

Developing a Growth Mindset in Math

by Jen Gibson and Danita Stewart

Get to Class Man!

We created a Google Classroom called **Our Mathematical Mindset Mission** <https://goo.gl/CSyFRl> and students in both divisions (grade 7 and 8) joined. Most assignments are outlined in the classroom and responses vary between photos of activities, video taping, reflection writing, comments etc.

Where u at?

My Math Interview

Students completed a series of questions about how they feel about math both currently and in the past to determine a baseline for any possible changes or growth in attitude. Students then videotaped their responses to 1-3 questions of their choice and uploaded them to the Google Classroom.

Half a Brain?

Next we spent time learning about how the brain learns in general and what the left and right side of the brain typically do.

Say What?

We learned
about:

GRIT

STRUGGLE

**TALENT VS.
SKILL**

FAILURE

We started to throw around
words like:

Effort

Persistence

Courage

Success

Dedication

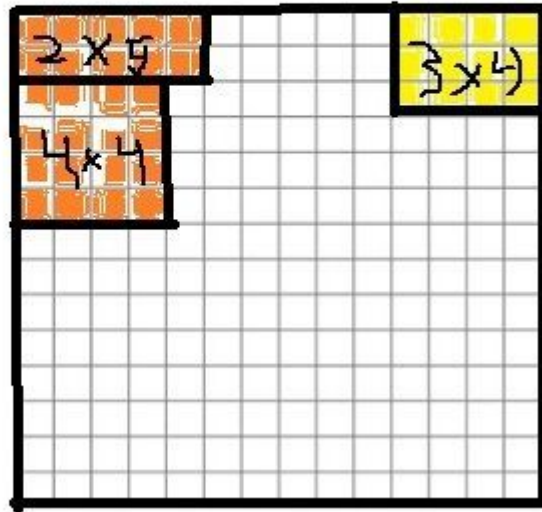
Mistakes

Risks

Creativity

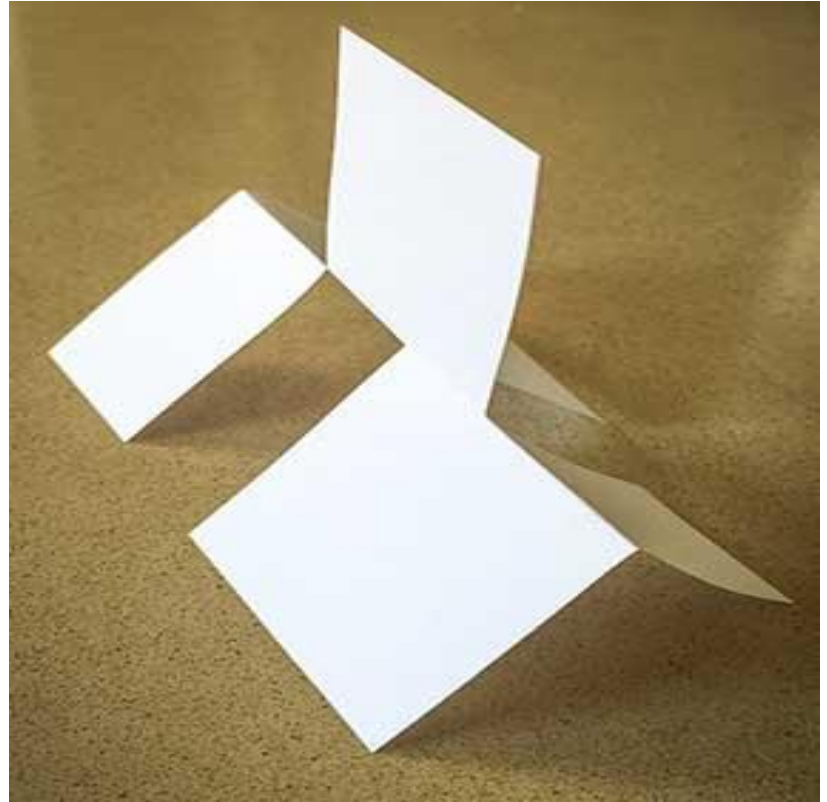


What do these words mean to you?



Times Tables Real Estate

The Struggle is
Real!



Growth Mindset Cultivation:

You reap what you sow...



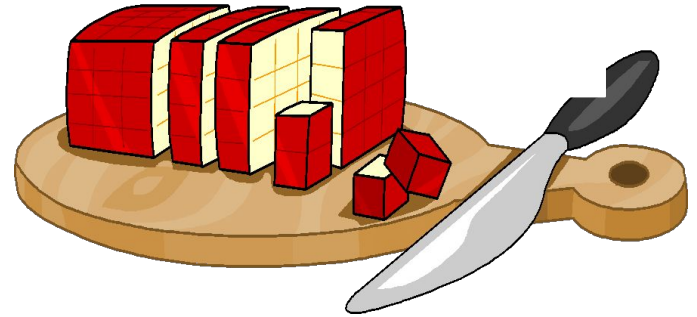
Soccer “goals” and Dying on a Treadmill

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Afternoon tea

Ms Murray bought a rectangular cheese block that measures 6 cm by 4 cm by 4 cm and has a red coating over the entire surface. If the cheese block is cut into 1-cm cubes, how many cubes have red coating on 3, 2, 1, 0 faces?



So What does this all have to do with Math?

$$\frac{2}{5} (4\frac{1}{2} + 3\frac{2}{5}) = 2\frac{13}{10}$$

$$\frac{2 \times 46}{5 \times 10} + \frac{2 \times 17}{5 \times 10} = \frac{74}{10} \text{ or } 7\frac{4}{10}$$

$$\frac{2}{5} \times \frac{74}{10} = \frac{148}{50} = \frac{74}{25}$$

$$\frac{79 \times 25}{25 \times 17} - \frac{46 \times 25}{17 \times 25} = \frac{1343}{425} - \frac{1150}{425} = \frac{193}{425}$$

$$\left(\frac{3}{4}\right)^2 = \frac{9}{16}$$

$$\frac{193}{425} \div \frac{9}{16} = \frac{193}{425} \times \frac{16}{9} = \frac{3088}{3825}$$

Divide By Reciprocal

5+ FRACTIONS UNIT TEST.

1) Solve. Put all answers into lowest terms

a) $\frac{1 \times 5}{3 \times 5} + \frac{2 \times 3}{5 \times 3} = \frac{11}{15}$ ✓

$\frac{5}{15} + \frac{6}{15} = \frac{11}{15}$

b) $\frac{5 \times 5 \times 2 \times 7}{7 \times 5 \times 5 \times 7} = \frac{11}{35}$ ✓

$\frac{25}{35} - \frac{14}{35} = \frac{11}{35}$

c) 1

So what's the big deal?

Want more???

