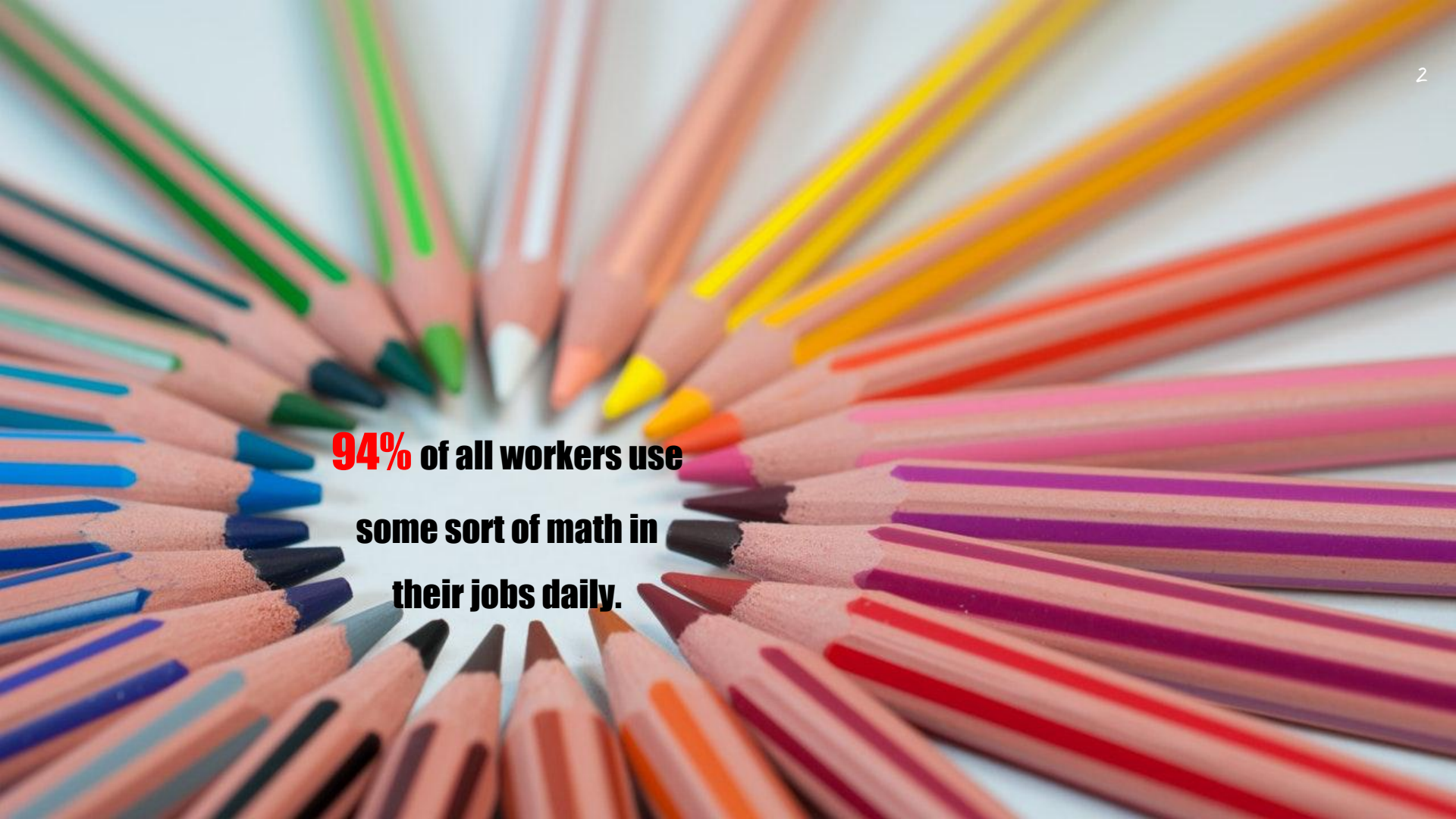Welcome to our

MATH Class!

94% of all workers use some sort of math in their jobs daily.

What can i be when i grow up?

- **Cryptographer:** keeps information secret and safe. Mix of mathematics, computer science, and electrical engineering.
- **Financial planner:** helps people get the most out of their money. by giving advice on how to invest and save their money, as well as help them make smart financial choices like tax and insurance.
- **Real Estate:** helps clients (customers) in buying, selling, and renting properties.
- **Pediatrician:** specialize in caring for young people, from infants to young adults. Using math to calculate a patient's growth, or the amount of liquid in a given shot or vaccine.
- **Accountants:** keeps or inspects financial (money) records. Constantly work with numbers and excel to organize the data in detail.

Rachel Riley

- Television presenter Rachel Riley studied Mathematics at Oxford University.
- At age 22 she joined *Countdown* where she applies her maths skills on a regular basis, handling the letters and numbers rounds to find solutions to complicated problems.
- She has shown us that pursuing your passion and studying maths at university can lead to us down different avenues, including less conventional ones such as a career in television!

Mayim Bialik

- American actress Mayim Bialik enjoyed math at a young age

- studied neuroscience at UCLA

- best known for her role as Dr. Amy Fowler in the comedy *The Big Bang Theory*

- Despite success in her early acting career, Mayim still decided to study neuroscience at university because she had a passion for the subject

neuroscience is the study of....... biological and chemical processes that make the brain and nervous system function
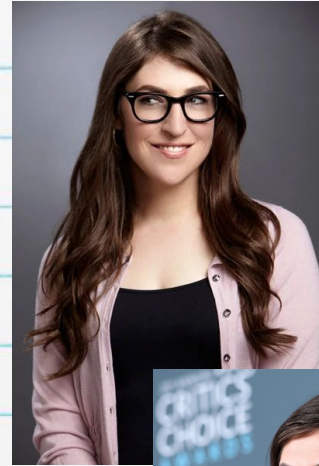
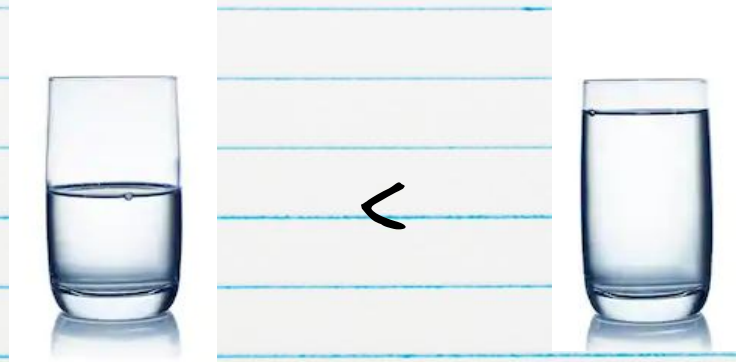Volume and Surface Area

Let's get started!

What is VOLUME?

Volume is the **amount of space** that an object occupies, or that is enclosed within a container
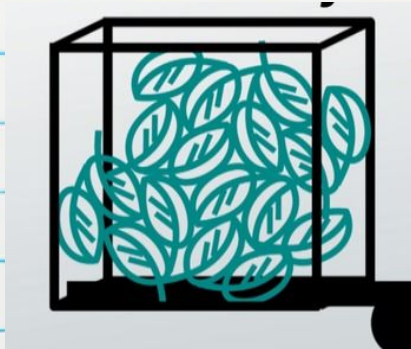
Let's test your knowledge!
Which glass cup has more volume?

<

The big glass cup can hold **more water**,
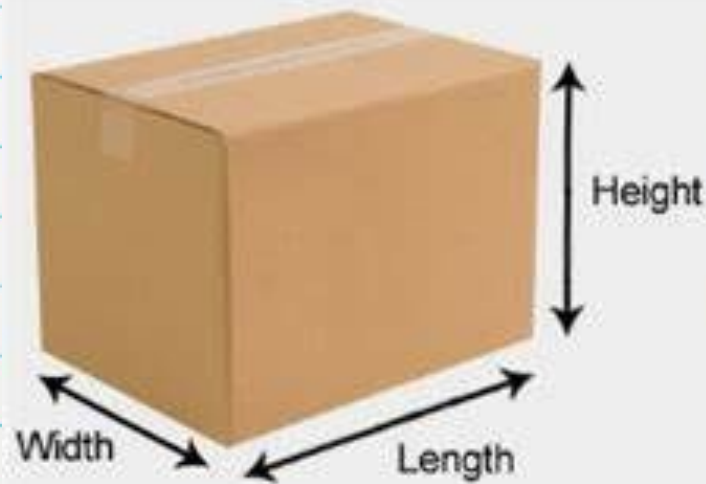so it has a **greater volume** than the small cup

FUN FACT!!

A measuring cup can be used to measure volume of liquids.

Let's dig deeper…
*How would you find the **volume** of a box?*
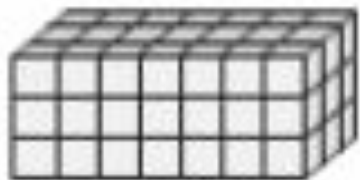

Length - The length is the longest side.

Width - The width is the shortest side.

Height - The height is from the base to the top

Height

Width

Length

Volume = w × h × l

Examples

$V = w \times h \times l$

$V = 3 \times 3 \times 7$

$V = $ **63 cm^3**
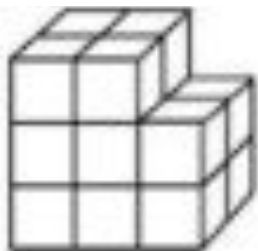
*Think of this as **TWO** boxes added up . . .*

$V = w \times h \times l$ $V = w \times h \times l$

$V = 2 \times 3 \times 2$ $V = 1 \times 2 \times 2$

$V = 12$ cm^3 $V = 4$ cm^3

Add them up . . . 12 cm^3 + 4 cm^3 = **16 cm^3**

What is SURFACE AREA?

The **total** area of the outside/uppermost

layer of an object

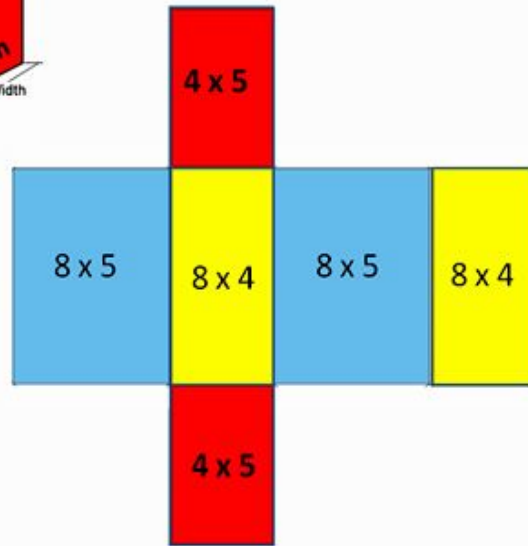# How would you find the **surface area** of a box?
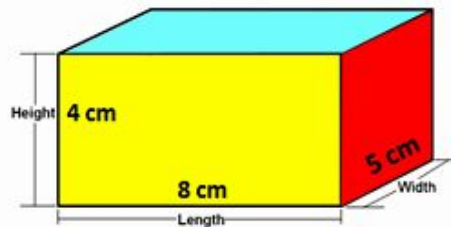
Examples

*bring a box for demonstration

4 sides of 3 x 7
2 sides of 3 x 3

4(3x7)+2(3x3)
= 84+18
= 102 cm^2

4 sides of 2 x 8
2 sides of 2 x 2

4(2x8)+2(2x2)
= 64+8
= 72 cm^2