

P1 Curriculum

Mathematics 2024

Content

- Math Learning in SBPS
 - Teaching Approaches
 - Programmes & Resources
- How Can I Help My Child?

- Partnership with School and Teachers

Teaching Approaches

Concrete-Pictorial-Abstract (C-P-A)

ICAN: Gradual Release Responsibility (GRR)

- I Do, We Do, You Do

Concrete-Pictorial-Abstract (C-P-A)

The learning of Mathematics concepts is progressive. manipulatives \rightarrow pictorial cues \rightarrow abstract representation



This is to help students **build strong foundation** in primary Math through a structured teaching sequence and supporting manipulatives and materials based on the (CPA) approach.

Examples of manipulatives used in teaching of Math









Improving Confidence and Achievement in Numeracy (ICAN) Strategies

The main objective of this strategy is to raise the confidence and achievement of learners. Teachers implement ICAN strategies in class by:

- Fostering a positive class climate and building routines
- Understanding the learning needs and matching pedagogical strategies
- Using available resources to diagnose and intervene appropriately



Gradual Release of Responsibility (GRR)

I Do - Teacher demonstrates

We Do – Teacher and Students do together



You Do - Students try on their own



Mathematics

Programmes

R

Resources



Online portal for math learning

Some features of Koobits

- •Colourful interface to capture student's attention and interest
- •Reward system to motivate students to practice consistently
- •Daily set of 10 personalized questions for adaptive learning
- •Topical practices for unlimited revision





Koobits

Online portal for math learning

Features

- Interactive videos & activities that engages the students
- Encourages <u>self-directed learning</u> and <u>learning at their</u> <u>own pace</u> -> <u>Students can login to attempt questions</u> <u>from the item bank anytime</u>
- Motivates students to challenge themselves/ their peers through the various tiers
- E-manipulatives: Greater exposure to different types of manipulatives besides concrete ones used in school



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Koobits

Online portal for math learning



• Login ID and password will be given by the Math teachers. (Will be recorded on Page 1 of the Student Handbook)

Learning Support for Mathematics (LSM)

It is an **early intervention** effort aimed at providing additional **support** to strengthen students' foundation in the early years.

- Students are identified for the intervention through a screening process carried out at the beginning of Primary 1.
- They are taught by a LSM Teacher.
- The programme is extended to students at Primary 2 to 4 who require the extra support.

Experiential Learning

- Application of Mathematical concepts in authentic settings
- Link textbook knowledge to real-world context
- Promote collaborative and communication skills



Financial Literacy

 To inculcate healthy financial habits and build a solid foundation in money basics and money values which will help children become financially savvy and informed consumers as adults.







What form of support can parents provide at home?

We believe that...

Parents are our partners in math education for their children.

• A <u>supportive math learning environment</u> at home

- Expands opportunities for students to internalise and master numeracy skills; and
- Encourages participation in math learning, especially for students who are reserved in class and/or those who need more time to acquire the skills.



The best way to help your child realise the usefulness of math is by using it <u>during recreational situations</u>.

Such as getting your child to:

- check that the cashier has given the correct change;
- Comparing prices at the supermarket (eg. find out which brand's eggs are sold at a cheaper price);
- count the number of plates needed when setting the table;
- figure out the basic shapes of items in the house etc.



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shortest

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Partnership with School and Teachers

- Ensure that your child <u>completes his homework(if any)</u>.
- Encourage your child to <u>attempt all questions</u> in daily assignments.
 - <u>Be cool</u>. Avoid jumping to his rescue when he cannot solve a problem. Guide him through by getting him to verbalise and analyse his thoughts on how he can approach the question.

Review mistakes made. Cover the solution and re-attempt the question.

This is wrong. The correct method is...

- Where and why are you stuck?
- How have you solved similar questions in school?
- Let's see how you arrived at the answer.
- How can we be sure that this answer is accurate?
- ✓ Is there another way to solve this?
- ✓ How can we do this better?

Practise use of appropriate Mathematical language.

Regrouping not borrowing!



Equation not number sentence!

3 + 4 = 7



Believe that every child can be successful in Math. It takes good teaching, coaching, encouragement and practice.

• Talk about math in a positive way.

A positive attitude about math is infectious.

• Encourage perseverance.

Some problems take time to solve.

• Encourage your child to experiment with different approaches to math.

There is often more than one way to solve a math problem.

• Encourage your child to talk about and show a math problem in a way that makes sense (i.e. Draw a picture or use objects)

•When your child is solving math problems ask questions to encourage thinking about math. $h_{\rm elns}$

Why did you...? What can you do next? Do you see any patterns?

Does the answer make sense? How do you know?

• Connect math to everyday life and help your child understand how math

influences them

(i.e. shapes of traffic signs, walking distance to school, telling time).

• Play family math games together that add excitement

"7-Up", Junior Monopoly, Sudoku and Snakes & Ladders.

• Talk with your child's teacher about difficulties he/she may be experiencing.

When teachers and parents work together, children benefit.

Parents & Guardians

