Primary 6
Mathematics
Curriculum Briefing

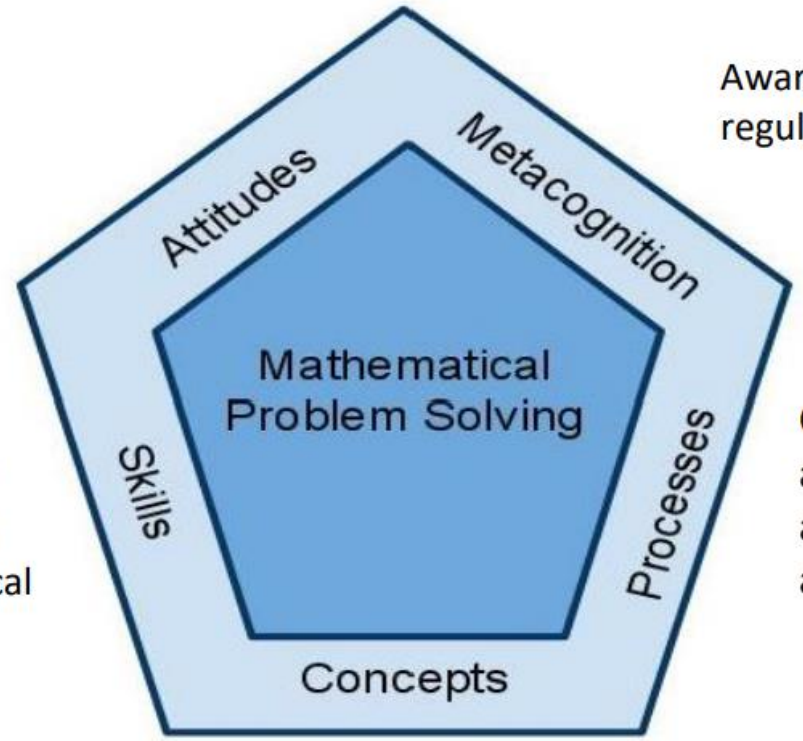
Outline

- Mathematics Curriculum Framework
- Mission
- Approach to Teaching & Learning
- Assessment

MOE Mathematics Curriculum Framework

Belief, appreciation, confidence, motivation, interest and perseverance

Awareness, monitoring and regulation of thought processes



Proficiency in carrying out operations and algorithms, visualising space, handling data and using mathematical tools

Competencies in abstracting and reasoning, representing and communicating, applying and modelling

Understanding of the properties and relationships, operations and algorithms

Mission

To enable our students to master mathematical concepts and skills for everyday life and to equip them with process skills to solve mathematical problems.

Content Sequence for P6 Standard Math	
Fractions	Speed
Ratio	Volume of Solids and Liquids
Percentage	Pie Charts
Circles	Algebra
Angles in Geometric Figures	Solid Figures and Nets

Content Sequence for P6 Foundation Math	
Fractions	Area of Triangles
Decimals	Triangles, Squares and Rectangles
Percentage	Pie Charts
Average	Volume

Approach to Teaching & Learning

CONCRETE → PICTORIAL → ABSTRACT

Approach to Teaching & Learning

Fraction Discs

3-D solids

Nets

Use of concrete manipulatives to develop conceptual understanding

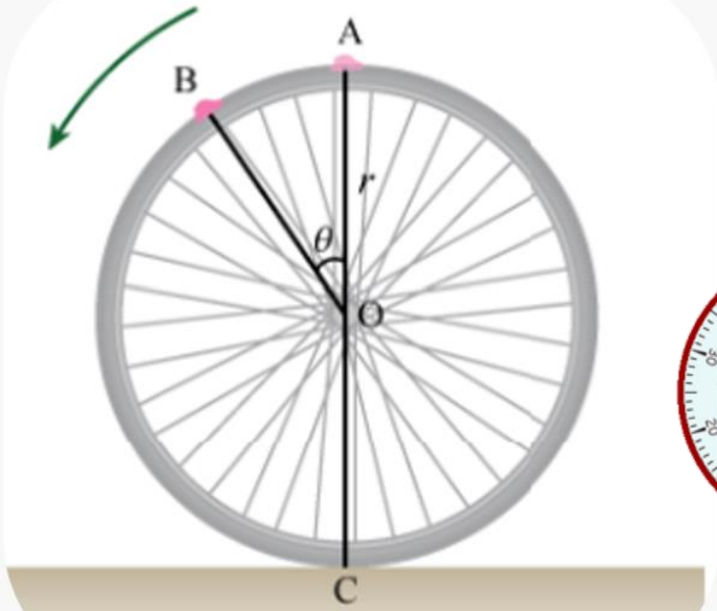
Experiential Learning

P6 - Circles

The Math Concept

Understanding and relating the circumference to the distance covered

(9) A wheel has a radius of 21 cm. How many complete turns must it make to cover a distance of 1980 cm? (Take $\pi = \frac{22}{7}$.)



Empathize

The pain point and the why

YEO YUAN XIN, TYLIA NOELLE
Response • 0

To ensure that the reliability of the results and make sure it is accurate

KASLYN
Response

To know are

Define

Find the perimeter of the basketball court.

Ideation

How to make a wheel that measures distances

Prototype

Making the measuring wheel

Testing

Student use their designed wheel to measure the basketball court

Q1

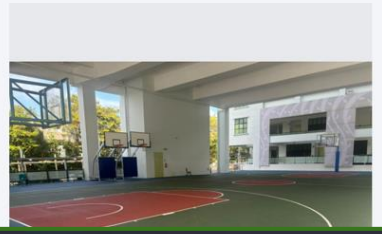
RECOMMENDED 1 min

Estimate the length and breadth of the basketball court.

Q2

RECOMMENDED 4 min

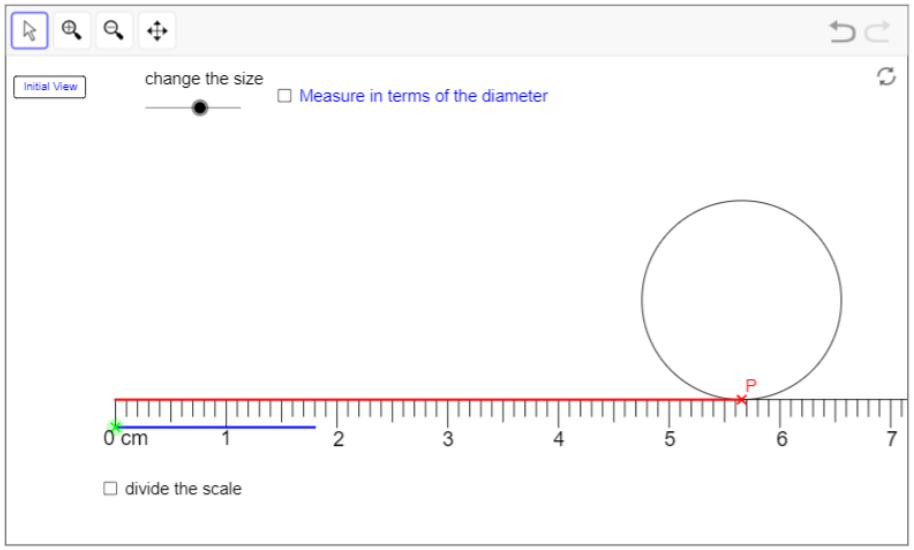
Using your deisgned wheel, measure the length and breadth of the basketball court.



RAFFLES GIRLS' PR. SCHOOL

Experiential Learning

ICT Enriched Lessons



The actual value is represented by π, which is read as **pi.**

π is given by $\frac{22}{7}$ which is about **3.14.**

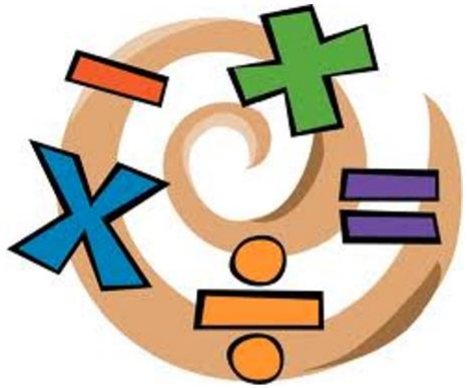
So,

The circumference of any circle = π x Diameter

	A	B	C	D
1	**Names:**	**Diameter**	**Circumference**	**Circumference ÷ Diameter**
4	Grace	1.5	4.7	3.13
5	Melanie	1.4	4.4	3.14
6	Sasha	1.7	5.3	3.12
7	Erina	1.1	3.5	3.18
8	Irdina	2.6	8.2	3.15
9	Tian Yi	1.2	3.8	3.17
10	Arra	1	3.1	3.10
11	Abeerah	1.2	3.8	3.17
12	Anaya	1.7	5.3	3.12
13	Cheryl	1	3.1	3.10
14				

Heuristics Skills

RAFFLES GIRLS' PRIMARY SCHOOL
MATHEMATICS
PRIMARY 6

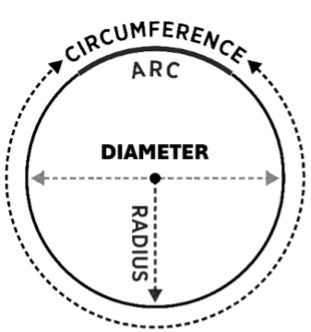


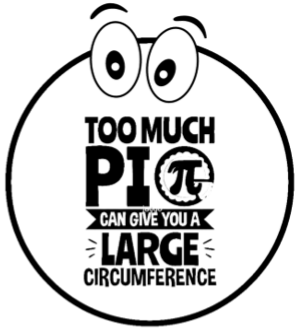
Whole Number Problem Sums

Key Concepts	Completed
1. Constant Difference	
2. Proportion / Grouping	
3. More than / Less than with Internal Transfer	
4. More than / Less than	

Ratio Problem Sums

Concepts	
1. Repeated Identity	
2. One Item Constant	
3. Constant Total	
4. Constant Difference	
5. Part - Whole	
6. Number & Amount	
7. Gaps & Difference	





CIRCLES BOOKLET

S/N	Key Concept	
1	Useful Notes: – Different types of π – Formulae for circumference & area of circles – Basic shapes in circles – Thinking routine for composite figures	
2	Perimeter in Composite Figures	
3	Area in Composite Figures	
4	Visualisation & Transformation (Cut-and-Paste)	

Polya's 4 Steps to Problem Solving

UNDERSTAND

- Read the question carefully
- Take note of key words / information
- What are you asked to solve?

PLAN

- Think about similar problem you have solved before.
- Any clues to guide you on the strategy to be applied here? e.g make a list, draw a model etc

SOLVE

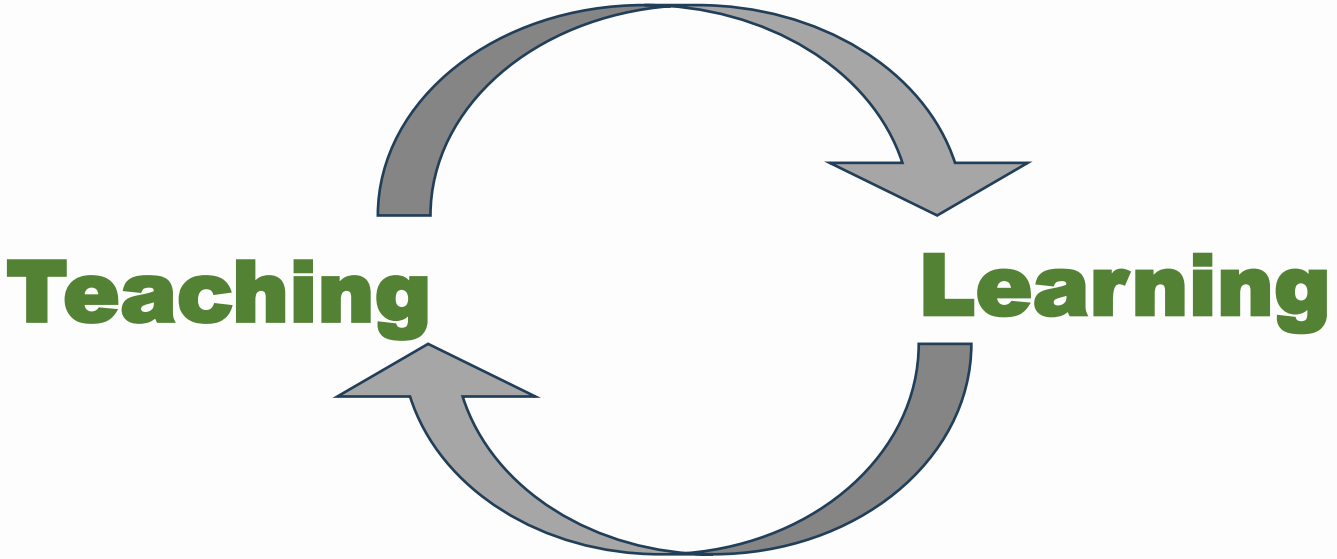
- Follow your plan step by step.
- Write the equations and check each step as you go

CHECK

- Does your answer make sense?
- Does your answer fit the conditions given in the question?
- Do you need to include any units in your answer?

Formative

ASSESSMENT



ASSESSMENT

Summative

Formative Assessment

- Daily work
- Topical Review
- Teacher's observation and feedback

P6 Standard Mathematics

Weighted Assessment 1	Weighted Assessment 2
Term 1 Week 9	Term 2 Week 9
30 marks	30 marks
Topics: • Whole Numbers • Fractions	Topics: • Ratio • Percentage • Measurement

P6 Foundation Mathematics

Weighted Assessment 1	Weighted Assessment 2
Term 1 Week 9	Term 2 Week 9
30 marks	30 marks
Topics: • Whole Numbers • Fractions • Decimals	Topics: • Percentage • Average • Area of Triangles

PSLE Standard Mathematics Exam Format

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

PSLE Foundation Mathematics Exam Format

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

Good habits for your child to adopt

- Read the question carefully
- Take note of key words and information given.
- Present solutions clearly
- Annotate or write short statements for the working
- Check that they have computed the answer correctly at each step before moving on to the next step
- Include relevant units in the answer
- Read the question again to ensure that they have answered the question

Empowering Math Learning at Home

- Show the relevance of Math in real-life
- Play Math Games
- Provide a supportive environment
- Encourage a Growth Mindset

Thank you!