
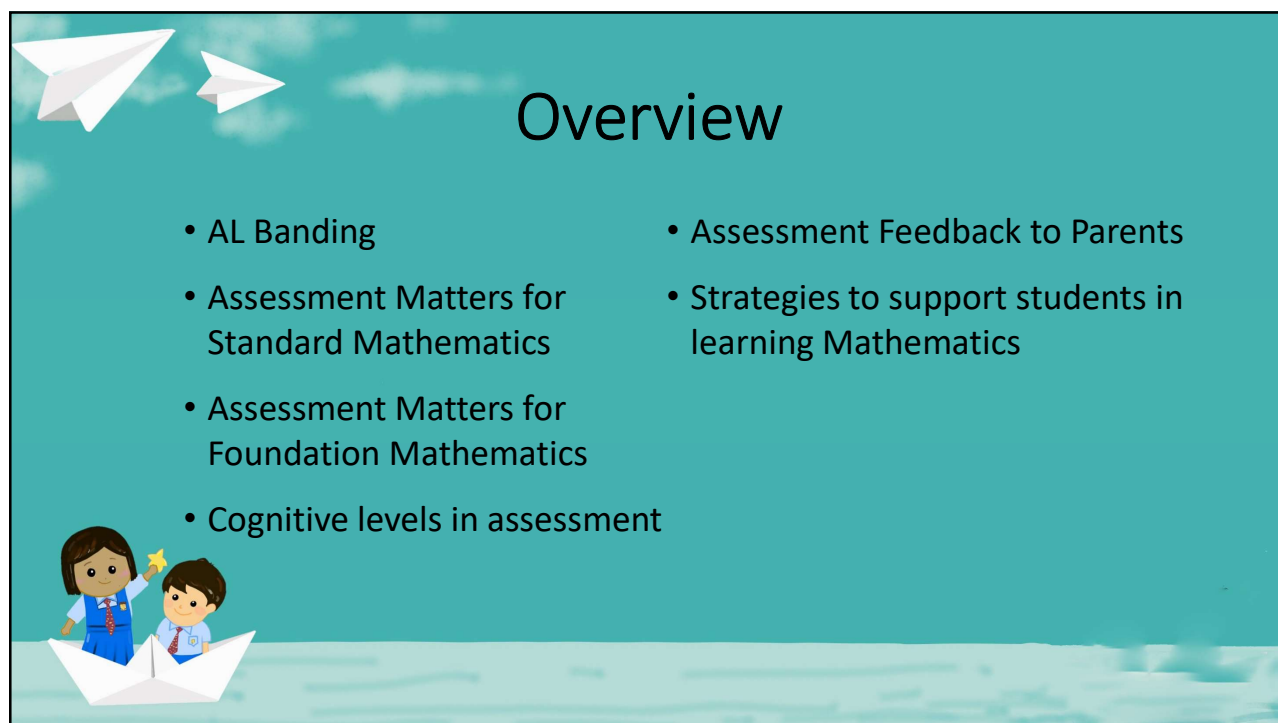


# Primary 5 and Primary 6 Assessment and Curriculum Sharing

## Mathematics



**RIVERVALE  
PRIMARY SCHOOL**



## Overview

- AL Banding
- Assessment Matters for Standard Mathematics
- Assessment Matters for Foundation Mathematics
- Cognitive levels in assessment
- Assessment Feedback to Parents
- Strategies to support students in learning Mathematics

## AL Banding

AL	Raw Mark Range		Grades for Foundation	Foundation Raw Mark Range	Equivalent Standard Level AL
1	≥ 90				
2	85 - 89				
3	80 - 84				
4	75 - 79				
5	65 - 74				
6	45 - 64		A	75 - 100	6
7	20 - 44		B	30 - 74	7
8	< 20		C	< 30	8

## AL Banding

Placement Outcome	PSLE Score
EXPRESS	4 - 20
EXPRESS / N(A) OPTION	21 - 22
N(A)	23 - 24
N(A) / N(T) OPTION	25
N(T)	26 - 30, with AL7 or better in both English Language <u>and</u> Mathematics

# Assessment Matters for Standard Mathematics



## Assessment Format for Standard Mathematics

Paper	Booklet	Item Type	Number of questions	Number of marks per question	Total marks	Duration
1	A	Multiple-choice	10	1	10	1 h
			5	2	10	
	B	Short-answer	5	1	5	
			10	2	20	
2		Short-answer	5	2	10	1 h 30 min
		Structured/ Long-answer	12	3, 4 or 5	45	
Total			47	-	100	2 h 30 min

[https://www.seab.gov.sg/docs/default-source/documents/guidelines\\_calculators.pdf](https://www.seab.gov.sg/docs/default-source/documents/guidelines_calculators.pdf)

## Assessment Content for P5 **Standard Mathematics**

Content	P5 Weighting (%)
Whole Numbers, Fractions and Decimals	42
Ratio Percentage	12
Rate	6
Area of Triangles Volume	15
Angles Properties of triangles Parallelogram, Rhombus and Trapezium	15
Average	10
<b>Total</b>	<b>100</b>

Note: Topics from P1 to P4 will also be included.

## Assessment Content for P6 **Standard Mathematics**

Content	P6 Weighting (%)
Whole Numbers, <b>Fractions</b> and Decimals	25
<b>Ratio</b> and <b>Percentage</b>	10
Rate and <b>Speed</b>	5
<b>Algebra</b>	5
Measurement <b>Circles</b> <b>Volume</b> <b>Solids, Nets and figures</b>	20
Angles <b>Angles in Geometrical Figures</b>	20
Statistics <b>Pie Chart</b>	15
Total	100

Note: Topics from P1 to P5 will also be included.

# Assessment Matters for Foundation Mathematics



## Assessment Format for Foundation Mathematics

Paper	Booklet	Item Type	Number of questions	Number of marks per question	Total marks	Duration
1	A	Multiple-choice	10	1	10	1 h
			10	2	20	
	B	Short-answer	10	2	20	
2		Short-answer	10	2	20	1 h
		Structured	6	3 or 4	20	
Total			46	-	90	2 h

[https://www.seab.gov.sg/docs/default-source/documents/guidelines\\_calculators.pdf](https://www.seab.gov.sg/docs/default-source/documents/guidelines_calculators.pdf)

## Assessment Content for Foundation Mathematics

Content	FMA P5 Weighting (%)	FMA P6 Weighting (%)
Whole Numbers, Fractions and Decimals	50	30
Rate	5	5
Percentage*		10
Measurement	20	25
Geometry	15	15
Statistics	10	15
Total	100	100

## Cognitive Levels for Mathematics



## Cognitive Levels for Mathematics

### Cognitive Levels

Level 1 (Basic)	<b><u>Recall</u></b> mathematical facts, concepts, rules and formulae; <b><u>perform straightforward computations and algebraic procedures</u></b>
Level 2 (Intermediate)	<b><u>Interpret information; understand and apply mathematical concepts and skills</u></b> in a variety of contexts
Level 3 (Challenging)	<b><u>Reason mathematically; analyse information and make inferences; select appropriate strategies</u></b> to solve problems.

## Cognitive Levels for Mathematics

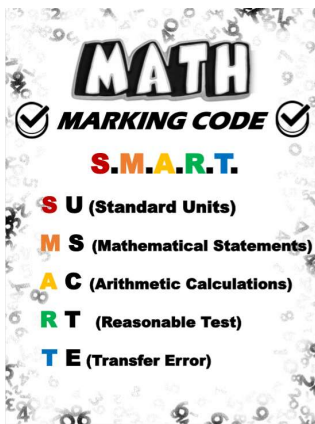
	Level 1	Level 2	Level 3
<b>P5 Standard</b>	<b>35</b>	<b>40</b>	<b>25</b>
<b>P6 Standard</b>	<b>25</b>	<b>40</b>	<b>35</b>
<b>P5 Foundation</b>	<b>40</b>	<b>50</b>	<b>10</b>
<b>P6 Foundation</b>	<b>35</b>	<b>50</b>	<b>15</b>

AL	Raw Mark Range
1	≥ 90
2	85 - 89
3	80 - 84
4	75 - 79
5	65 - 74
6	45 - 64
7	20 - 44
8	< 20

# Assessment Feedback to Parents



## Assessment Feedback to Parents



### At the end of each topic

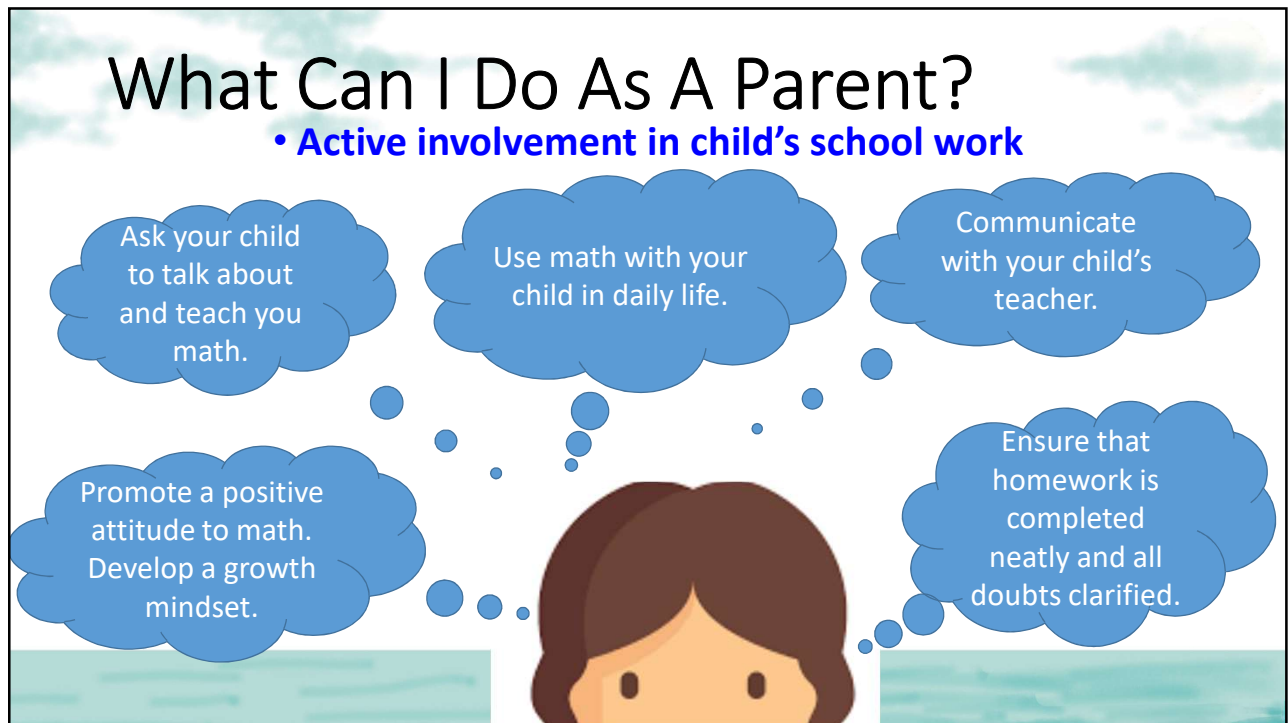
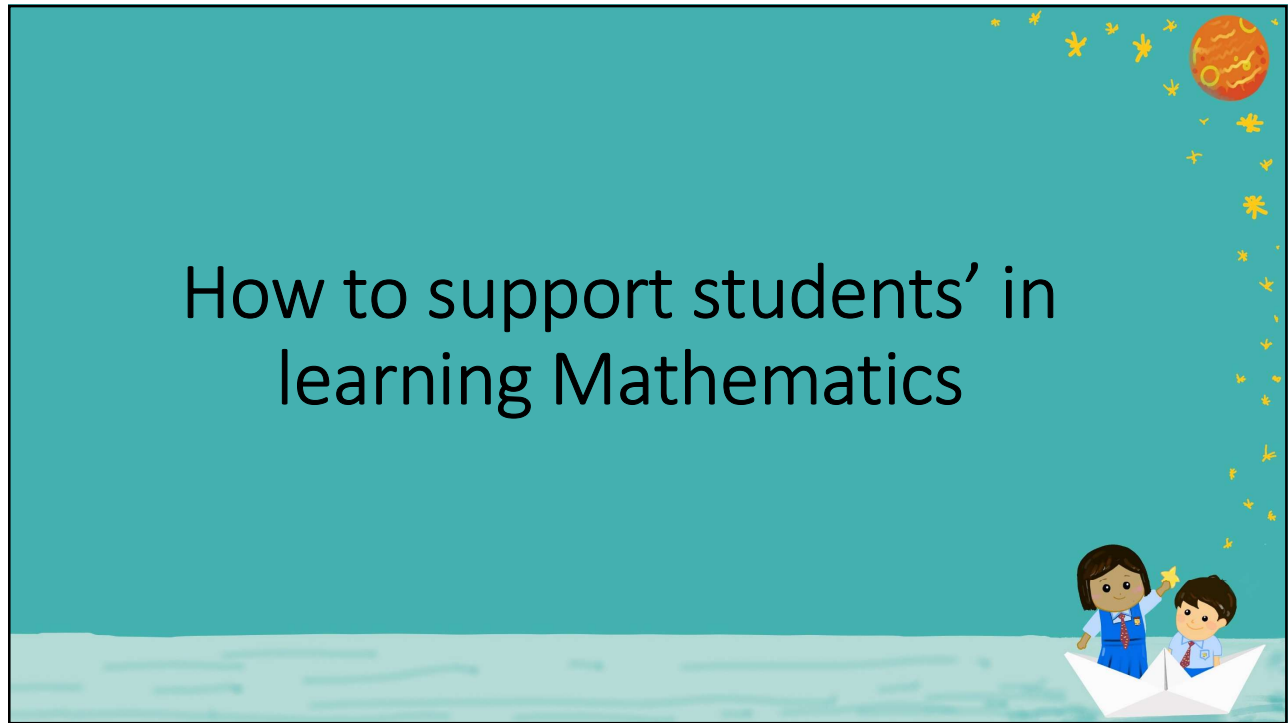
- unweighted assessments such as topical reviews, performance tasks & journals

### Daily work:

- In-class work
- homework

**Teachers' meetings with parents or other feedback channels**





- Which mobile phone best suits our needs?
- Which mobile plan to subscribe to?
- To purchase a mobile phone with a plan or without?

<b>30GB</b>	
300 mins Talktime & 300 SMS Free Weekend Local Data	
Plan	Phone
\$78.00/mth	\$478.00
<b>5GB</b>	
100 mins Talktime & 100 SMS Free Weekend Local Data	
Plan	Phone
\$48.00/mth	\$748.00

## Involvement your child in supermarket math



Estimate mass of fruits and vegetables before weighing.



Compare different brands, find the best value for money!



Compare different sizes. Discuss best value for money or even why people may buy the more expensive option.

## How to study Math

- 1) **Master basic arithmetic skills – Mathematical Fluency**
- 2) Practise, practise and practise (and check): Set time limit
- 3) Review mistakes: **misread, transfer error,**  
**computational/precision errors,**  
**conceptual understanding**  
 E.g.: look through Topical Review worksheets, workbook,  
Paper 1
- 4) Identify and understand doubts

## Koobits

- Encourage self-directed learning
- Students can learn at their own pace and can close gaps identified.
- Solutions are provided to guide students if they did the questions wrongly.
- Students are encouraged to try the same skill again, if they have not mastered the skill.
- Allocate 15 to 20 min on Koobits daily.



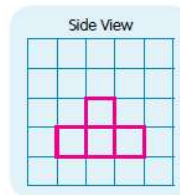
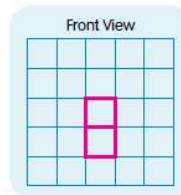
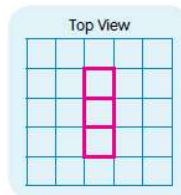
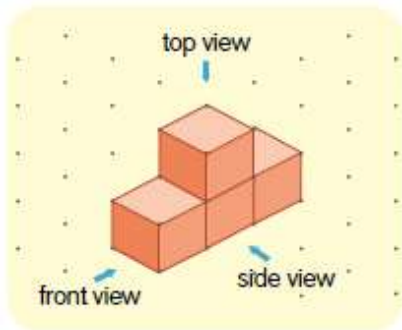
# Communicating effectively in Mathematics



**TOP view** is always seen from the **FRONT** view

## Volume

Draw the top view, front view and side view of each solid on square grids.



I see 3 square faces when I look from the top.



I see 2 square faces when I look from the front.



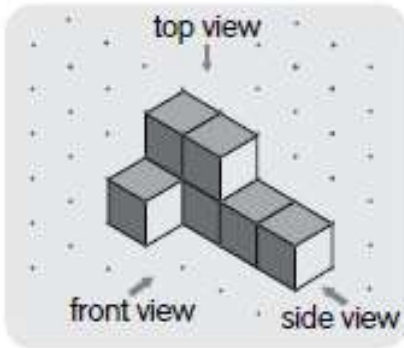
I see 4 square faces when I look from the side.



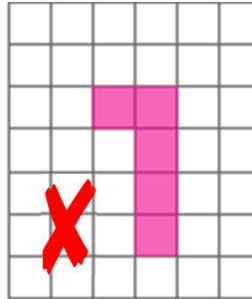
# Volume

**NOTE:**  
**TOP view** is always seen from the **FRONT** view

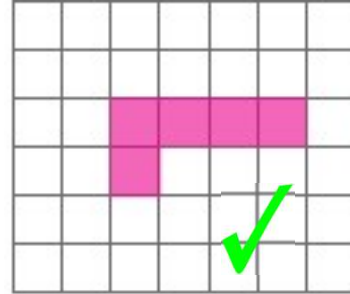
Draw the top view of the solid on square grid.



**Top view**



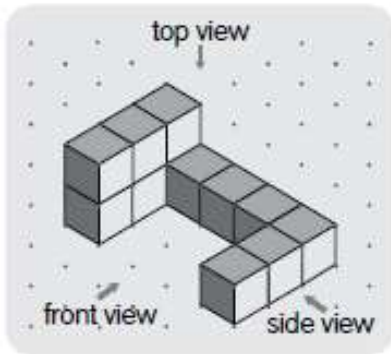
**Top view**



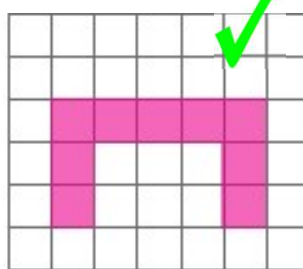
# Volume

**NOTE:**  
**TOP view** is always seen from the **FRONT** view

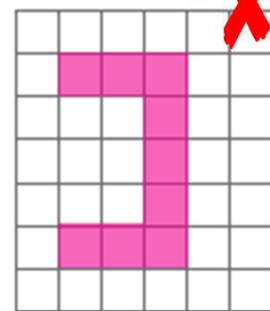
Draw the top view of the solid on square grid.



**Top view**



**Top view**

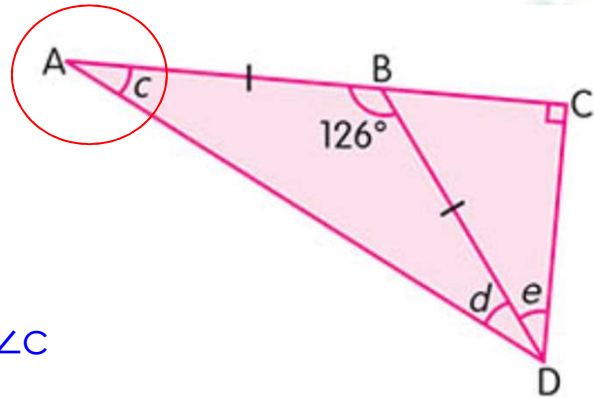


# Angles

- Clear identification of angles

Correct:  $\angle BAD$  or  $\angle DAB$  or  $\angle C$

Incorrect:  $\angle bad$  or  $\angle dab$  or  $\angle C$  or  $\angle A$



# Angles

- Labelling of equations

Recommended:

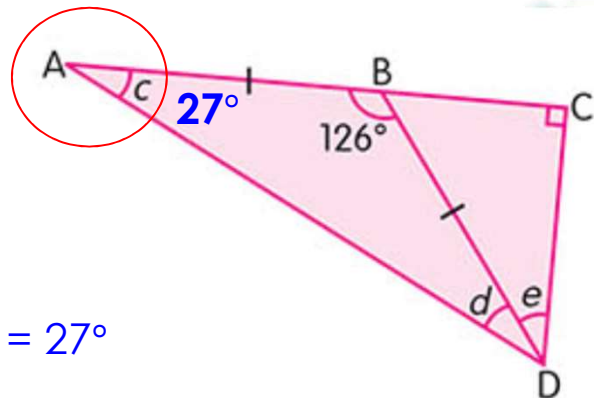
$$\angle BAD = (180^\circ - 126^\circ) \div 2 = 27^\circ$$

OR

$$(180^\circ - 126^\circ) \div 2 = 27^\circ (\angle BAD)$$

OR

Labelling in the diagram



# Presentation

- Order of operations (P5), which affects algebra (P6)

$(4 + 8) \times 6 + 30 - 8$ $= 12 \times 6$ $= 72 + 30$ $= 108 - 8$ $= 100$			$(4 + 8) \times 6 + 30 - 8$ $= 12 \times 6 + 30 - 8$ $= 72 + 30 - 8$ $= 108 - 8$ $= 100$	
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# Presentation

- Order of operations (P5), which affects algebra (P6)

## Method 1

$$50 - 20 = 30$$

$$30 + 15 = 45$$

Do not  
recommend

## Method 2

$$50 - 20 + 15 = 30 + 15$$



$$= 45$$

P6 algebra	$25s + 10 - 4s + 6s - 8$
Simplifying	$= 25s - 4s + 6s + 10 - 8$
algebraic	
expressions	$= 27s + 2$

# Presentation of solutions:

## 1) Arrows for Percentage and Rate



✓ Use arrows to express workings when doing questions involving percentage and rate.

	 Wrong	 Right
Percentage:	100% = 20	100% → 20
	1% = $20 \div 100$ = 0.2	1% → $20 \div 100$ = 0.2
	50% = $0.2 \times 50$ = 10	50% → $0.2 \times 50$ = 10

# Presentation of solutions:

## 1) Arrows for Percentage and Rate

✓ Use arrows to express workings when doing questions involving percentage and rate.

	 Wrong	 Right
Rate:	20 min = 80 bottles	20 min → 80 bottles
	1 min = $80 \div 20$ = 4 bottles	1 min → $80 \div 20$ = 4 bottles
	8 min = $8 \times 4$ = 32 bottles	8 min → $8 \times 4$ = 32 bottles



# Presentation of solutions:

## 2) Equal sign for unitary method

✓ Use equal signs when doing questions involving units

☹️	😊
Wrong	Right
15 units → 75	15 units = 75
1 unit → $75 \div 15$ = 5	1 unit = $75 \div 15$ = 5
7 units → $7 \times 5$ = 35	7 units = $7 \times 5$ = 35

# Presentation

## • Wrong use of units

Money → \$, ¢

Mass → kg, g

Length → cm, m, km

Area →  $\text{cm}^2$ ,  $\text{m}^2$ ,  $\text{km}^2$   
(Area = length (cm) x length (cm))

Volume →  $\text{cm}^3$ ,  $\text{m}^3$ , ℓ, ml  
(Volume = length (cm) x length (cm) x length (cm))

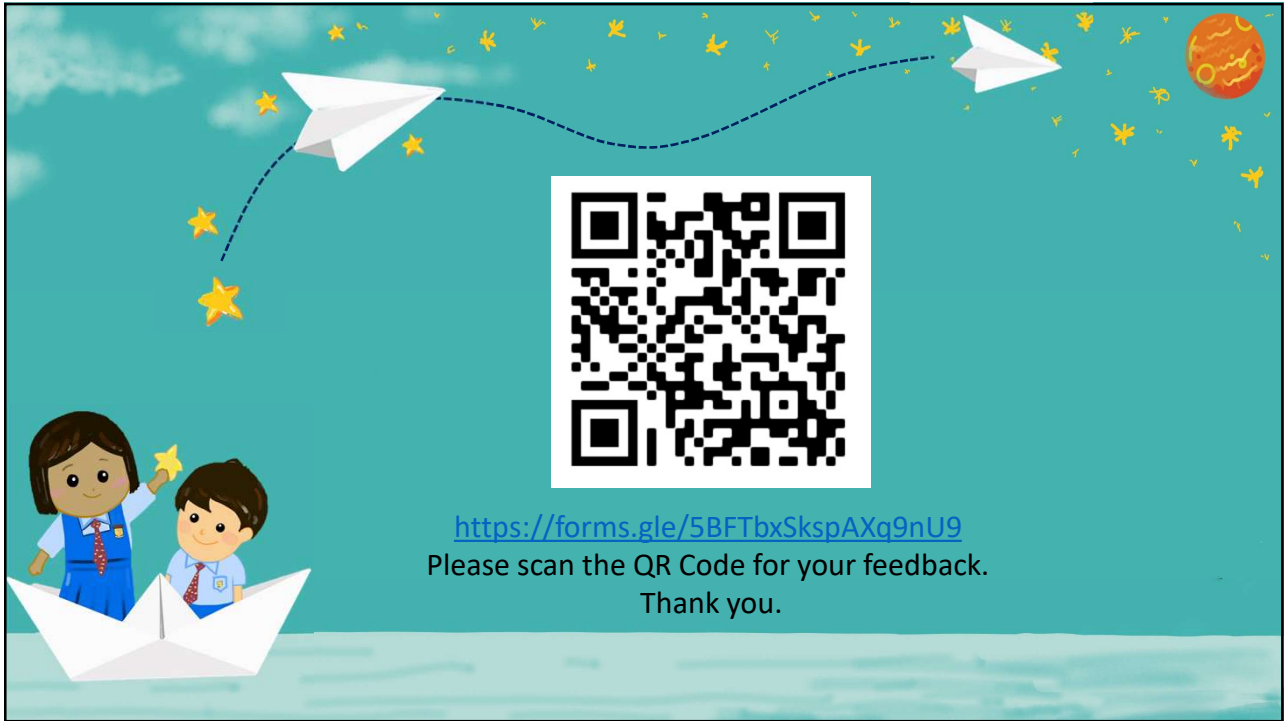
Time → a.m., p.m., h, min, s

Angle → °

Percentage → %

Speed → km/h, m/min





<https://forms.gle/5BFTbxSkspAXq9nU9>  
Please scan the QR Code for your feedback.  
Thank you.



**THANK  
YOU**