Primary 5
FPPS Connects

27 Feb 2026

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Primary 5 Curriculum Briefing

- Key Programmes for the Level
- PSLE Scoring and Direct School Admission (DSA) at Primary 6
- Tips for Parents & School-Home Partnership
- Mathematics Workshop for Parents

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Key Programmes for the Level

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Key Programmes for the Levels

Primary 5
• P1 – P6 Leadership Training (T1) • Growing Years Series (T2 & T4) • Inter-Class Games (T2) • Primary 5 Residential Camp (T3) • SS Museum-Based Learning (T3) • NE Show (T3) • Applied Learning Programme (T4)

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PSLE Scoring

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PSLE SCORING BANDS

a) **Reduces fine differentiation** of students' examination results at a young age

- Students with similar scores in each subject are grouped into wider scoring bands measured in 8 ALs.

b) **Reflects** a student's **individual level of achievement**

- Students' ALs for each subject reflect their level of achievement, rather than how they have performed relative to their peers.

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

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GRADING OF FOUNDATION SUBJECTS

- Foundation subject grades are graded in scoring bands from **AL A to AL C**.
- To derive a student's overall PSLE Score for S1 Posting, **AL A to AL C** for Foundation level subjects **are mapped to AL 6 to AL 8 of Standard level subjects respectively**.

FOUNDATION LEVEL AL	FOUNDATION RAW MARK RANGE	EQUIVALENT STANDARD LEVEL AL
A	75 – 100	6
B	30 – 74	7
C	< 30	8

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4 SUBJECT ALs WILL BE ADDED TO FORM THE OVERALL PSLE SCORE

- **The PSLE Score can range from 4 to 32, with 4 being the best**

ENGLISH LANGUAGE	AL3
MOTHER TONGUE LANGUAGE	AL2
MATHEMATICS	AL1
SCIENCE	AL2
PSLE SCORE	**: AL8**

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MOE will post students to secondary school through three Posting Groups – Posting Groups 1, 2, and 3.

PSLE Score	Posting Group(s)	Indicative level for most subjects at start of Secondary 1
4 - 20	3	G3
21 - 22	2 or 3	G2 or G3
23 - 24	2	G2
25	1 or 2	G1 or G2
26 - 30 (with AL7 or better in EL and MA)	1	G1

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FIND OUT MORE ON THE PSLE-FSBB MICROSITE

https://www.moe.gov.sg/psle-fsbb/index

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Direct School Admission (DSA)

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What is DSA-Sec?

DSA-Sec seeks to broaden the **recognition of talents and achievements beyond academic grades**. DSA-Sec allows P6 students to apply to certain secondary schools before taking PSLE.

Students apply to DSA-Sec based on their talent in sports, CCAs and specific academic areas.

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DIRECT SCHOOL ADMISSION (DSA)

Some talent areas for DSA Application:

- Sports and games
- Visual, literary and performing arts
- Debate and public speaking
- Science, Mathematics and engineering
- Languages and Humanities
- Uniformed groups
- Leadership

Use **SchoolFinder** *to explore the list of schools and programmes for Direct School Admission.*

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Important to take note of the following on DSA-Sec:

- If your child is admitted to a secondary school through DSA-Sec, they are <u>not allowed to</u>:

- Submit school choices during the Secondary 1 (S1) posting process.

- Transfer to another school. They must commit to their chosen school for the duration of the programme.

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SCHOOLS THAT ONLY PARTICIPATE IN DSA-SEC

The following specialised independent schools accept students **only through the DSA-Sec process**:

1. **NUS High School of Mathematics and Science**
2. **School of Science and Technology (SST)**
3. **School of the Arts (SOTA)**

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SCHOOL THAT ONLY CONDUCTS SCHOOL-BASED ADMISSION

The following specialised independent school only accepts students through its **own admission process**:

- **Singapore Sports School**

Refer to the school's website for information on its application process and timeline.

FIND OUT MORE ON THE DSA-SEC MICROSITE!

https://www.moe.gov.sg/secondary/dsa

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Tips for Parents to Support your child

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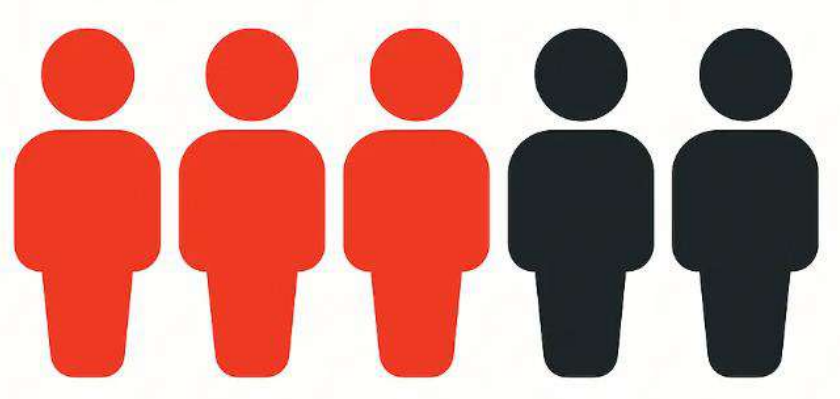
Transition into Upper Primary

Helping your child thrive through academic transitions.

Did you know?

About **3 in 5** of our Primary 5 & 6 students indicated the following in the Termly Check-in Survey:

"I feel stressed about my studies because my parents will be disappointed if I don't do well."

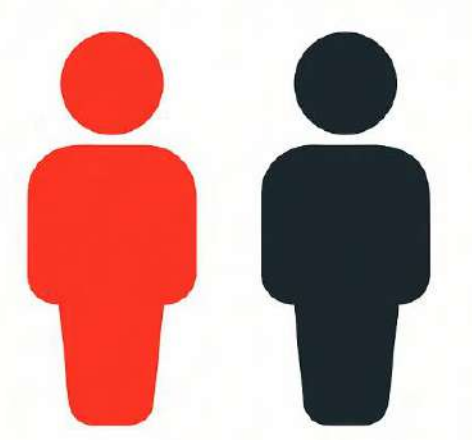


3 in 5 worry about disappointing their parents

Did you know?

1 in 2 of our Primary 5 & 6 students indicated the following in the Termly Check-in Survey:

"I feel stressed about my studies because I expect myself to do very well."



1 in 2 have high self-expectations for their academic results

What your child may be experiencing

Your child may be experiencing

- **Fatigue** from balancing a more demanding upper primary curriculum with heavier CCA and other commitments

- **Stress and anxiety** from the preparation needed for Weighted Assessments (WA), the End-of-Year Examination (EYE), and the upcoming PSLE

- **Worry** about failing or not meeting expectations set by themselves or by others (e.g. peers, parents, teachers)

- **Disappointment** when results fall short of hopes as well as the time and effort invested

Supporting your child

Tips on how you can support your child

- Remind your child that assessments are important ways to **understand gaps in learning** and to use feedback from these assessments to improve.
- Emphasise that these assessments **do not define a child's worth** or future.
- **Recognise and affirm** your child's effort rather than just the outcomes. Celebrate small improvements.
- Support your child in viewing **setbacks as learning opportunities**, while **acknowledging feelings** of frustration or sadness as part of the process. This will help promote a **growth mindset** – the belief that their abilities can be developed through dedication, effort, and learning from challenges.

Supporting your child

Tips on how you can support your child

- **Manage your own expectations and stress**, including in relation to PSLE performance and secondary school choices, as these can place additional pressure on your child. Reassure your child that they are loved regardless of academic performance.
- Guide your child in drawing up a **balanced schedule** with time for revision, homework, play, exercise, and rest.
- Together with the child, **agree on realistic and specific goals** so that revision is manageable and is something a child feels he has control over.
- Find out exactly what your child is struggling with so you can **get the right help**. This also teaches them that asking for support is normal.

From Child to Tween

Supporting your child through physical and emotional changes.

Understanding your child's changes

Physical changes impact emotions

- Children may experience **anxiety or confusion** about their physical changes
- Hormonal shifts often lead to **mood fluctuations and increased sensitivity**
- Increased **self-esteem challenges** arising from concerns about physical appearance and social acceptance

Be a safe harbour during these stormy years

- Create **safe spaces** for conversations
- **Keep communication channels** open at all times
- **Validate** their feelings without dismissing them
- Be **patient and understanding** with their mood fluctuations and heightened sensitivity

Understanding Mental Health and Well-Being

Mental health: Beyond what you might expect

School: Farrer Park Primary School

What is Mental Health?

Good mental health is more than just the absence of mental illness.

It refers to a state of well-being where we **realise our potential** and can **cope with the varying emotions and normal stresses** that we all experience in our daily lives.

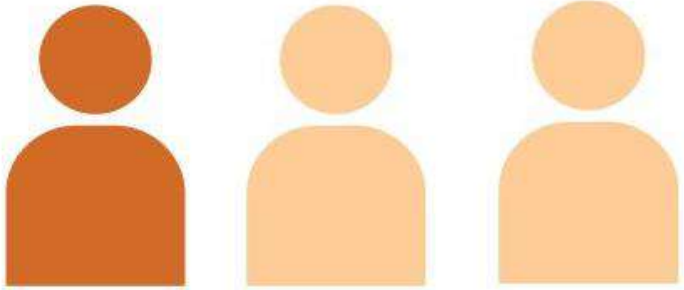
Why Should We Be Concerned About Our Children's Mental Health?

What does the data tell us?

Did you know?

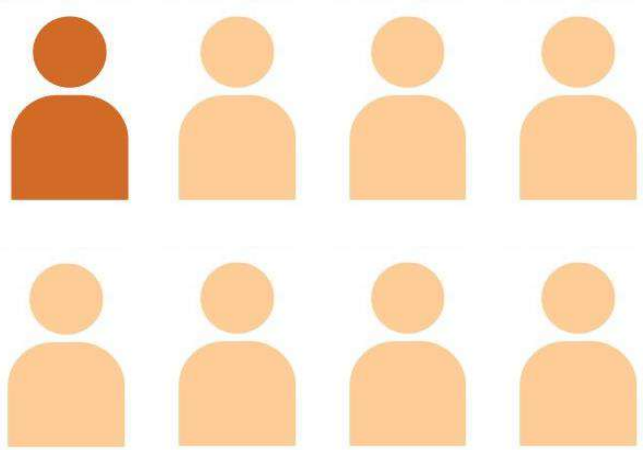
Singapore Youth Epidemiology and Resilience Study (2023)*

1 in 3 youths (37.2%) in Singapore, aged 10-18, experienced symptoms such as sadness, anxiety and loneliness+



+ based on self-reporting scores

1 in 8 youths (12%) had a current mental health condition



Common mental health conditions experienced by children and youth include:

Generalised Anxiety Disorder
(2.75% of those diagnosed)

Major Depressive Disorder
(2.37% of those diagnosed)

Graphics Source: Parenting for Wellness Toolbox

** Conducted by Yeo Boon Khim Mind Science Centre (NUS, NUHS). Most of the data was collected from 2020-2022 and results were published in 2023.*

Did you know?

Tinkle Friend

Source: The Straits Times, 2024

Mental health one of the top reasons primary school kids called helpline in 2023

Mental health became **one of the top five most common topics** that Singapore's young children anonymously asked the Tinkle Friend service in 2023, alongside issues related to school, peers and family.

Mental health-related concerns among these children – mainly **aged 13 and below** – include **self-image struggles and emotional distress that presents as fear, anger, anxiety and low moods.**

Among the children who called or chatted with Tinkle Friend in 2020, almost half were upper primary school pupils aged 10 to 12.

What Will Your Child Learn in School?

Find out what your child will learn about **Mental Health and Well-being** during **CCE (FTGP)*** lessons and other programmes.

***Character and Citizenship Education (Form Teacher Guidance Period)**

Primary 5 and 6

During CCE (FTGP) lessons, students will be taught:

Managing Thoughts, Feelings & Behaviour

- Understanding mental health as part of overall health
- Developing healthy coping strategies for stress
- Embracing new learning opportunities
- Managing expectations

Strengthening Sense of Self & Purpose

- Building strong sense of identity during developmental changes

Building Healthy Habits to Maintain Well-being and Safety

- Learning how good habits contribute to personal growth and well-being

Look at the 'I Am, I Can, I Have' statements below and put a tick for those statements that apply to you.

It is okay if you don't have many ticks. With time, you can work on them and build your resilience muscle!

I Am	I Can	I Have
◯ I am willing to learn from my mistakes.	◯ I can choose to think of challenges as new learning opportunities.	◯ I have people who encourage me.
◯ I am confident of my strengths and skills.	◯ I can find different ways to solve my problems.	◯ I have people I trust.
◯ I am respectful of others.	◯ I can find helpful ways to cope with my emotions.	◯ I have people who accept me for who I am.
◯ I am grateful for the people in my life.	◯ I can control my actions.	◯ I have people who care and help me when I need it.
◯ I am open-minded to different options and outcomes.	◯ I can use 'Stop-Think-Do'.	◯ I have someone whom I can talk to about my worries.
◯ I am curious about things around me.	◯ I can use calming down strategies when I need to.	◯ I have someone to show and guide me to do things.
◯ I am responsible for my actions.	◯ I can ask for help when I need it.	
◯ I am _____	◯ I can call/message Tinkle Friend if I need someone to talk to.	
_____	◯ I can _____	
_____	_____	
	_____	

Understand and Care for Myself 3

Taken from P5 CCE Journal P.3

Parents can build their child's resilience by regularly reminding the child of his or her identity, strengths, and support network.

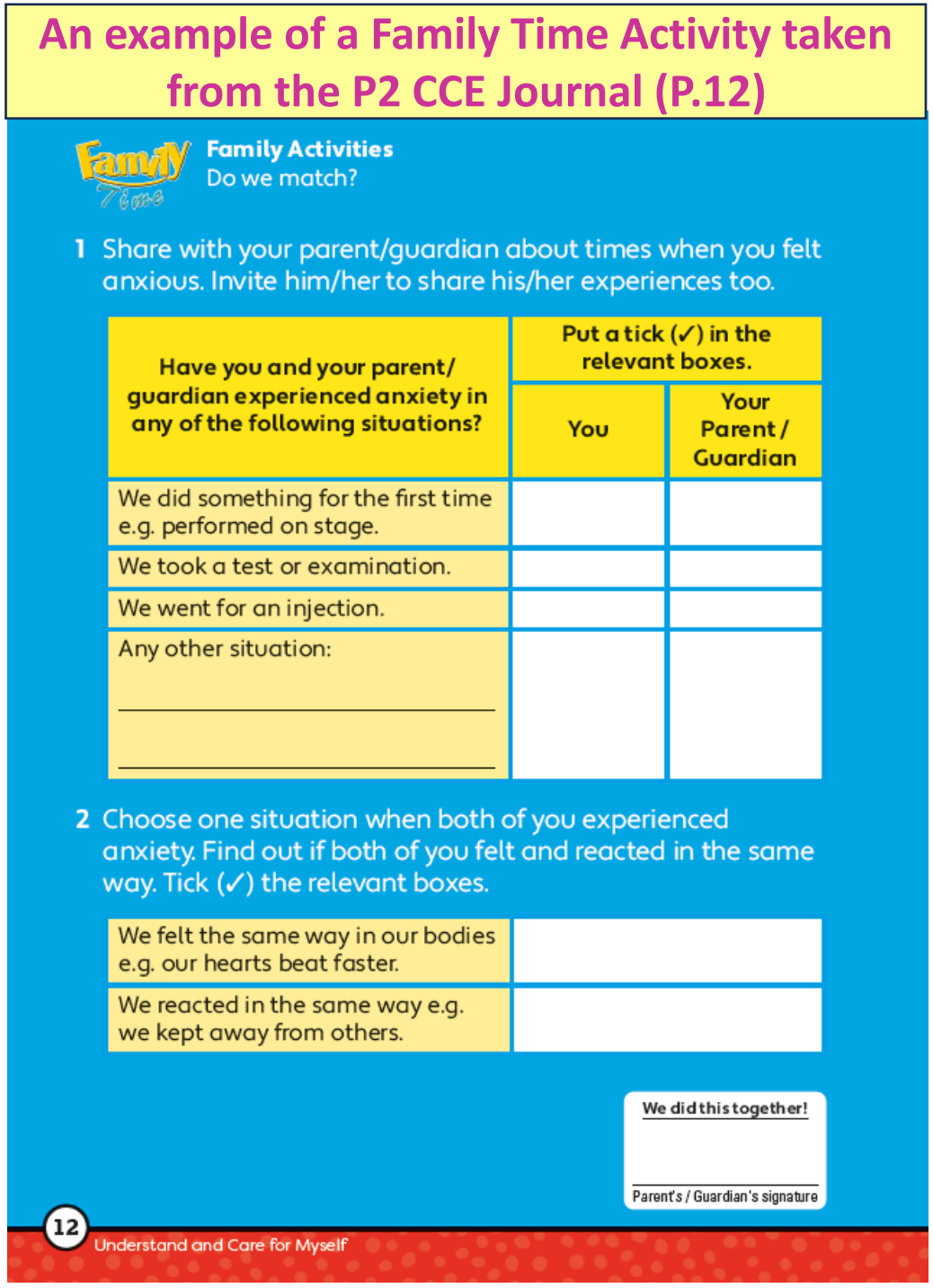
Extending CCE beyond school

Explore the Mental Well-being messages with your child

Every child will have a **CCE (FTGP) Journal**.

We encourage parents to participate in the "**Family Time**" activities inside the journal with your child to reinforce their learning.

An example of a Family Time Activity taken from the P2 CCE Journal (P.12)



Family Time

Family Activities
Do we match?

1 Share with your parent/guardian about times when you felt anxious. Invite him/her to share his/her experiences too.

Have you and your parent/ guardian experienced anxiety in any of the following situations?	Put a tick (✓) in the relevant boxes.	
	You	Your Parent / Guardian
We did something for the first time e.g. performed on stage.		
We took a test or examination.		
We went for an injection.		
Any other situation: _____ _____		

2 Choose one situation when both of you experienced anxiety. Find out if both of you felt and reacted in the same way. Tick (✓) the relevant boxes.

We felt the same way in our bodies e.g. our hearts beat faster.	
We reacted in the same way e.g. we kept away from others.	

We did this together!

_____
Parent's / Guardian's signature

12 Understand and Care for Myself

School Programmes and Initiatives to support students' mental health

- Mental Health Talk for all Students
- Stress Management Talk for Upper Primary Students
- Mindful Practice
- FTGP Lessons

Primary 5 **FTGP Lessons**
• New Learning Opportunities • Stressbusters

Parenting with confidence: Cyber Wellness

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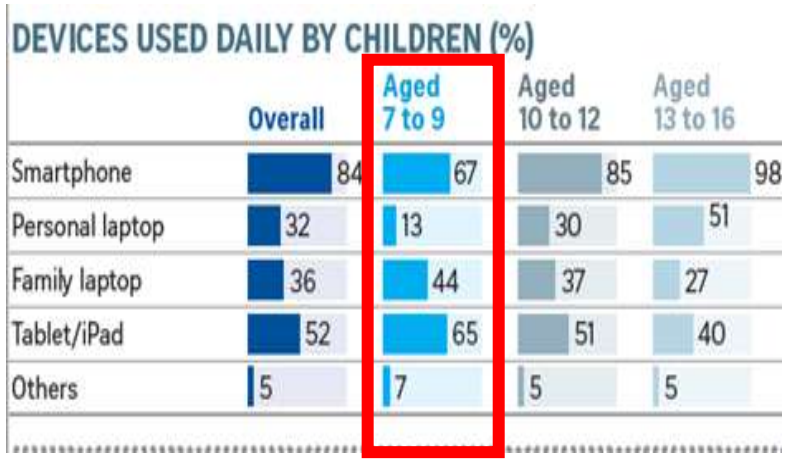
What is Cyber Wellness?

67% of children aged seven to nine in Singapore use smartphones every day, and are active on social media



Source: The Straits Times, 7 Feb 2021

Age when they started using social media

Current age/ Starting age	Overall	Age 7 to 9 years old	Age 10 to 12 years old	Age 13 to 16 years old
3 years old or below	9%	17%	6%	4%
4-6 years old	25%	42%	24%	11%
7-9 years old	39%	41%	46%	31%
10-12 years old	22%	NA	24%	40%
13-16 years old	5%	NA	NA	14%

Parents may not be aware of the online risks

Source: MLC-TOUCH Parent Child Poll Findings, 22 Aug 2023

What is Cyber Wellness?

Cyber Wellness is about our students being able to navigate the cyber space safely.

This is done through our curriculum which aims to

- equip students with the knowledge and skills to harness the power of Information and Communication Technology (ICT) for positive purposes;
- maintain a positive presence in cyberspace; and
- be safe and responsible users of ICT.

What will students learn about Cyber Wellness during CCE (FTGP) lessons?

During CCE(FTGP)* lessons, students will be taught:

Be a positive peer influence online and manage digital footprints

- Speak up and stand for what is right regardless of peer pressure
- Seeking help from trusted adults/sources when needed
- Awareness of permanence of online data and review privacy settings

Importance of cybersecurity

- Protect oneself from phishing, spam, scams and hacking

How to verify online falsehoods

- Use S.U.R.E.* to verify information online

Staying Safe from Pornography

- Understand the impact of pornography on themselves and others
- Reject pornographic content using the 'Stop-Think-Do' strategy.
- Know that keeping, selling, sharing or forwarding pornographic materials is an offence

Encourage our children to share their experiences as they navigate friendships.

*S.U.R.E. stands for **S**ource, **U**nderstand, **R**esearch, **E**valuate.*
It is part of National Library Board's Information Literacy Programme.

***Character and Citizenship Education (Form Teacher Guidance Period)**

What other Cyber Wellness programmes do we have for our students?

- P3 to P6 Cyber Wellness Ambassadors Training Programme

- Cyber Wellness Awareness Day

- Safer Internet Day in collaboration with Total Defence Day

- Assembly Talks on Cyber-related issues conducted by external vendors (e.g. TOUCH Cyber Wellness, The Cyber Security Agency of Singapore (CSA), Singapore Neighbourhood Police)

- Post-exam cyber wellness poster design competition

What are the school rules on digital device use?

- **Use of mobile devices**

➢ Responsibility for safekeeping of devices

➢ Consequences for unauthorised or unpermitted use of a mobile device

How can parents help their child develop good digital habits?

- **Role model** good digital habits
- Have **regular conversations** with your child
- Discuss and **develop a timetable** with your child
- Achieve a **balanced screen time**
- **Use parental controls**

School-Home Partnership

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The Crucial Role of Parents

Your partnership with the school: Supporting your child together.

Supporting Your Child's Mental Well-Being Through School-Home Partnership (SHP)

3 areas where we can work together to foster SHP

1 Respectful Communication

2 Role Models

3 Real Connections

We value your partnership to raise a

'Happy, Kind, and Confident Generation Together'.

Respectful Communication

Open, respectful conversations between educators and parents deepen our understanding of each child, enable a coordinated & holistic support for the child and model healthy communication for our students.

Share observations about your child's emotional state, stress levels, and social interactions

Listen to and understand each other’s perspectives and concerns regarding your child

Communicate kindly and respectfully with one another

Role Models

Model the skills and values our children need for their mental well-being

Demonstrate healthy ways to manage stress, setbacks and difficult emotions

Show children it is okay to ask for help when struggling

Model self-care

Check out this video on MOE YouTube for tips on how parents can support the social-emotional learning of their children.

Real Connections

Building strong bonds and genuine connections helps nurture a sense of belonging and emotional safety, supporting mental well-being of your child

Teach children to recognise and communicate their emotions effectively

Build strong bonds through shared experiences and meaningful conversations

Establish routines that support mental wellness (outdoor time, sufficient sleep, family time, limit screen time, etc)

Providing a safe space for conversations

Tips taken from Parenting For Wellness Toolkit (p.11)

https://go.gov.sg/pfwp11

This QR code takes you directly to page 11 of the toolbox. The full toolbox is available at the end of the presentation.

Things You Can Do

Listen attentively. Maintain eye contact and put away your devices to show that you are paying attention.

Ensure that the environment is conducive and comfortable for your child. E.g. recreate an environment where your child had previously opened up to you, and have the conversation in a place where your child feels they have privacy.

Listen to understand, instead of listening in order to give advice and offer solutions.

Take a step back to calm down if things get heated, and return to the conversation after calming down.

Check that your child is comfortable with you sharing what they have told you with other people. If you have to do so out of concern for their safety, explain to your child why it is necessary.

Things You Can Say

- Use open ended questions to find out more about your child's perspectives and feelings.

  How did that make you feel?

- Acknowledge that your child's opinions and feelings are valid, even if you disagree with them or do not fully understand them.

  I hear that you are feeling frustrated.

- Let your child know that it is natural to experience these feelings, and that you experience them too.

  I can see why you are upset. I would be too.

- If you are not sure what else to do, you can let your child know you are concerned for them, and offer support or a listening ear.

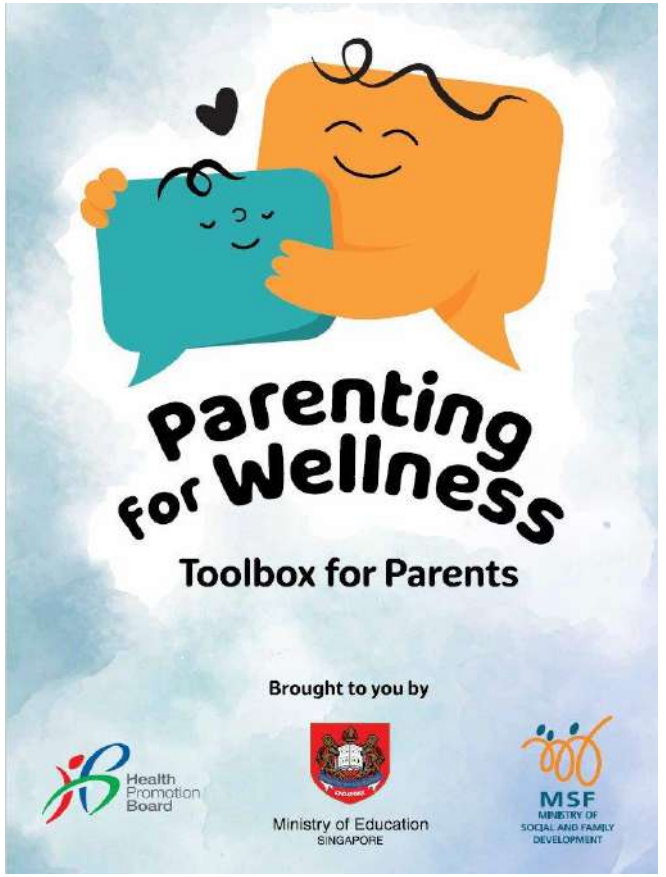
  How can I help? What support do you need from me?

Parenting Resource: *Parenting for Wellness*

Keen to find out more about building strong parent-child relationships, supporting our children's mental well-being, and parenting in the digital age?

For more bite-sized resources (practical tips and strategies), scan the QR code on the right to download a copy of the **Parenting for Wellness Toolbox for Parents**.

https://go.gov.sg/pfw-toolbox-for-parents

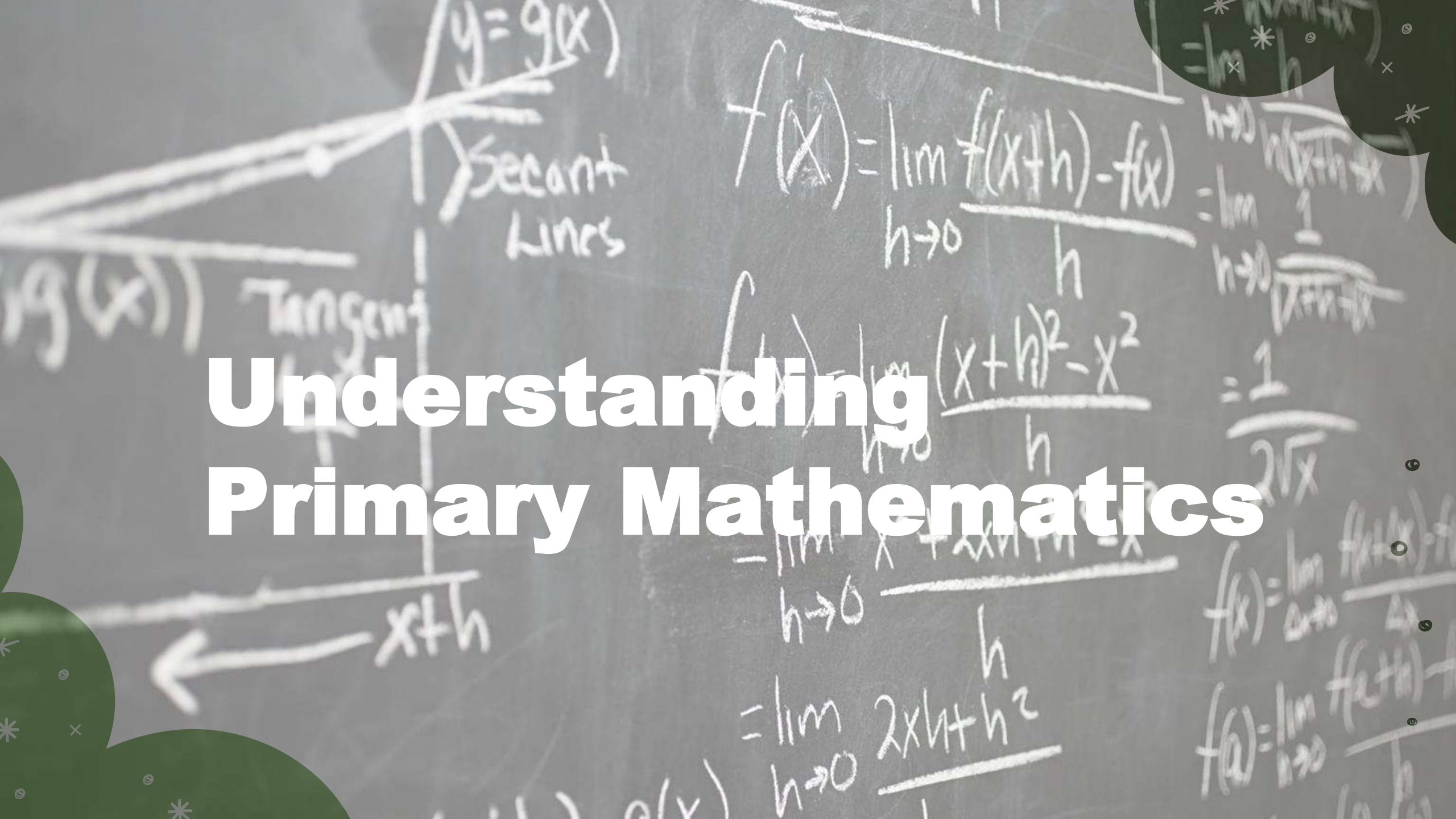


https://go.gov.sg/hpbpfw

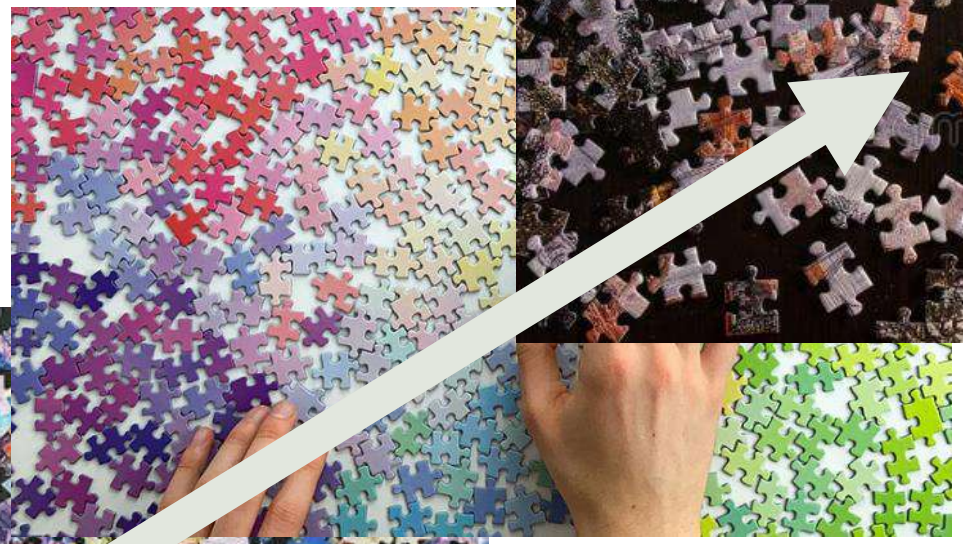
For personalised access to the full suite of parenting resources, check out the **Parenting for Wellness website** on Parent Hub (hosted by HPB)! Scan the QR code on the left to access the website.

Mathematics Workshop for Parents

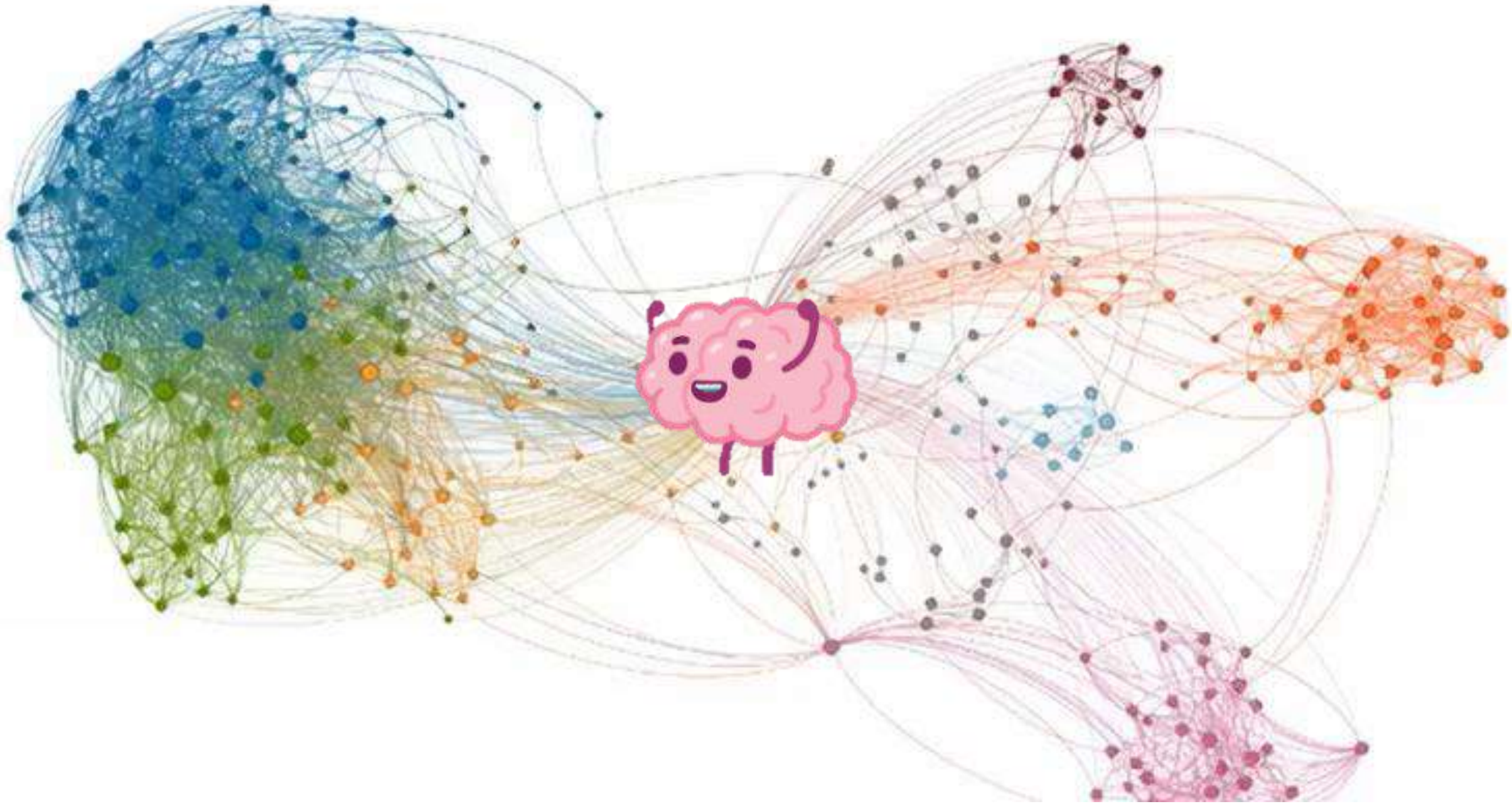
by HOD (MA) Ms Loh Siew Yi


Understanding
Primary Mathematics

AGE



LEARNING OF MATHS



Today's Sharing

Turning 'Uh-Oh' to 'Ohhh!'

Less Strain, More Gain

When Answers Look Right but Aren't

‘Uh-Oh’ to ‘Ohhh!’

‘Uh-oh’ to ‘Ohhh!’ – Math Word Problems

R
Read

U
Understand

L
Link

E
Equations

R
Review

‘Uh-oh’ to ‘Ohhh!’ – Labelling Steps

% of watermelons = 100% - 60% = 40%

% of w =

No. of watermelons and mangoes = $\frac{112}{40}$ x 100 = 280

No. of w and m =

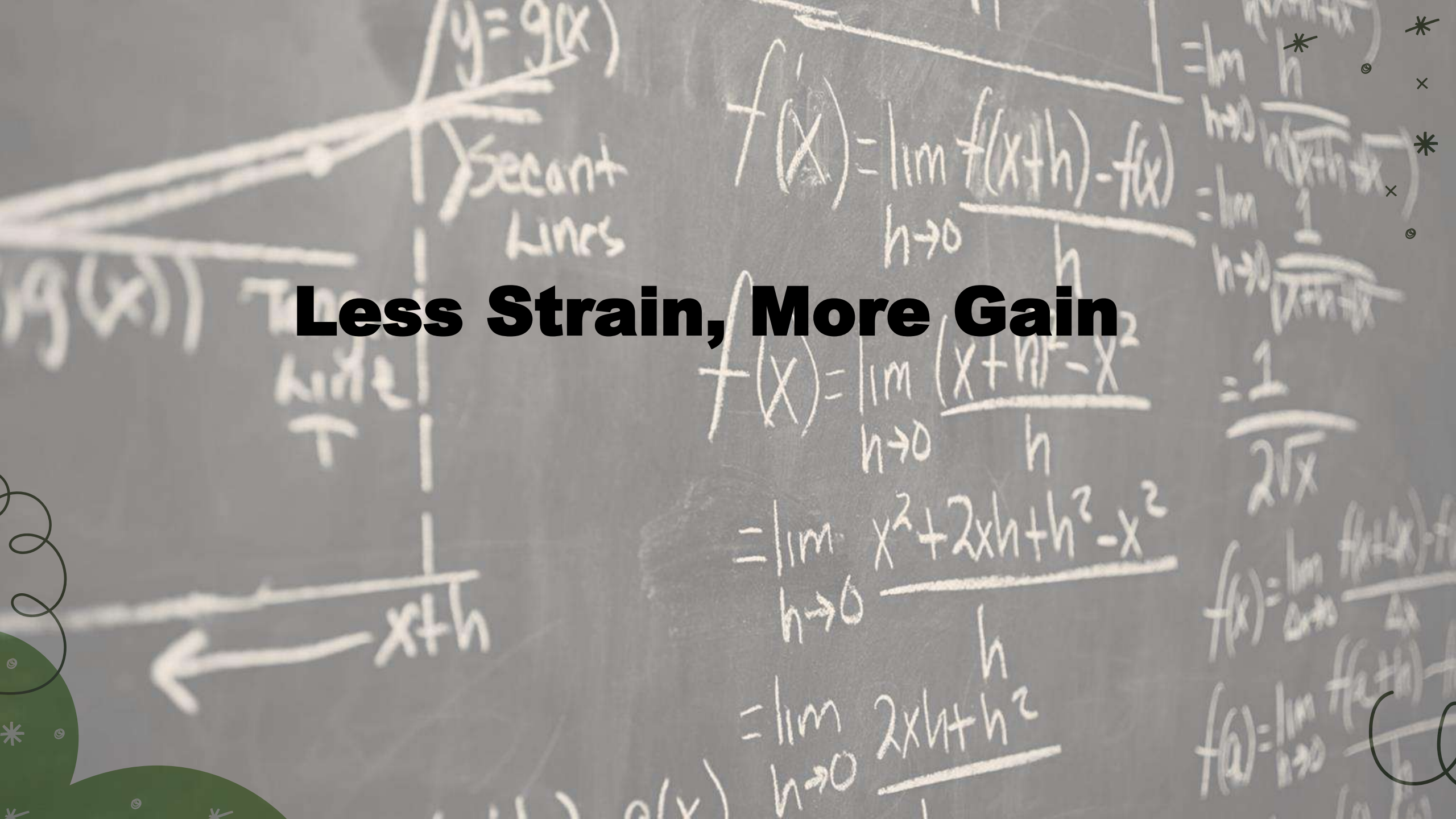
% of watermelons and mangoes = 100% - 60% = 40%

% of w and m =

No. of durians = $\frac{280}{40}$ x 60 = 420

No. of d =

Making Thinking Visible - Clarity



Less Strain, More Gain

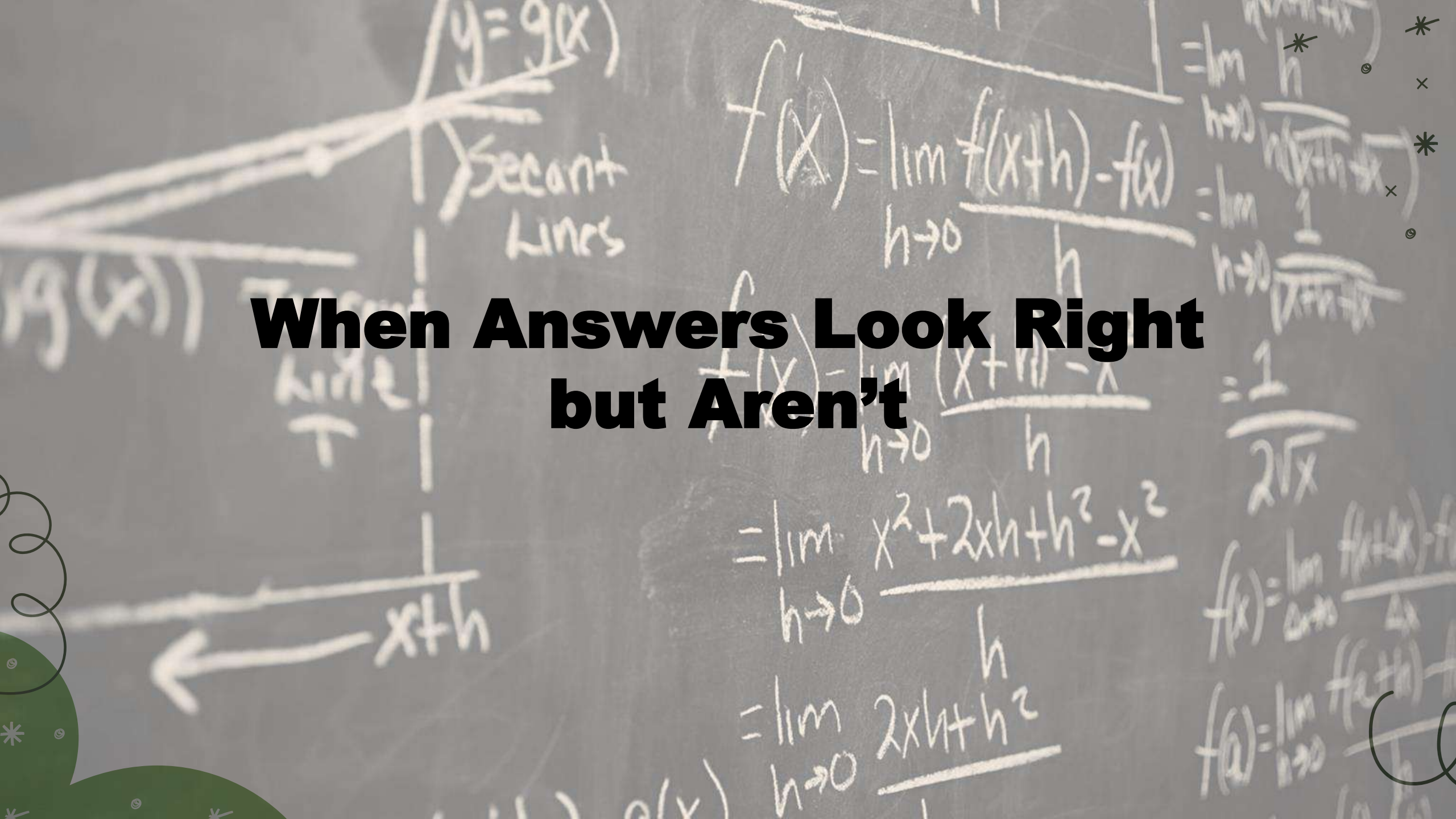
Less Strain, More Gain

Memorise – Reduce Cognitive Load

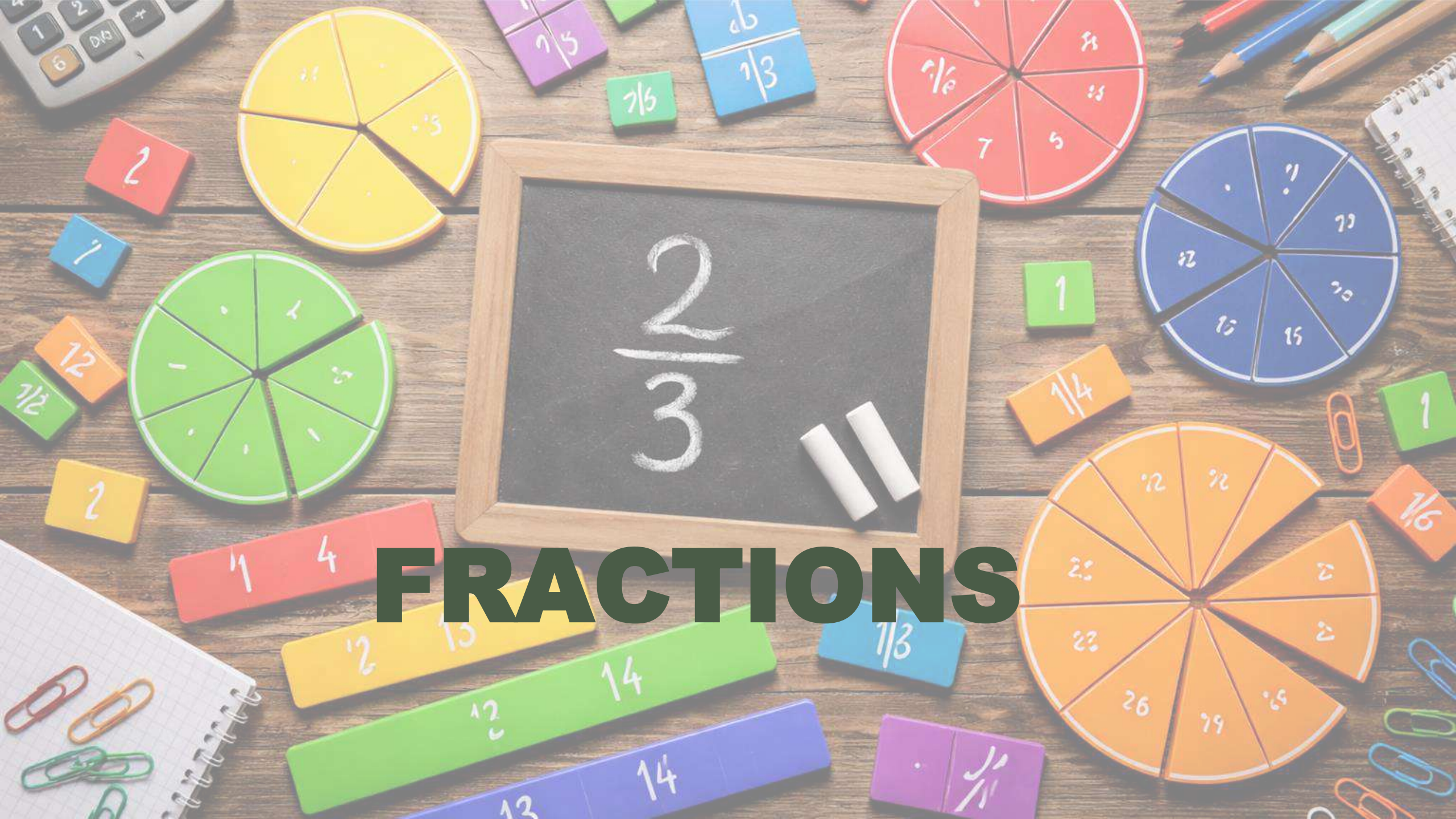
- Addition facts within 20
- Multiplication and division facts
- Properties of shapes – squares, rectangles, parallelogram, rhombus, trapezium, triangles
- Formulae

Visual & Motor Skills

- Play non-digital games (e.g. Blokus, Rummikub, Sudoku, Chess, Checkers, Lego, etc)
- Fold origami
- Draw (e.g. models, using rulers, etc)



When Answers Look Right but Aren’t



FRACTIONS

NUMERATOR AND DENOMINATOR

$$\frac{2}{3}$$

Numerator - Number of equal parts/ groups

Denominator - Total number of equal parts/ groups

Read as two out of three

Simplifying Fractions - Cancellation

Reducing fractions – only numerator with denominator

$$\frac{12}{18} \times \frac{9}{21} = \frac{\cancel{12}^{\,2}}{\cancel{18}_{\,3}} \times \frac{6}{21}$$

$$= \frac{\cancel{12}^{\,\cancel{2}\;2}}{\cancel{18}_{\,\cancel{3}\;3}} \times \frac{\cancel{6}^{\,\cancel{2}}}{21}$$

Reduce numerator with numerator.
Not correct.

COMMON DENOMINATOR

Common denominators – change to common denominators when the fractions refer to the **same total**

Example 1

There are some cookies in a bag. $\frac{1}{4}$ of the cookies are chocolate chip cookies. $\frac{2}{5}$ of the cookies are almond cookies. The rest are butter cookies. What fraction of the cookies are butter cookies?

Should this be changed to the same denominator?

Common denominators – change to common denominators when the fractions refer to the **same total**

Example 1

There are some cookies in a bag. $\frac{1}{4}$ **of the cookies** are chocolate chip cookies. $\frac{2}{5}$ **of the cookies** are almond cookies. The rest are butter cookies. What fraction of the cookies are butter cookies?

Yes because referring to the same total.

Common denominators – change to common denominators when the fractions refer to the **same total**

Example 2

$\frac{5}{7}$ of the students in a Computer Club are boys. $\frac{1}{4}$ of the girls in the Computer Club are in Primary 6. What fraction of the students in the Computer Club are not Primary 6 girls?

Should this be changed to the same denominator?

Common denominators – change to common denominators when the fractions refer to the **same total**

Example 2

$\frac{5}{7}$ **of the students** in a Computer Club are boys. $\frac{1}{4}$ **of the girls** in the Computer Club are in Primary 6. What fraction of the students in the Computer Club are not Primary 6 girls?

No because $\frac{5}{7}$ referring to the students while $\frac{1}{4}$ is referring to the girls.

Common denominators – change to common denominators when the fractions refer to the **same total**

Example 3

Faridah baked some cookies. $\frac{3}{8}$ of them were butter cookies. $\frac{2}{5}$ of the remainder were peanut cookies. The rest were chocolate cookies.
What fraction of the cookies were chocolate cookies?

Should this be changed to the same denominator?

Common denominators – change to common denominators when the fractions refer to the **same total**

Example 3

Faridah baked some cookies. $\frac{3}{8}$ of them were butter cookies. $\frac{2}{5}$ of the remainder were peanut cookies. The rest were chocolate cookies. What fraction of the cookies were chocolate cookies?

No because $\frac{3}{8}$ referring to the total number of cookies while $\frac{2}{5}$ is referring to the remainder.

REMAINDER IN THE ANSWER – DIVIDING FRACTIONS

Primary 6

Remainder in the answer – dividing fractions

Example

A jug contains 4 ℓ of water. Mr Tay uses the water to fill some identical glasses to the brim.

The capacity of each glass is $\frac{5}{8}$ ℓ. How much water is left?

What does the remainder in the answer mean?

Remainder in the answer – dividing fractions

Example

A jug contains 4 ℓ of water. Mr Tay uses the water to fill some identical glasses to the brim.

The capacity of each glass is $\frac{5}{8}$ ℓ. How much water is left?

No. of glasses = 4 ÷ $\frac{5}{8}$ = 6 $\frac{2}{5}$

Many mistaken that $\frac{2}{5}$ refers to the amount of water left but it refers to $\frac{2}{5}$ of a $\frac{5}{8}$ ℓ glass.

Solution

No. of glasses = $4 \div \frac{5}{8} = 6\frac{2}{5}$

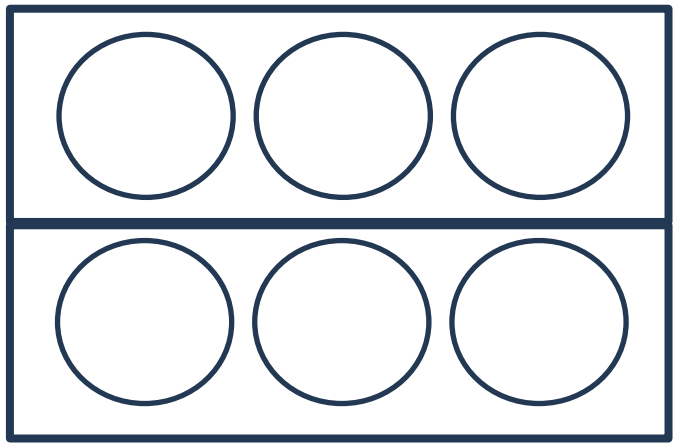
There are 6 completely filled glasses. We are left with $\frac{2}{5}$ of a glass is filled.

Amt of water left = $\frac{2}{5} \times \frac{5}{8} = \frac{2}{8}$ (ans)

A Key Idea on Dividing by a Fraction – What does the equation mean?

Division – grouping equally

$$6 \div 3 = 2$$



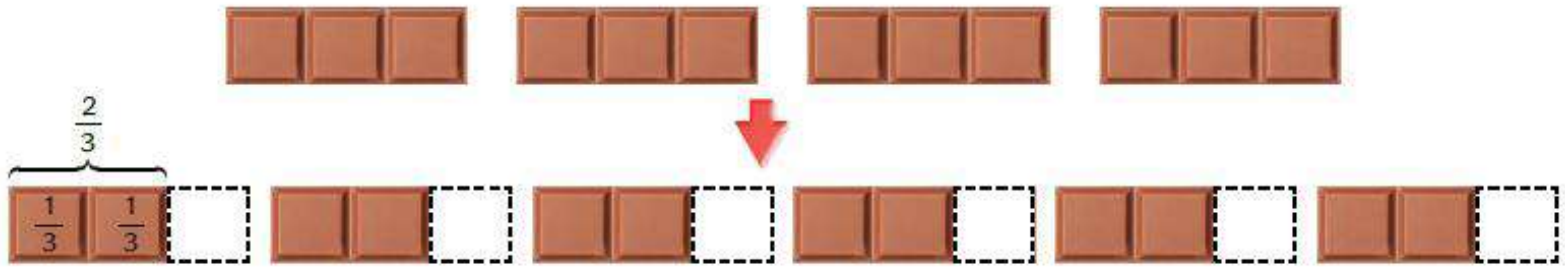
Dividing by a fraction – groups of $\frac{2}{3}$

$$4 \div \frac{2}{3} = 6$$

A group of children share 4 bars of chocolate equally.

Each child gets $\frac{2}{3}$ of a chocolate bar.

How many children are there?



Percentage

Some key ideas in %

Representation of a whole

100% = 1 Whole

100 equal parts

Percent = out of 100

70%

70 equal parts out of 100 equal parts

Common error

Mrs King baked some cookies. 60% of them were chocolate cookies and the rest were butter cookies. There were 240 chocolate cookies. How many butter cookies were there?

60% = 240

Not mathematically correct because % means out of 100.

So 60% has a value of 60 out of 100, which is $\frac{60}{100}$.

60% = $\frac{60}{100}$

60% of cookies = 240

Incorrect representation

60% → 240

ARE THE PERCENTAGES REFERRING TO THE SAME WHOLE?

Primary 6

Are the percentages referring to the same whole?

Example 1

Mrs King baked 600 cookies. 60% of them were chocolate cookies and the rest were butter cookies. She sold some butter cookies and the percentage of chocolate cookies increased to 72%. How many butter cookies did she sell?

Is 60% and 72% from the same 100%?

Are the percentages referring to the same whole?

Example 1

Mrs King baked 600 cookies. 60% of them were chocolate cookies and the rest were butter cookies. She sold some butter cookies and the percentage of chocolate cookies increased to 72%. How many butter cookies did she sell?

No because 60% is referring to the **total before any butter cookies were sold.**

72% is the percentage of chocolate cookies **after sales of butter cookies.**

So the **total has changed and 100% is different.**

Are the percentages referring to the same whole?

Example 2

At a fruit stall, 60% of the fruits are durians. 60% of the remaining fruits are mangoes and the rest are watermelons. There are 112 watermelons. How many durians are there?

Do both 60% refer to the same 100%?

Are the percentages referring to the same whole?

Example 2

At a fruit stall, 60% **of the fruits** are durians. 60% **of the remaining fruits** are mangoes and the rest are watermelons. There are 112 watermelons. How many durians are there?

No because the **first 60% refers to the fruits** while the **second 60% refers to the remaining fruits**.

Solution

% of watermelons = 100% - 60% = 40%

Refers to remainder

No. of watermelons and mangoes = $\frac{112}{40}$ x 100 = 280

% of watermelons and mangoes = 100% - 60% = 40%

Refers to all fruits

No. of durians = $\frac{280}{40}$ x 60 = 420

Algebra

What is Algebra?

A branch of mathematics in which arithmetical operations and formal manipulations are applied to abstract symbols rather than specific numbers.

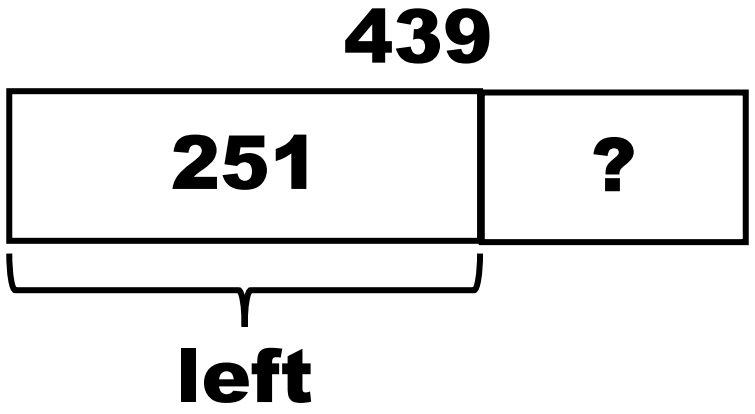
Representing unknowns with letters

https://www.britannica.com/science/algebra

Algebra vs Model

Mdm Mani had 439 beads. She gave some away and had 251 beads left. How many beads did she give away?

Let x be the number of beads given away.



$x + 251 = 439$

$x = 439 - 251 = 188$

Left = 439 – 251 = 188

Models are pictorial representations of algebraic equations.

Readiness of the individual

1) Does he/ she understand algebra/ model conceptually?
2) Can he/ she apply algebra/ model independently, on demand and across varied contexts?

Algebra

Primary 6

Algebra vs Model – Which is better?

Example

Mrs Loke had some red, green and yellow buttons. She had 80 more green buttons than yellow buttons and 15 more red than green buttons. She used $\frac{3}{4}$ of her green buttons and $\frac{1}{2}$ of her yellow buttons to sew on some dresses. She had 290 buttons left. How many buttons did Mrs Loke have at first?

Algebra

	R	G	Y
	$Y+80+15$	$Y+80$	Y
	$= Y+95$		
Used		$\frac{3}{4}(Y+80)$	$\frac{1}{2}Y$
left		$\frac{1}{4}(Y+80)$	$\frac{1}{2}Y$
		290	

$$Y+95+\frac{1}{4}Y+20+\frac{2}{4}Y=290$$

$$1\frac{3}{4}Y+115=290$$

$$1\frac{3}{4}Y=290-115$$

$$=175$$

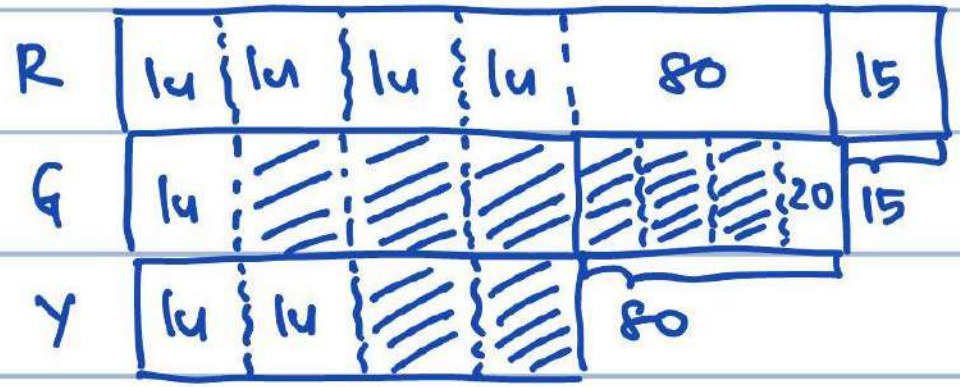
$$3y=175\div 1\frac{3}{4}\times 3$$

$$=300$$

Total at first $= 300+95+80$

$= 475$ (Ans)

Model



$7u + 80 + 15 + 20 = 290$

$7u = 290 - 80 - 15 - 20$

$= 175$

$12u = \frac{175}{7} \times 12$

$= 300$

$\text{Total} = 300 + 80 + 15 + 80$

$= 475$ (Ans)


thank you