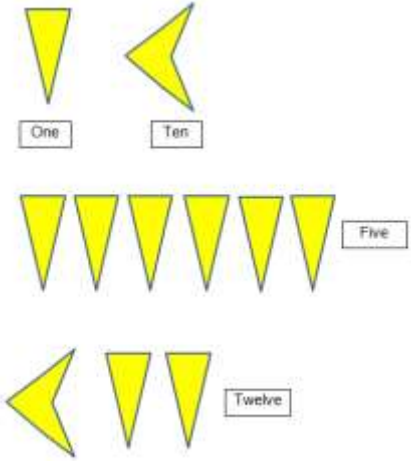


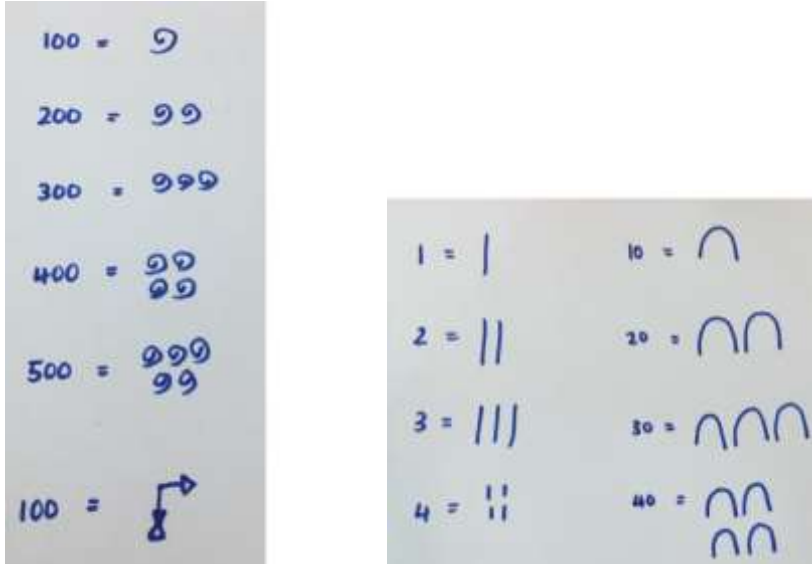
Mathematics - its impact on the world past, present and future

Terms	Illustrations	Definition
<p>Babylonian number system</p>	 <p>The illustrations show four examples of Babylonian numerals: <ul style="list-style-type: none"> A single inverted yellow triangle labeled 'One'. A single yellow chevron labeled 'Ten'. Five inverted yellow triangles in a row labeled 'Five'. One yellow chevron followed by two inverted yellow triangles labeled 'Twelve'. </p>	<p>It used only two numerals or symbols, a one and a ten to represent numbers.</p> <p>The system got trickier with larger numbers and used a base 60 system, rather than our system of base 10.</p>
<p>Binary system</p>		<p>Only made up of only 0's and 1's. There is no 2,3,4,5,6,7,8 or 9.</p> <p>In a binary number each "place" represents a power of 2. E.g.</p> <p> $1 = 2^0 = 1$ $10 = 2^1 = 2$ $100 = 2^2 = 4$ $1000 = 2^3 = 8$ $10000 = 2^4 = 16$ </p> <p>Binary numbers are very useful in electronics and computer systems. Regardless of the type of information represented, it is all stored as bit patterns made up from the digits 1 or 0. In other words everything that is stored on the computer is eventually broken down into its simplest form, which is a pattern of 1s and 0s.</p>


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<p>Decimal number system</p>	<p style="text-align: center;"> Decimal Point 8307.5924 </p> <p style="text-align: center;"> Each place to the left, the value becomes 10x bigger Each place to the right, the value becomes 10x smaller </p>	<p>The number system we use every day, based on 10 digits (0, 1, 2, 3, 4, 5, 6, 7, 8, 9). It can also be called 'base 10' system. The value of the digit depends on where it is placed in the number. This is called place value. Zero is used as a place holder which affects the value of the number e.g. 102 and 1002 – the 0 significantly changes the value of the number.</p>
<p>Egyptian number system</p>	<p style="text-align: center;"><i>Decimal Egyptian Number Symbols</i></p> <ul style="list-style-type: none"> 1 = staff 10 = ∩ Heel bone 100 = 9 coil of rope 1000 = ⚡ Lotus flower 10 000 = 🖐️ A pointing finger 	<p>Written symbols and hieroglyphics. There was a symbol for every power of ten and the numbers were written from right to left.</p>

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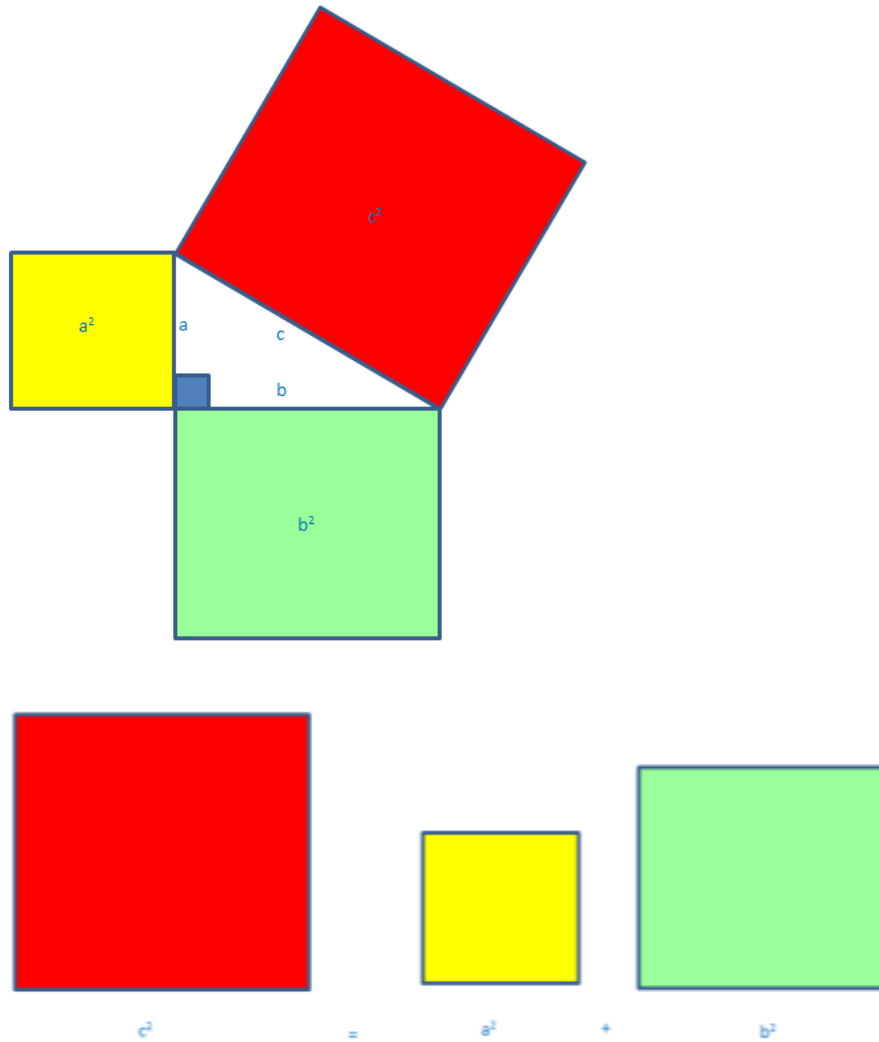
	 <p>The image shows two hand-drawn representations of numbers. The left side shows numbers 100 to 500 represented by circles: 100 = 9, 200 = 99, 300 = 999, 400 = 999, 500 = 9999. The right side shows numbers 1 to 40 represented by vertical lines and arches: 1 = , 2 = , 3 = , 4 = , 10 = ∩, 20 = ∩∩, 30 = ∩∩∩, 40 = ∩∩∩∩.</p>	
<p><u>Famous mathematicians</u></p>		<p>People who have contributed significantly to society through the creative and intelligent use of mathematics. Famous mathematicians have played a huge part in shaping our world as it stands today.</p>
<p><u>Fibonacci Sequence</u></p>		<p>Found by adding the two numbers before it together. e.g. 0, 1, 1, 2, 3, 5, 8, 13, 21, 34... The 2 is found by adding the two numbers before it (1+1) The 5 is found by adding the two numbers before it (2+3) The 8 is found by adding the two numbers</p>

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		<p>before it ((3+5)</p> <p>The 13 is found by adding the two numbers before it (8+5)</p> <p>The 21 is found by adding the two numbers before it (8+13)</p> <p>The next number in the sequence above would be 55 (21+34)</p> <p>There are many areas of nature where the Fibonacci sequence can be found and some of these areas include, flower petals, plants, fruit, the human face, the human hand and animals (i.e. rabbits)</p> <p>Leonardo Bonacci, known as Fibonacci, founded the sequence so it was named after him.</p>																																																						
<p>Greek number system</p>	 <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>1</td><td>α</td> <td>10</td><td>ι</td> <td>100</td><td>ρ</td> </tr> <tr> <td>2</td><td>β</td> <td>20</td><td>κ</td> <td>200</td><td>σ</td> </tr> <tr> <td>3</td><td>γ</td> <td>30</td><td>λ</td> <td>300</td><td>τ</td> </tr> <tr> <td>4</td><td>δ</td> <td>40</td><td>μ</td> <td>400</td><td>ν</td> </tr> <tr> <td>5</td><td>ε</td> <td>50</td><td>ξ</td> <td>500</td><td>ϕ</td> </tr> <tr> <td>6</td><td>ς</td> <td>60</td><td>ς</td> <td>600</td><td>χ</td> </tr> <tr> <td>7</td><td>ζ</td> <td>70</td><td>ο</td> <td>700</td><td>ψ</td> </tr> <tr> <td>8</td><td>η</td> <td>80</td><td>π</td> <td>800</td><td>ω</td> </tr> <tr> <td>9</td><td>θ</td> <td>90</td><td>ϑ</td> <td>900</td><td>λ</td> </tr> </tbody> </table>	1	α	10	ι	100	ρ	2	β	20	κ	200	σ	3	γ	30	λ	300	τ	4	δ	40	μ	400	ν	5	ε	50	ξ	500	ϕ	6	ς	60	ς	600	χ	7	ζ	70	ο	700	ψ	8	η	80	π	800	ω	9	θ	90	ϑ	900	λ	<p>Originally had 27 symbols. Our own word "alphabet" comes from the first two letters, or numbers of the Greek alphabet -- "alpha" and "beta." Greek letters were also used for writing Greek numerals. The first nine letters (from alpha to theta) were used for the numbers 1 to 9. The next nine letters (from iota to koppa) were used for multiples of 10 from 10 to 90. Finally, the next nine letters (from rho to sampi) were used for 100 to 900. For example, the numbers 1, 2, and 3 are alpha, beta, and gamma.</p>
1	α	10	ι	100	ρ																																																			
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9	θ	90	ϑ	900	λ																																																			

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Pythagoras' Theorem



In a right angled triangle, the square of the long side is equal to the sum of the squares of the other two sides. It is stated in this formula:

$$a^2 + b^2 = c^2$$

Pythagoras' Theorem was founded by Pythagoras of Samos, a Greek philosopher and mathematician.

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<p>Roman numerals</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #ADD8E6;"> <th>Base 10 Number</th> <th>Roman Numeral</th> <th>Base 10 Number</th> <th>Roman Numeral</th> </tr> </thead> <tbody> <tr><td>1</td><td>I</td><td>10</td><td>X</td></tr> <tr><td>2</td><td>II</td><td>20</td><td>XX</td></tr> <tr><td>3</td><td>III</td><td>30</td><td>XXX</td></tr> <tr><td>4</td><td>IV</td><td>40</td><td>XL</td></tr> <tr><td>5</td><td>V</td><td>50</td><td>L</td></tr> <tr><td>6</td><td>VI</td><td>60</td><td>LX</td></tr> <tr><td>7</td><td>VII</td><td>70</td><td>LXX</td></tr> <tr><td>8</td><td>VIII</td><td>80</td><td>LXXX</td></tr> <tr><td>9</td><td>IX</td><td>90</td><td>XC</td></tr> <tr><td>10</td><td>X</td><td>100</td><td>C</td></tr> </tbody> </table>	Base 10 Number	Roman Numeral	Base 10 Number	Roman Numeral	1	I	10	X	2	II	20	XX	3	III	30	XXX	4	IV	40	XL	5	V	50	L	6	VI	60	LX	7	VII	70	LXX	8	VIII	80	LXXX	9	IX	90	XC	10	X	100	C	<p>Roman numerals were used by the Ancient Romans but we still use them sometimes today e.g. can be seen on some analogue clocks or after kings or queen's names e.g. Henry VIII (meaning Henry the 8th).</p> <p>Roman numerals use letters instead of numbers. There are seven letters you need to know:</p> <p>I = 1 V = 5 X = 10 L = 50 C = 100 D = 500 M = 1000</p>
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