

# Maths at QEGS

# Types of numbers

- In maths we use lots of different sorts of numbers.
- Most of these you will have come across already during primary school.
- Some of the following words may be unfamiliar to you, so you might need to look up what they are.

The task that we are going to complete uses 10 different number headings. It is important that you understand what numbers fit into each of the categories.

- Numbers less than 12
- Even numbers
- Factors of 60
- Square numbers
- Multiples of 5
- Multiples of 3
- Prime numbers
- Numbers more than 12
- Triangle numbers
- Odd numbers

You will need a 5 x 5 grid like the one on the following slide.

- Arrange the 10 heading cards around the top and left hand edge.
- Then, by using the numbers from 1 to 25, try to place all of the numbers in a box so that they are correct for their headings.
- You can only use each number once!


For example...

16 is both even and square

4 is a factor of 60 and square

18 is more than 12 and even

20 is more than 12 and a factor of 60

The headings can go in any order.

Try different places if you can't fit any more numbers into the grid

Even number

Factor of 60

	Square number		Number more than 12	
	16		18	
	4		20	

# Mathematics at QEGS – what is it like?

- You will have 7 lessons per fortnight
- You will get homework weekly
- You will spend more time on topics to give you a strong depth of knowledge
- Lots of discussions, investigations and problem solving
- The use of lots of different manipulatives to help you visualise problems

Explain how 213 can be represented using the Dienes blocks in three different ways.

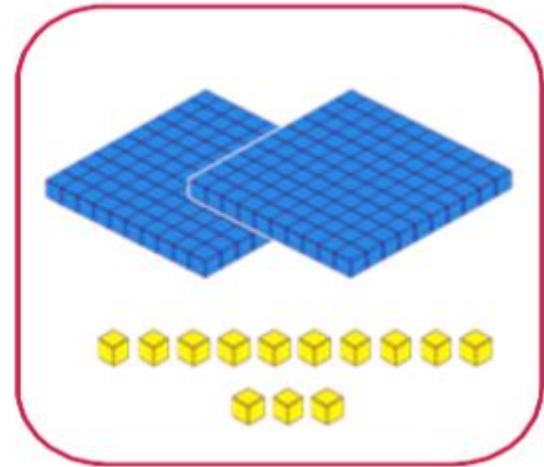
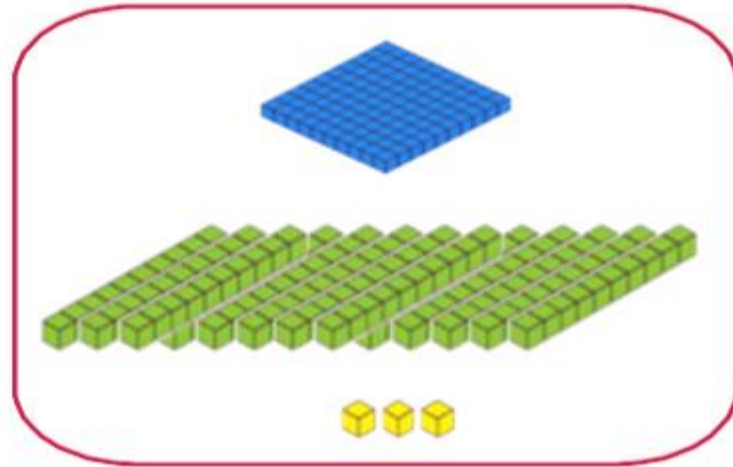
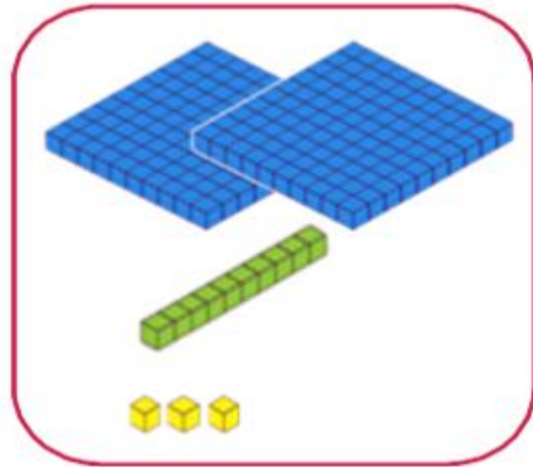




Explain how 213 can be represented using the Dienes blocks in three different ways.

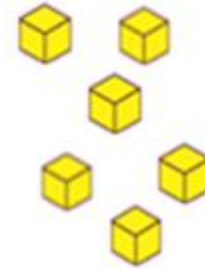
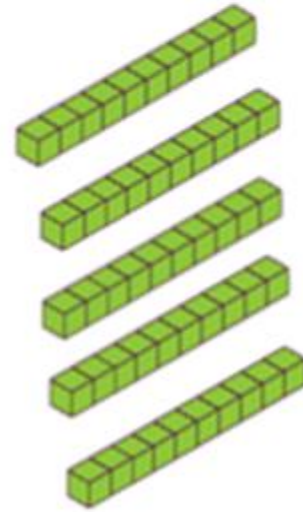
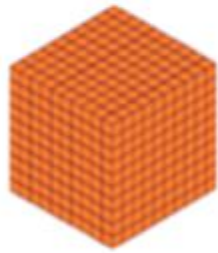


Examples

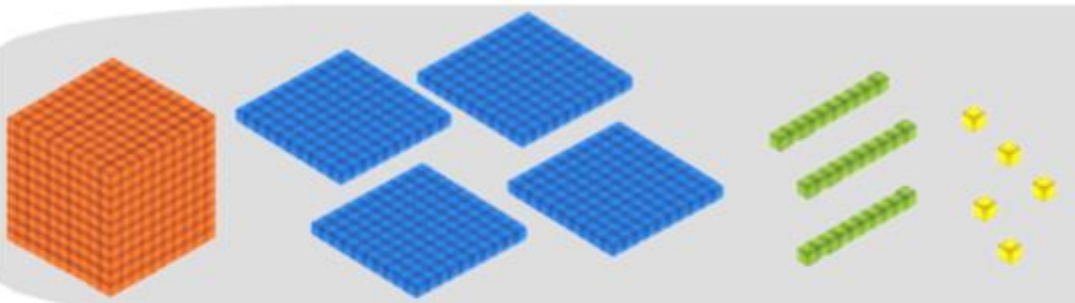


# How can we represent a number?

Thousands	Hundreds	Tens	Ones



# What is the number?



A large orange cube (1,000), three blue flats (300), two green rods (20), and five yellow units (5).

Thousand s	Hundreds	Tens	Ones



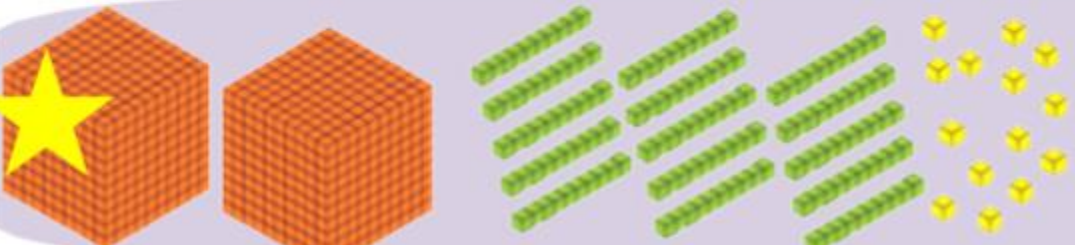
Two blue flats (200), three green rods (30), and five yellow units (5).

Thousand s	Hundreds	Tens	Ones



One large orange cube (1,000), three green rods (30), and five yellow units (5).

Thousand s	Hundreds	Tens	Ones



Two large orange cubes (2,000), three green rods (30), two green rods (20), and five yellow units (5). A yellow star is on the first cube.

Thousand s	Hundreds	Tens	Ones

# To finish off

- Choose a number from 1 to 25 and decorate it with all the (Mathematical) facts you know about it...
- Prizes for the best ones in September!