

### Mathematics

**Dwight Lower School** 

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### What makes a successful learner?

Children learn best through authentic inquiry.

Children need to be active in the pursuit of their own learning and not just passive receptors of factual knowledge.

The IB PYP also recognises that it is not knowledge alone that makes a learner successful, but the skills and attitudes they develop along the way.

### What does Inquiry Maths look like?

- ➤ Children ask questions and make conjectures.
- ➤ Children investigate mathematical concepts through many materials or modes

in order to have a concrete and contextual understandin

After children become confident with one material they are asked to transfer their knowledge to another material.



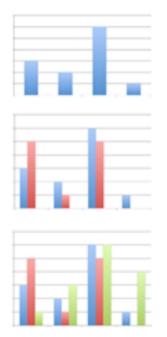
Constructing

meaning

Transferring

meaning

# What questions or statements can you make about this prompt?



Posing questions about the prompt	Making comments about the prompt
What does mean?	We notice that
Is it right that ?	We know that because
How is it true that ?	We think that because
Why is?	We wonder whether
Would it be if?	We can change

# How could you show this information using manipulatives?

4B's favourite seasons

	Total
Spring	2
Summer	5
Autumn	2
Winter	4

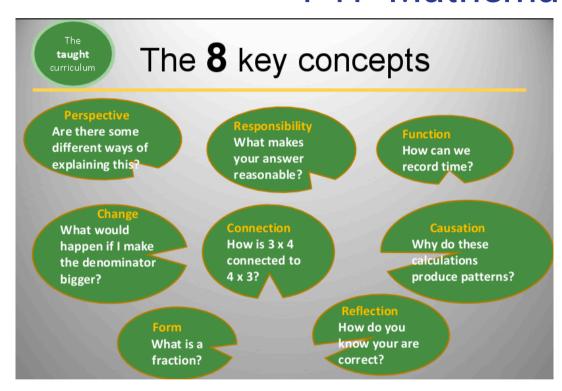
## Encourage students to show their understanding in different ways

Imagine you are trying to help someone to understand what three tenths means.

What pictures could you draw to be helpful?

What equipment could you use?

### **PYP Mathematics**



Broad, open-ended questioning which require investigation, discussion and a full, considered response.

### Five Strands of Mathematics:

- 1) Number
- 2) Measurement
- 3) Data handling
- 4) Shape and space
- 5) Pattern and function

#### **Assessments**

- ★ Pre-assessments (at the beginning of a new topic)
- ★ Formative ongoing throughout the topic
- ★ Summative at the end of the topic
- **★** May Summative assessments
- ★ Mathletics (Years 3 6)
- **★** Target cetting

### **Useful** websites

<a href="http://nrich.maths.org">http://nrich.maths.org</a> Which promotes the learning of mathematics through problem solving.

<u>www.mathletics.co.uk</u> Our school currently has a subscription for Years 3 - 6 children.

Games to practise different strands of mathematics:

www.topmarks.co.uk

https://topicbox.net/mathematics/

http://www.bbc.co.uk/skillswise/maths