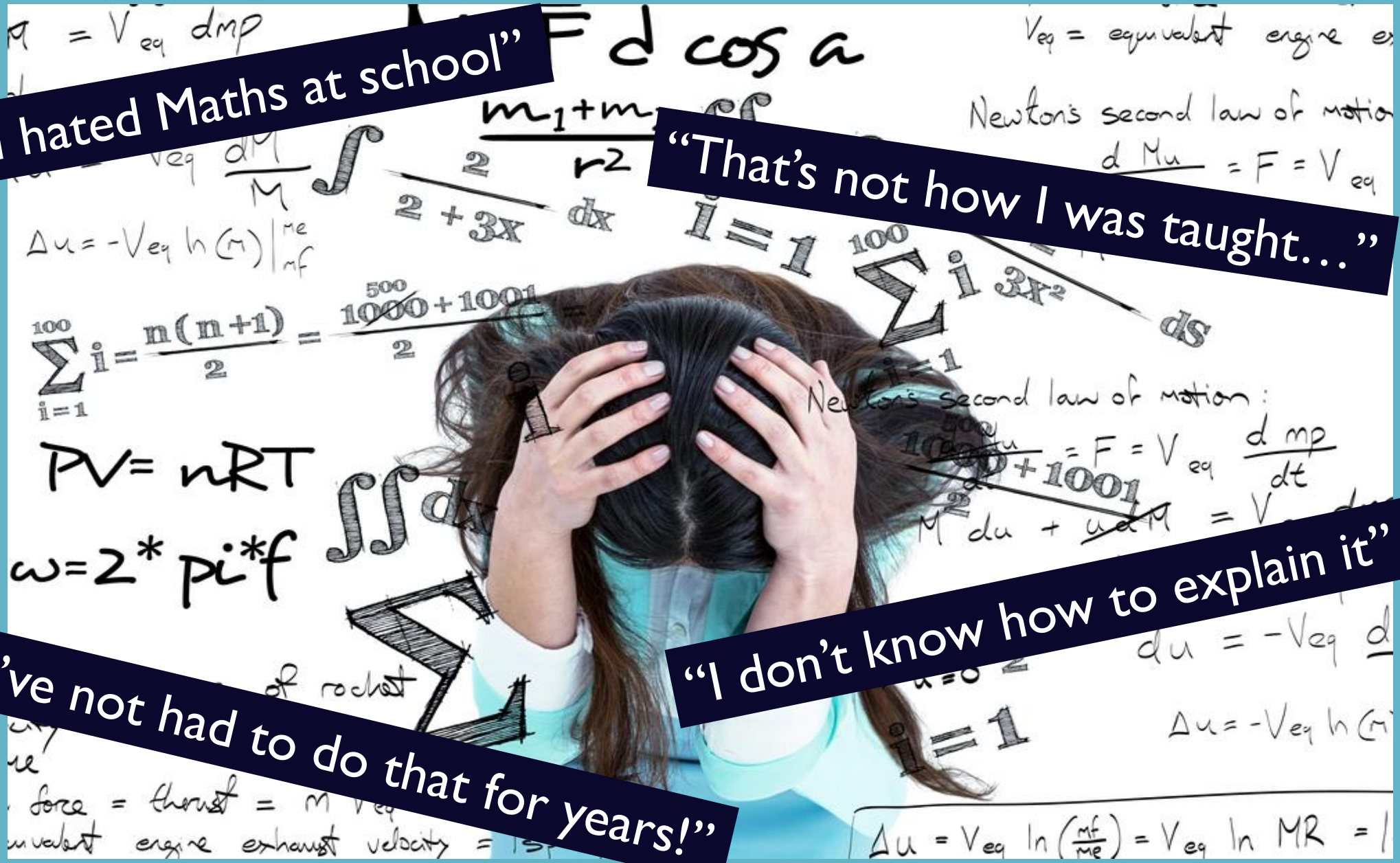
SUPPORTING YOUR CHILD WITH NUMERACY


"I hated Maths at school"
"That's not how I was taught..."
"I don't know how to explain it"
"I've not had to do that for years!"

DON’T PANIC!

THESE THOUGHTS ARE VERY COMMON AND WE ARE HERE TO SUPPORT YOU!

SUPPORTING YOUR CHILD WITH NUMERACY

The level of support and type of support required will vary greatly depending on both the pupil and parental needs.

Over the course of this session we will look at:

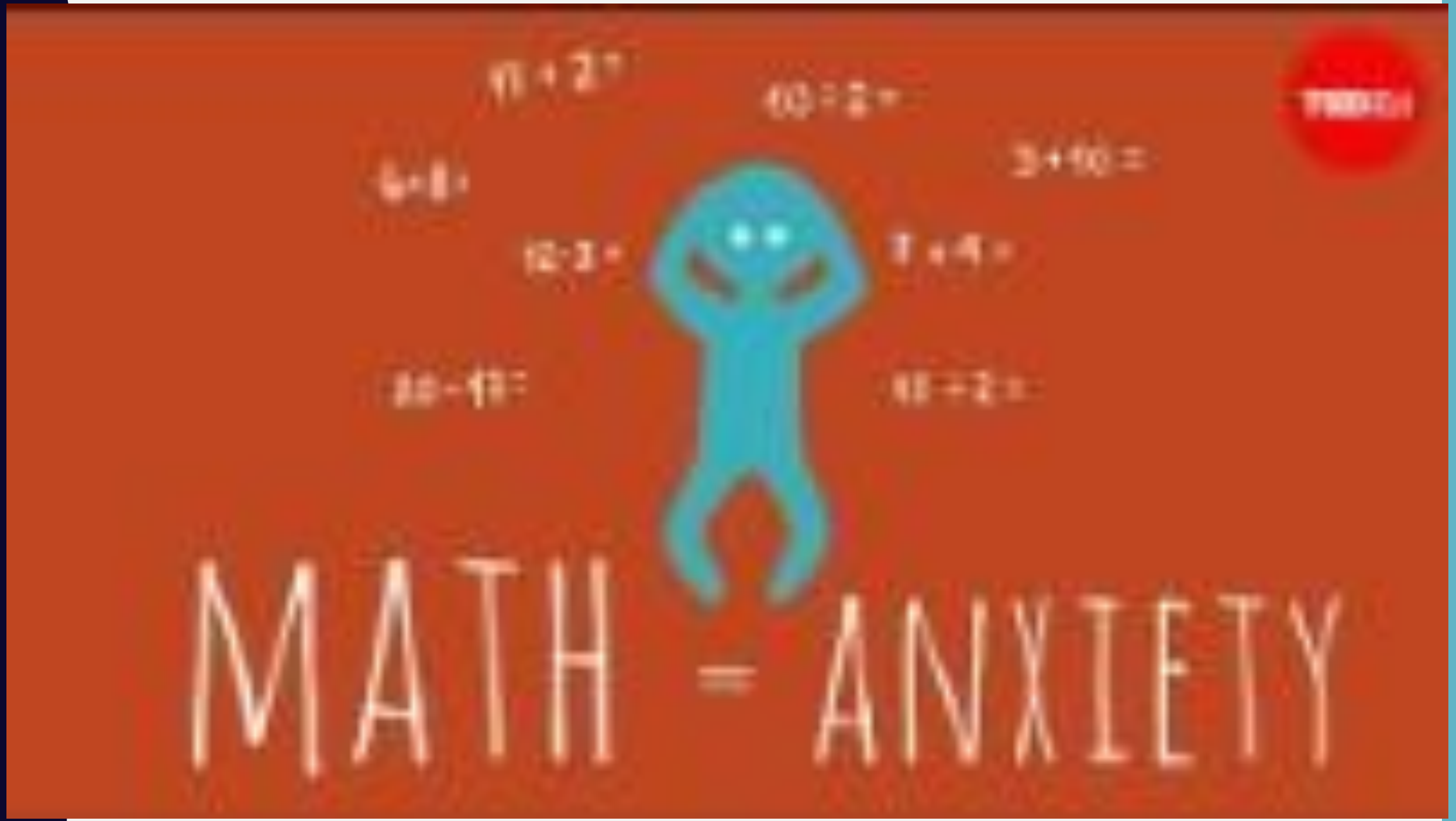
- Maths anxiety
- How to work towards overcoming anxiety around number work
- Growth Mindset and developing resilience with numbers
- How to support your young person in developing their numerical skills
- Homework and revision support at home

MATHS ANXIETY

Maths Anxiety is defined as a negative emotional reaction to mathematics, leading to varying degrees of helplessness, panic and mental disorganisation that arises among some people when faced with a mathematical problem.

An Ipsos MORI poll, commissioned by the Maths Anxiety Trust in the Spring of 2018 found that:
36% of younger (15-24 year-olds) people feel anxious about maths, compared to 10% of older (65+)

Remarkably, about half of the UK adult population have numeracy skills that are no better than those of a primary school child. Worse still, number skills across the UK appear to be deteriorating over time. The UK is the only OECD country where levels of numeracy among those aged 16-24 are lower than those aged 55-64.


MATH = ANXIETY

OVERCOMING MATHS ANXIETY TOP TIPS

Recognising the emotion: Lots of people experience panic and stress when faced with maths, especially if it's been a while since doing any. Trying to recognise that it won't always be this way is important, i.e. that this is the way that you feel now, but not forever.

Easing into it: Getting better at maths doesn't happen overnight, it can be difficult and require persistence. This can be daunting for anyone who experiences maths anxiety. It is important for people to work at their own pace, without the pressure to master a problem straight away. Setting achievable goals, which feel reachable, can help to keep up the motivation while overcoming anxiety.

OVERCOMING MATHS ANXIETY TOP TIPS

Talking it through: In order to overcome maths anxiety, it's important not to struggle alone. If a first attempt to solve something doesn't work, it can help to find support. We will look at where to find support later in the session.

Overcoming maths myths: Changing the way that we think about numbers can make a real difference to our self-confidence. It is helpful to remember that ability to be good at maths isn't something we are born with; it can change over time and we can all be good with numbers.

Use numbers often: It's easy to have our phones set to digital time, use our phone calculators for basic calculations or rely on apps to tell you when the next bus will arrive. By repeatedly exposing yourself to small, everyday interactions with numbers, your confidence and ability will improve.

SUCCESS IN SCHOOL

How we can help young people to be more resilient learners?

Our resilience is often a result of our mindset.

WHAT IS MY MINDSET?

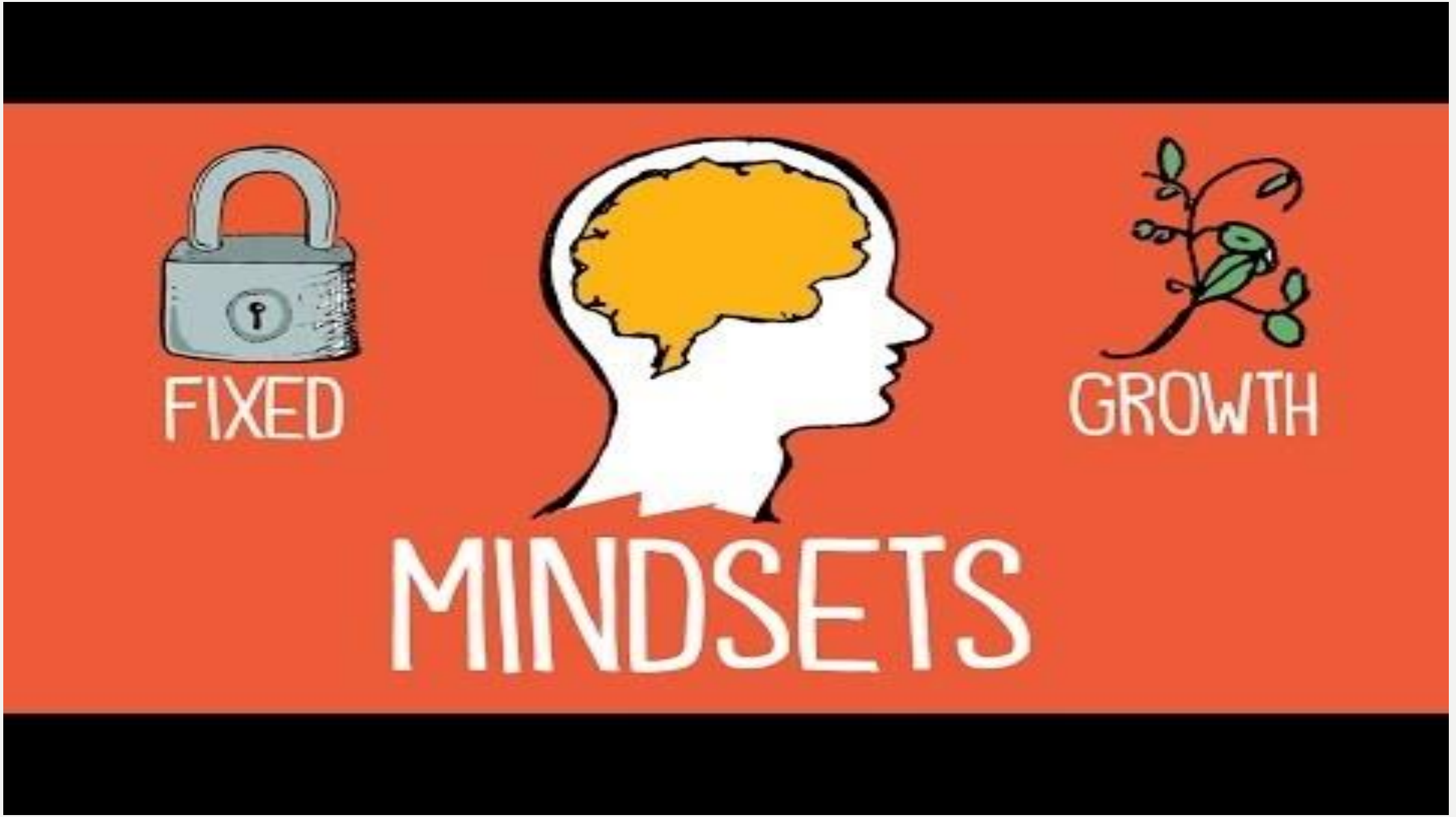
Mindset Quiz

	Strongly Agree	Agree	Disagree	Strongly Disagree
Your intelligence is something very basic about you that you can't change very much.	0	1	2	3
I appreciate when people, colleagues, coaches, teachers, managers give me feedback about my performance.	3	2	1	0
Trying new things is stressful for me and I avoid it.	0	1	2	3
You can always substantially change how intelligent you are.	3	2	1	0
Only a few people will be truly good at sports – you have to be "born with it."	0	1	2	3
Musical talent can be learned by anyone.	3	2	1	0
Truly smart people do not need to try hard.	0	1	2	3

WHAT IS MY MINDSET?

0-6	Strong Fixed Mindset
7-11	Fixed with some growth ideas
12-16	Growth with some fixed ideas
17-21	Strong Growth Mindset

What does this mean?


FIXED
GROWTH
MINDSETS

HAVING A GROWTH MINDSET

Through our lives we will all have a fixed mindset about certain things, it is important to realise this and to remember:

- ✓ Making mistakes is how we learn best
- ✓ It is not important who finished first, as long as you keep trying until you succeed
- ✓ If you never push yourself you will never reach your full potential
- ✓ Hard work and effort are the most important traits for success

HOW CAN WE ENCOURAGE YOUNG PEOPLE TO HAVE A GROWTH MINDSET?

- ✓ Teach them it is OK when things go wrong
- ✓ Talk about mistakes - this can help them learn to identify what they have already tried out that hasn't worked, so they can try again and find what does work
- ✓ Teach them to keep trying to solve a hard problem, even if they can’t see the end solution
- ✓ Praise for effort, improvement and perseverance rather than just achievements

NUMERACY AT HOME

USE NUMBERS OFTEN!

- ✓ **Shopping** – comparing brands and prices to get the best deal, discussing nutritional labels, general budgeting, handing over money and calculating change

- ✓ **Travel** - reading bus and train timetables, using distance speed and time calculations, using money for bus/train tickets

- ✓ **Cooking and Baking** – weighing and measuring, scaling (baking 2 batches instead of 1 … how would this change the ingredients required?), temperature, cooking times

NUMERACY AT HOME

- ✓ **Time** – Change your mobile phone/fitbit/apple watch to have a clock face rather than digital time. Work out when movies/events will finish based on start time and run time.

- ✓ **Money** - Keep track of pocket money / birthday money. This can be done on paper or you could make a spreadsheet! This will help with budgeting.

- ✓ **Play Games** – Games and puzzles are a great way to improve problem-solving in general! There are numeracy based puzzles in newspapers, magazines and online (such as Sudoku) to help numerical and problem solving skills. Many card and board games such as Monopoly, Blackjack, Rummy, and numerous others have a mathematic element.

HOMEWORK / REVISION SUPPORT

- School Website – resources for numeracy support specific to Bishopbriggs Academy
- Common Language and Methodology Booklet and 'How To' Guides
- TEAMS
- Satchel:One
- Websites aimed at young people such as BBC bitesize

COMMON LANGUAGE AND METHODOLOGY BOOKLET

SCHOOL WEBSITE

↓

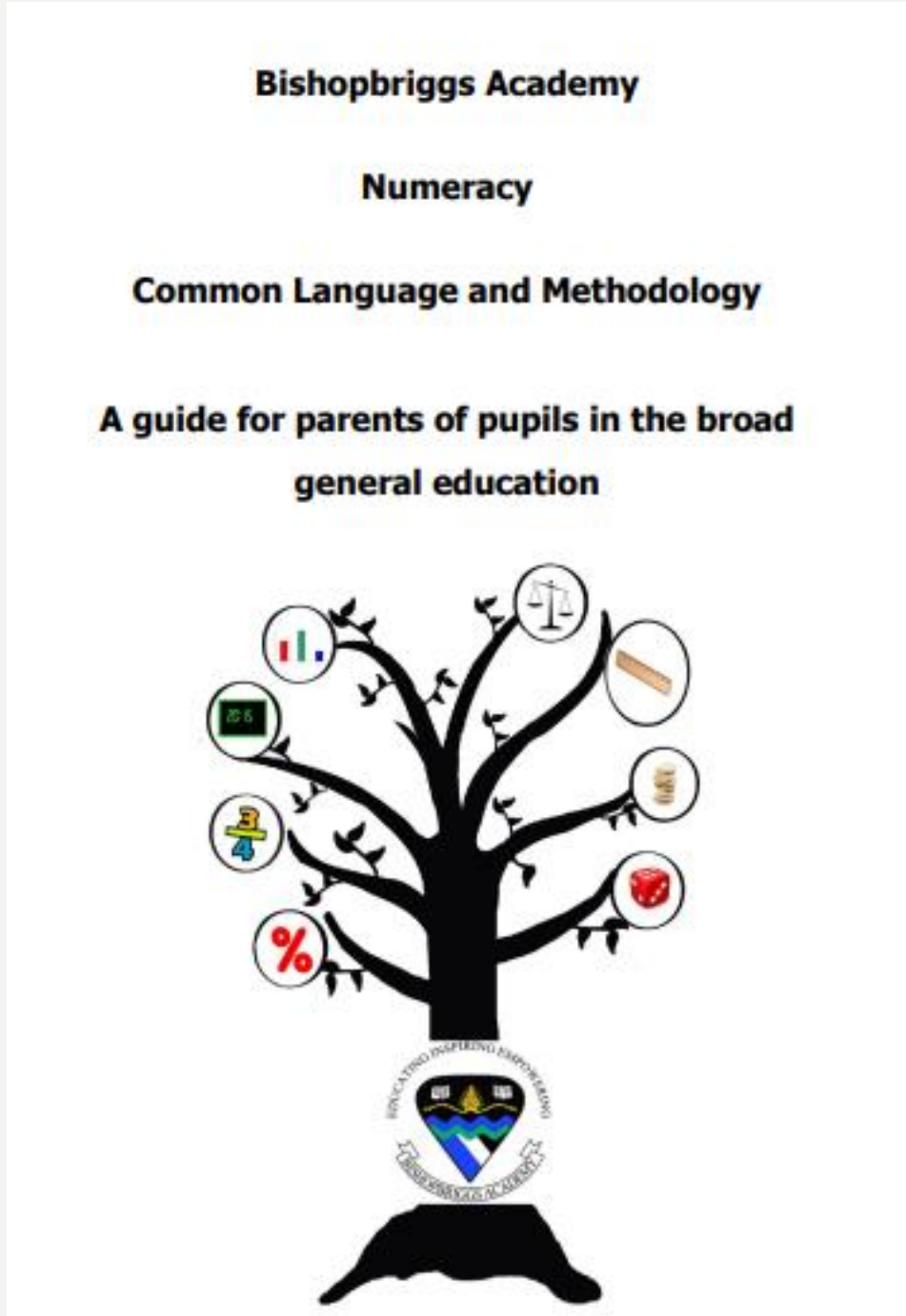
LEARNING

↓

FAMILY LEARNING

↓

ONLINE RESOURCE HUB - NUMERACY



‘HOW TO’ GUIDES

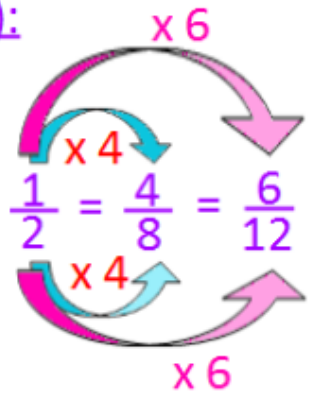
Adding/Subtracting Fractions

Before fractions can be added or subtracted the denominator for each fraction must be made the same. This can be done by:

1. Finding the equivalent - This can be thought of as the opposite of simplifying fractions. Choose any number, and multiply both top and bottom by that number.
2. Simplifying - Look for the highest number that divides both the numerator (top) and the denominator (bottom). This is called the highest common factor.

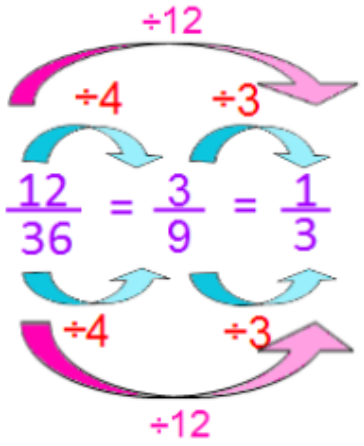
Example 1(Equivalent):

The blue arrows show how we have multiplied by 4 to make an equivalent fraction.
The pink arrows show what happens when we multiply by 6.

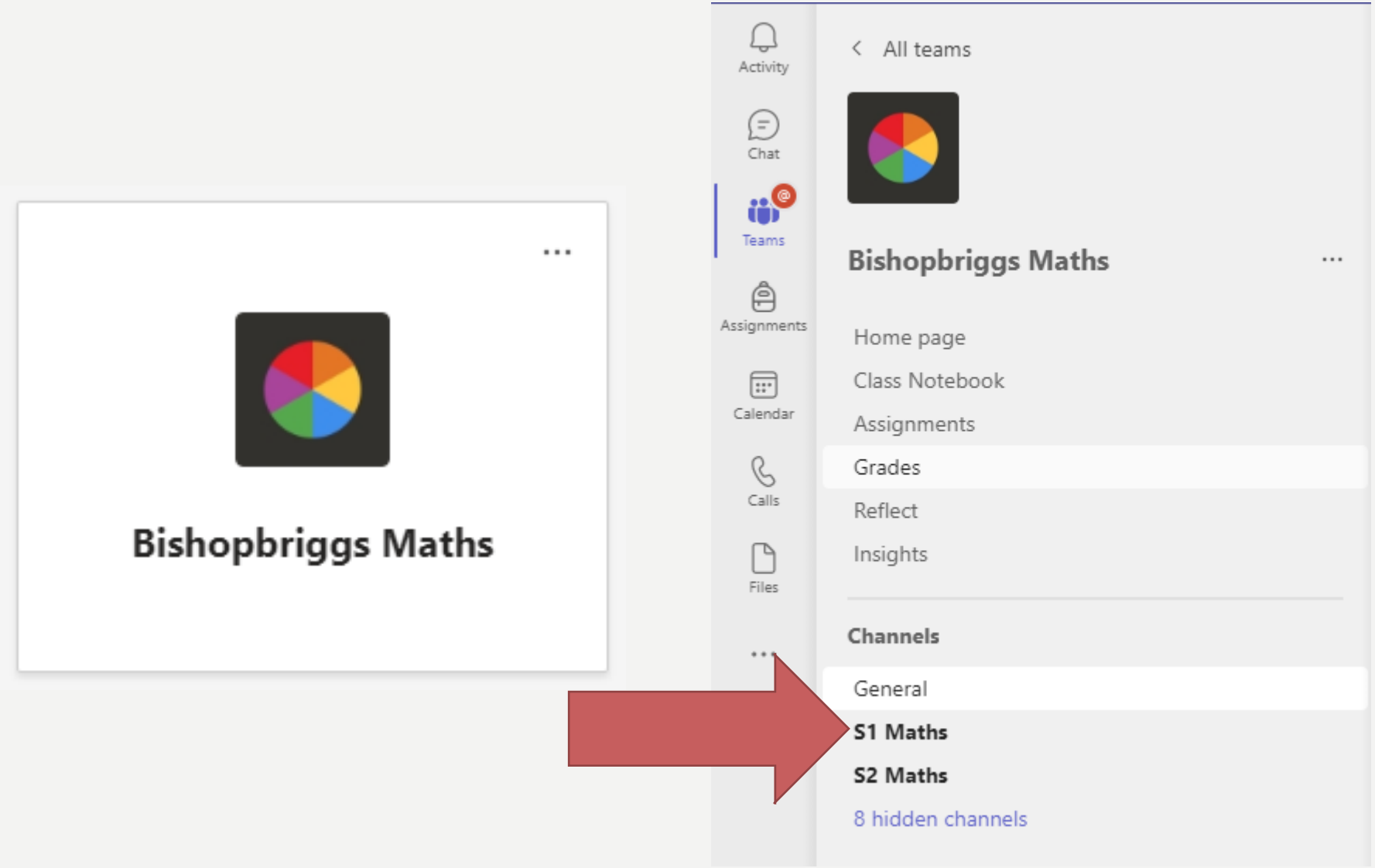


Example 2 (Simplifying):

12 and 36 both divide by 4 and 3. This is one way of simplifing this fraction. Alternatively, you might spot that the HCF is 12, and use this instead.



TEAMS


Bishopbriggs Maths
Activity
Chat
Teams
Assignments
Calendar
Calls
Files
All teams
Bishopbriggs Maths
Home page
Class Notebook
Assignments
Grades
Reflect
Insights
Channels
General
S1 Maths
S2 Maths
8 hidden channels

Lesson 1: Rounding to Decimal Places

- *Slides 3-7 of this PowerPoint*
- *3a Homework Booklet, Page 7, Exercise 1*

Lesson 2: Rounding to Significant Figures

- *Slides 9-13 of this PowerPoint*
- *3b Homework Booklet, Page 7-8, Exercise 2*

Lesson 3: Creating a scale drawing using an appropriate scale

- *Slides 15-18 of this PowerPoint*
- *3b Homework Booklet, Page 8, Exercise 3*

Lesson 4: A Mixture of all 3!

- *3a Homework Booklet*
- *Page 9*
- *Revisit-Review-Revise Exercise 1*

CLICK HERE FOR

3a HOMEWORK BOOKLET

NUMERACY GROWTH MINDSET ACTIVITIES

Look at the following 4 numbers. Try and find one number that doesn't match the others. Take a note of why it is the odd one out. Can you think of any other reasons why another number could also be the odd one out?

22	28
18	27

7	35
21	16

NUMERACY GROWTH MINDSET ACTIVITIES

Write addition or subtraction symbols and equals signs in the grid in order to form equations that are true.

Equations can go forwards, backwards, up or down!

Circle each finished equation.

An example is on the next slide…

NUMERACY GROWTH MINDSET ACTIVITIES

12	8	20	36	3	33	17	30
−							
7	32	39	8	31	16	28	9
=							
5	40	8	14	22	7	29	21
18	10	28	32	6	9	15	30
23	30	4	10	22	16	8	21
15	2	13	22	28	25	3	9