained in the examination?

(a) To ensure that subjects are accorded equal weighting. Use of marks obtained in the examination can lead to a wrong ranking of pupils. Consider the following example.

Based on marks obtained in examination

Pupils	Marks for				Total Marks
	Eng	Chinese	Science	Maths	
A	120* (1)	162 (1)	33 (3)	45 (2)	360 (1)
B	116 (2)	145 (3)	40 (1)	56 (1)	357 (2)
C	113 (3)	158 (2)	40 (1)	42 (3)	353 (3)

\* Number in bracket gives the ranking in the subject

Based on T-Score

Pupils	Marks for				Aggregate Score
	Eng	Chinese	Science	Maths	
A	44	55	30	39	168 (2)
B	42	46	35	46	169 (1)
C	41	53	35	37	166 (3)

In this example, English has a greater effect on the overall ranking. T-Score will remove the influence from any subject on the overall ranking.

(b) The aggregate score helps to place pupils in the Secondary School and the secondary school courses more fairly.

### 6) Is it possible for a pupil with 3 A\* and 1 A to have a lower aggregate T-Score than another pupil who has only 1A\* and 3As?

Yes, It is possible because each grade has a range of T- Scores. A pupil getting an A\* can be on the lower end of the T-Score range while another pupil getting an A can be on the higher end of the range.

## T-Score and its calculation

- The candidate's aggregate score as shown in the PSLE result slip represents the sum of the T-Scores of 4 subjects.
- T-Score is not the mark that a pupils obtains in the examination. A pupil scoring 70% in the Science examination may not have a T-score of 70.
- T-Score gives the rank or position of a pupil's performance compared to all other pupils in that subject whereas the mark obtained in the examination only show how good the pupils is in the subject. For example, a pupil who scored 70% in Science would not have performed as well if most other people scored higher than 70%

### Q1. How is T-Score calculated for each subject?

We apply the following formula:

$$T = 50 + 10 \frac{(X - Y)}{Z}$$

Where: **X** is the pupil's mark for the subject  
**Y** is the average mark (mean) scored by all the pupils  
**Z** is the spread of the marks around the average mark (standard deviation)

Example: Average mark (Y) scored by all pupils is 68.0  
 spread of marks around the average mark (Z) is 14.

Subject Q	Pupil A	Pupil B
Marks in Exam	80%	50%
T-Score	$50 + 10 \frac{(80 - 68.0)}{14}$ =58.57	$50 + 10 \frac{(50 - 68.0)}{14}$ =37.14

### Q2. How is the aggregate T-Score calculated?

By adding all the T-Score for the 4 subjects.

#### Example:

Subject	Total Mark	T-Score
English	200*	34
Chinese	200*	51
Maths	100	53
Science	100	47
Total:		185

There is no double weighting for the languages \*including oral, listening and paper 2

Therefore, aggregate T-Score for the pupil is 185.