



NORTHBRIDGE INTERNATIONAL SCHOOL
CAMBODIA
A NORD ANGLIA EDUCATION SCHOOL

Developing Mathematical Thinking

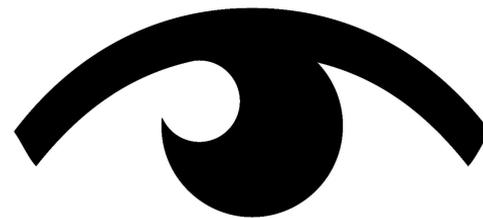
Friday 14th February 2020

Be Ambitious

What is Maths?

- Seeing patterns
- Visualising
- Making connections
- Thinking deeply
- Making mistakes
- Explaining and reasoning
- Solving problems
- Calculating

VISUALIZE



& MAKE CONNECTIONS

When we think of maths we use 5 brain pathways and 2 of those are visual.

It helps our brains to think of maths **visually, not just in numbers.**

You can draw a picture of ANY maths idea!



In order to be a cricket player a person first has to master the foundational skills e.g. batting, bowling, catching and fielding.

In the same way, in order to do math, a child first has to learn the foundational skills of math like **visual perception and visual memory**.

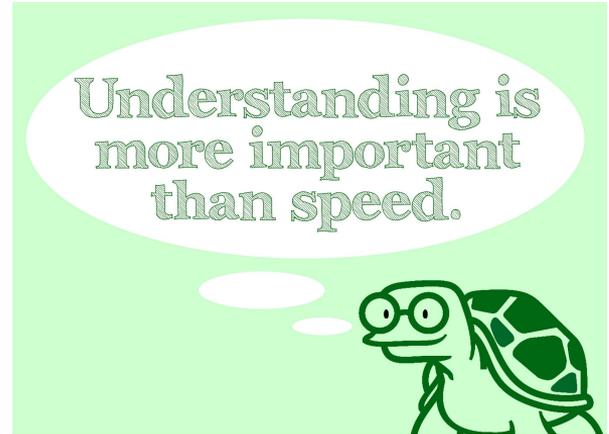
- [Dyscalculia Headlines](#)

Visual perception - the brain's ability to make sense of what their eyes see.

Visual memory - the ability to store and retrieve previously experienced visual sensations and perceptions when the stimuli that originally evoked them is no longer present.

How do we develop these skills?

- Manipulatives
- Models
- Pictures
- Asking questions
- Convincing a friend
- Reflecting
- Project based learning
- Making connections to the real world





Cuisenaire Rods



Cubes



[4x4 grid](#)
[5x5 grid](#)

[Skyscraper instructions](#)



Dice



[Dice Games](#)
[Close to 100 Handout](#)

[Multiplication Games](#)