

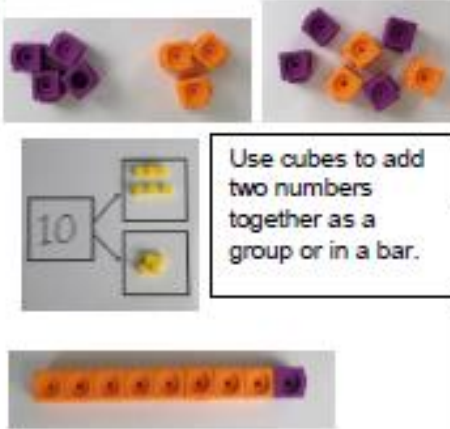
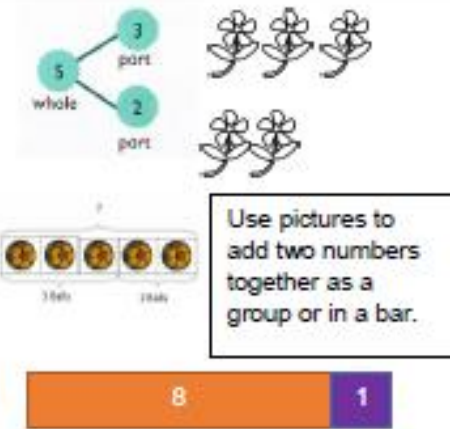
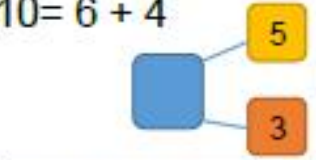


*Parents' Guide to  
Mathematics at  
The Bythams Primary School  
Reception*



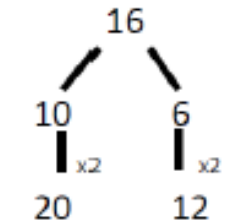
*Dear Parents,*

*This booklet is to help you understand how the main four operations in Maths are taught at Bythams School. Each guide has the main objectives for the year group and how it is taught in the concrete, pictorial and the abstract. The concrete is all about physical things, such as cubes, bead strings and counters which the children manipulate to understand the objectives. The pictorial is when concepts are shown in a pictorial form such as photos, diagrams and number lines. The abstract moves to formal methods and word problems to understand the objectives. All three methods are used in conjunction with one another, not as a progression.*

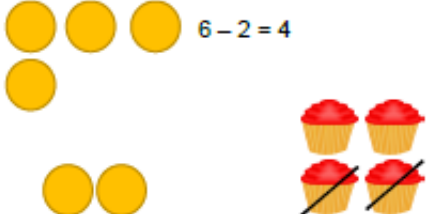
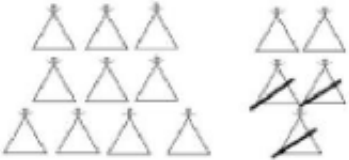
## Addition

Objective and Strategies	Concrete	Pictorial	Abstract
Combining two parts to make a whole: part-whole model	 <p>Use cubes to add two numbers together as a group or in a bar.</p>	 <p>Use pictures to add two numbers together as a group or in a bar.</p>	<p><math>4 + 3 = 7</math></p> <p><math>10 = 6 + 4</math></p>  <p>Use the part-part whole diagram as shown above to move into the abstract.</p>

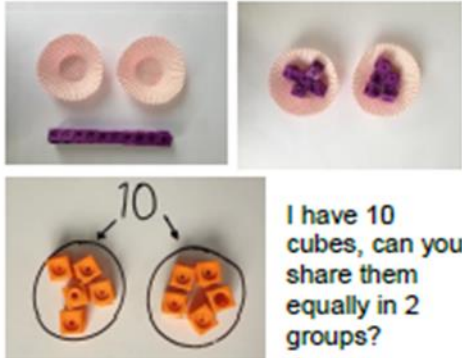

## Multiplication

Objective and Strategies	Concrete	Pictorial	Abstract
Doubling	<p>Use practical activities to show how to double a number.</p>  <p>double 4 is 8 <math>4 \times 2 = 8</math></p>	<p>Draw pictures to show how to double a number.</p> <p>Double 4 is 8</p> 	 <p>Partition a number and then double each part before recombining it back together.</p>

## Subtraction

Objective and Strategies	Concrete	Pictorial	Abstract
Taking away ones	<p>Use physical objects, counters, cubes etc to show how objects can be taken away.</p>  <p><math>6 - 2 = 4</math></p>	<p>Cross out drawn objects to show what has been taken away.</p>  <p><math>15 - 3 = 12</math></p>	<p><math>18 - 3 = 15</math></p> <p><math>8 - 2 = 6</math></p>

## Division

Objective and Strategies	Concrete	Pictorial	Abstract
Sharing objects into groups	 <p>I have 10 cubes, can you share them equally in 2 groups?</p>	<p>Children use pictures or shapes to share quantities.</p>  <p><math>8 \div 2 = 4</math></p>	<p>Share 9 buns between three people.</p> <p><math>9 \div 3 = 3</math></p>

## What you can do at home to help your child make progress

- *Spot numbers and shapes in your home or in the local environment.*
- *Let your child help counting cutlery to set the table.*
- *Counting can be everywhere and with anything, you can count steps, jumps and hops. This demonstrates to the children that it does not have to be an object.*
- *Pairing socks back together when they have been washed.*
- *Finding things around the home talking about the concept of size, bigger smaller, longer and shorter.*
- *When in the bath have plastic cups for your child to play with so they understand the words empty, full, overflown, half-full etc. This can also be at other times when having drinks too.*