



GUIDE TO EYE LEVEL MATHS

MIATHIS

OVERVIEW

EYE LEVEL MATHS

Why is mastery important in maths?

In Arithmetic operations, concepts are linked and extended from one another (Systematicity). Therefore, step by step mastery is a must.

Grade 1-3

- add
- subtract

- addition
- subtraction

$$\boxed{7 + 5} = 12$$

$$\begin{array}{r} 87 \\ + 15 \\ \hline 102 \end{array}$$

- multiplication

$$\begin{array}{r} 36 \\ \times 9 \\ \hline 54 \\ 27 \\ \hline 324 \end{array}$$

Grade 3-6

- division
- fraction

$$\begin{array}{r} 9 \\ 36 \overline{) 355} \\ \underline{324} \\ 31 \end{array}$$

$$\begin{aligned} 3\frac{5}{9} &= \frac{32}{9} \\ 3 \times 9 & \\ = 2\boxed{7+5} & \\ = 32 & \end{aligned}$$

Mixed number
> Improper fraction

- multiplication
of fraction

$$\begin{aligned} 3\frac{5}{9} \times 6\frac{3}{16} \\ = \frac{\overset{2}{\cancel{3}2}}{\underset{1}{\cancel{9}}} \times \frac{\overset{11}{\cancel{9}9}}{\underset{1}{\cancel{16}}} \\ = 22 \end{aligned}$$

- equation

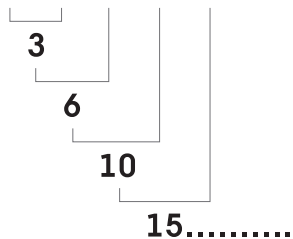
$$\begin{aligned} x \times 3\frac{5}{9} &= 8 \\ x &= 8 \div 3\frac{5}{9} \\ x &= 8 \div \frac{32}{9} \\ x &= \overset{1}{\cancel{8}} \times \frac{9}{\underset{4}{\cancel{32}}} \\ x &= 2\frac{1}{4} \end{aligned}$$

OVERVIEW

EYE LEVEL MATHS

Why is mathematical thinking important in maths?

$$1+2+3+4+5+6+\dots+98+99+100=$$



What is mathematical thinking?

Mathematical thinking is the ability to analyse, understand and solve problems logically. It is a necessary skill to make a strategy (formula) for solving mathematical problems.

$$1+2+3+4+\dots+97+98+99+100=$$

101
101
101
101



Eye Level Maths is learning material that develops mathematical thinking.

CHARACTERISTICS

EYE LEVEL MATHS

Why Eye Level Maths?

The four characteristics of Eye Level Maths can help you experience the learning effects of mathematics.

- 1. Develops mathematical problem-solving skills through BTM & CTM**
- 2. Builds a solid foundation in 5 fundamental areas of maths**
- 3. Masters each math concept through a small step approach**
- 4. Helps students learn effectively with various tools and well-designed booklets**



**BASIC
THINKING**



**CRITICAL
THINKING**

PROGRAM

EYE LEVEL MATHS

What is Eye Level Maths program?

Eye Level Maths enables students to cultivate problem-solving capabilities by improving mathematical ability.

	BASIC THINKING MATHS	CRITICAL THINKING MATHS
Learning Goal	Mastery of Arithmetic Skill	Advance Application and Problem Solving
Level	32 Levels	32 Levels
Learning Contents	<ul style="list-style-type: none">• Numbers• Arithmetic• Equations• Measurement• Variables and Equations• Relationships and Functions• Probability and Statistics• Geometry	<ul style="list-style-type: none">• Patterns and Relationships• Measurement• Geometry• Reasoning• Problem Solving• Spatial Sense
Learning Method	Online & Offline	Offline

BTM OVERVIEW

Learning Approach

EYE LEVEL MATHS

Students can master every topic with systematically composed four-step booklets.

Understanding the Concept

Book: Problem Solving
Level 10

Date _____ Name _____

1 Let's look at the addition problem $60 + 70$.

6 groups of 10 7 groups of 10

Add 6 groups of 10 and 7 groups of 10.

13 groups of 10

There are 13 groups of 10.

It is the same as 1 group of 100 and 3 groups of 10.

$$\begin{array}{r} 60 \\ + 70 \\ \hline 130 \end{array}$$

3

Step 1

Practice

Book: Problem Solving
Level 10

1 Add. (12 points each)

$$\begin{array}{r} 10 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 80 \\ + 30 \\ \hline \end{array}$$

$$\begin{array}{r} 80 \\ + 20 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ + 20 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ + 30 \\ \hline \end{array}$$

$$\begin{array}{r} 70 \\ + 10 \\ \hline \end{array}$$

$$\begin{array}{r} 70 \\ + 50 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ + 40 \\ \hline \end{array}$$

4

Step 2

Problem-solving (Word Problems)

Book: Problem Solving
Level 10

Try This 2

2 Answer the questions. (26 points each)

1 Some students are jumping rope. Roy jumped 52 times and Logan jumped 74 times. How many times did they jump altogether?

Number Sentence _____
Answer _____ times

2 Miss Anderson's class made paper flowers. The boys made 63 paper flowers and the girls made 72 paper flowers. How many paper flowers did the students make altogether?

Number Sentence _____
Answer _____ paper flowers

14

Step 3

Evaluation

Performance Assessment

1 Add. (12 points each)

$$\begin{array}{r} 142 \\ + 753 \\ \hline \end{array}$$

$$\begin{array}{r} 245 \\ + 47 \\ \hline \end{array}$$

$$\begin{array}{r} 232 \\ + 647 \\ \hline \end{array}$$

$$\begin{array}{r} 438 \\ + 24 \\ \hline \end{array}$$

$$\begin{array}{r} 317 \\ + 261 \\ \hline \end{array}$$

$$\begin{array}{r} 579 \\ + 19 \\ \hline \end{array}$$

$$\begin{array}{r} 456 \\ + 323 \\ \hline \end{array}$$

$$\begin{array}{r} 825 \\ + 58 \\ \hline \end{array}$$

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Step 4

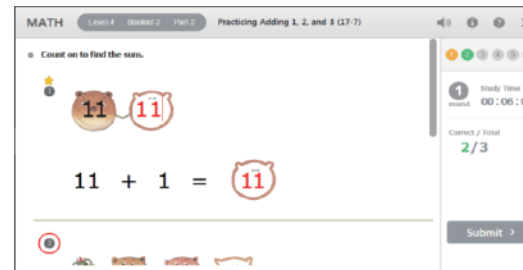
BTM ONLINE OVERVIEW

EYE LEVEL MATHS

Students can study effectively with systematically composed online contents.

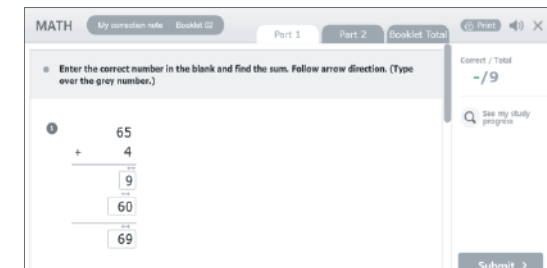
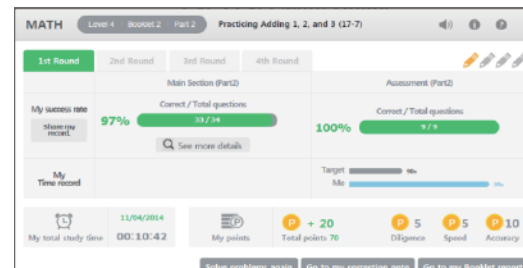
Study

- Main Part
- Automatic Scoring



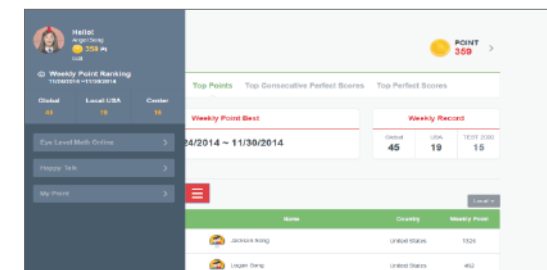
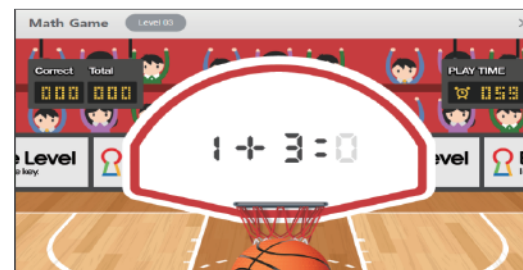
Result Management

- Report per Each Part
- My Correction Note



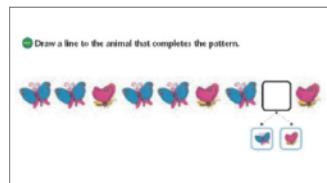
Motivation

- Arithmetic Game
- Point and Ranking

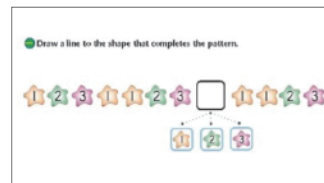


Students can cultivate critical thinking & problem-solving ability through 5 parts of CTM.

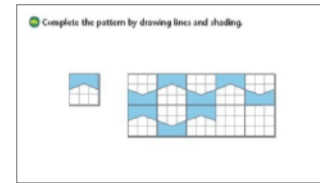
Patterns & Relationships



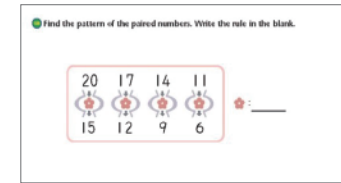
Repeating Pattern



Increasing Pattern



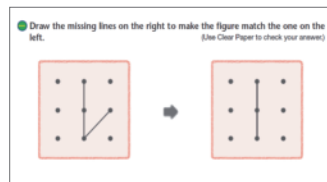
Line, Shape, Domino



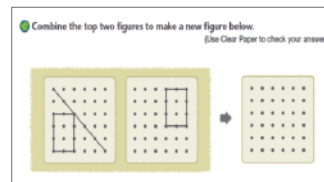
Number Pattern

Learn the basis for function with systematic and diverse patterns.

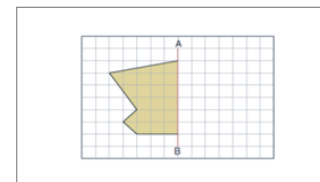
Geometry



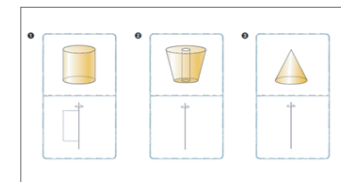
Drawing Figures



Combining Shapes



Symmetry



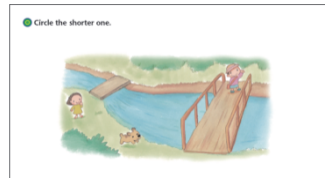
Rotation of Figures

Develop spatial sense and intuitional thinking(plane surface->solid)
by manipulating, observing and practising with teaching tools.

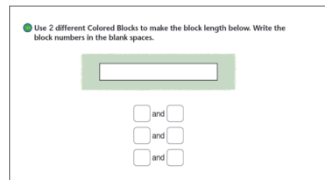
CTM OVERVIEW

EYE LEVEL MATHS

Measurement



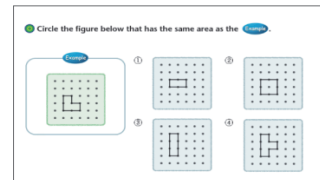
Comparison (Length)



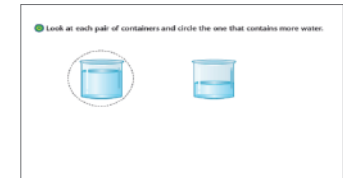
Conserving Lengths



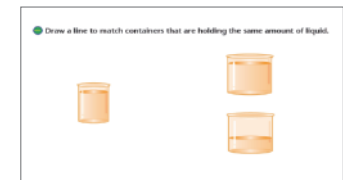
Comparison (Areas)



Conserving Areas



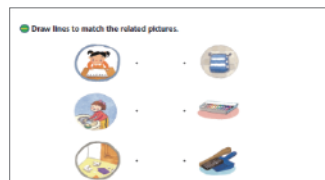
Comparison (Volumes)



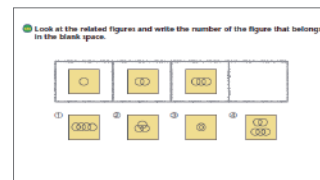
Conserving Volumes

Understand the concept of comparison, conservation and measurement through intuitional comparison of diverse quantities.

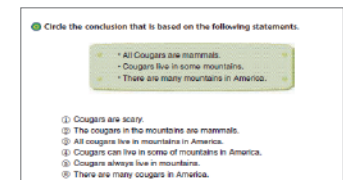
Reasoning



Classifying



Analogy



Analysis and Process

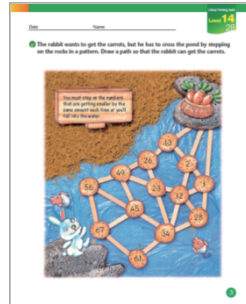
Improve analytical and comprehension skills with grouping and analogy which leads to mathematical thinking.

CTM OVERVIEW

EYE LEVEL MATHS

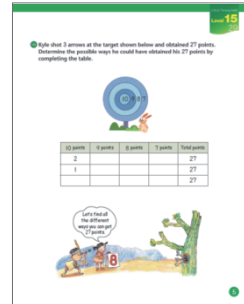
Problem Solving

1



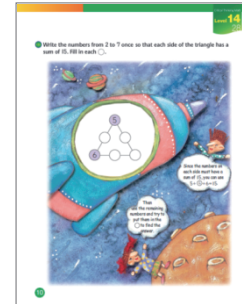
Pattern Recognition

2



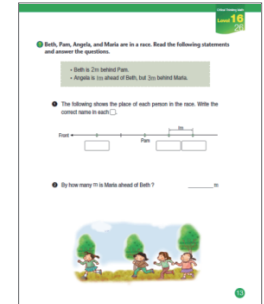
Data Analysis

3



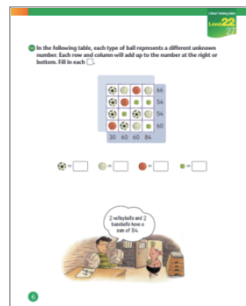
Alternative Methods

4



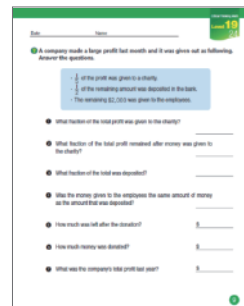
Drawing Diagrams

5



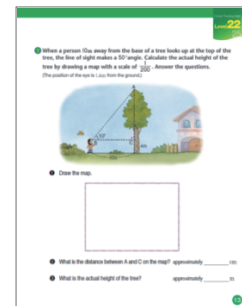
Deduction

6



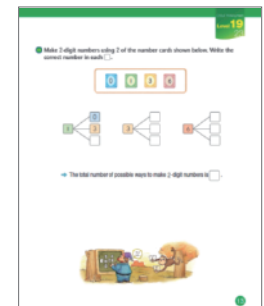
Reverse Calculation

7



Trial and Error

8



Tree Diagram

8 STRATEGIES FOR PROBLEM SOLVING

Develop students' capabilities to solve any type of problem using eight types of problem-solving strategies.

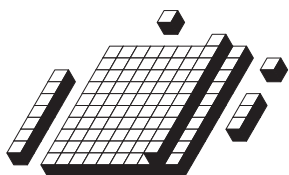
CTM OVERVIEW

Teaching Tools

EYE LEVEL MATHS

Students experience practical applications in mathematics by solving applied mathematical problems using the Eye Level Teaching Tools.

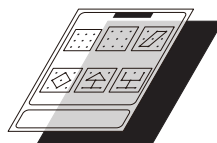
Use for Level: 1~23



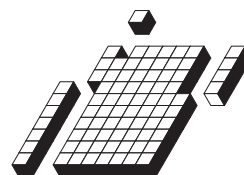
Numerical Figures



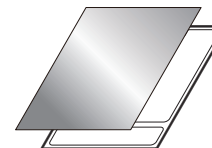
Blocks and Shapes



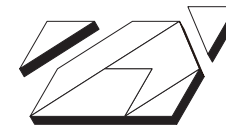
Clear Paper



Colored Blocks

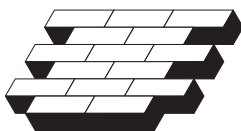


Mirrors

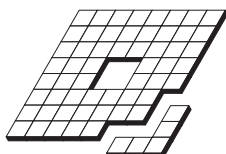


Wooden Blocks

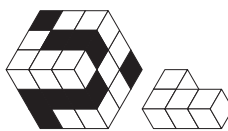
Use for Level: 24~32



Thinking Bricks



Thinking Pentos



Thinking Cubes

ONLINE LEARNING STEPS

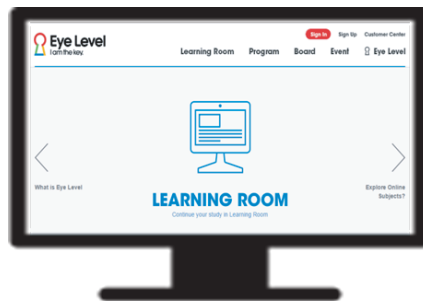
EYE LEVEL MATHS

STEP 1

Go to
“Study.myeyelevel.com”

Both student and parent must sign up first!

Parents must sign in as parent to view the student’s learning status.



STEP 2

Online Practice

Online exercises are graded immediately. Students can work on multiple times what they have missed.



STEP 3

Checking Learning Result

After checking the result at Report, students can solve the problems they got wrong at My Correction Note.

