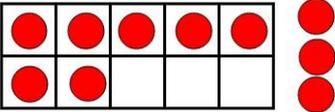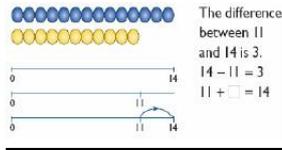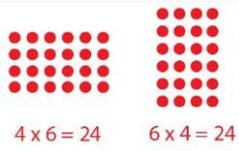# Knowledge Organiser for EYFS and KS1 Maths

| Number and Place Value | |
|---|---|
| **Key Vocabulary** | |
| Partitioning | Splitting a number different ways to support calculation |
| Tens | The value of the first digit in a 2 digit number (eg 32 has 3 tens) |
| Units/ ones | The value of the final digit in a number (eg 45 has 5 units) |
| Digit | An individual figure within a number  (eg 1, 2) |
| Ordinal number | Numbers which define order (1st, 2nd, 3rd) |
| Greater than > | When a number has a higher value than the one it is being compared with |
| Less than < | When a number has a lower value than the one it is being compared with |
| Equals = | Use to show that both sides of a number sentence are balanced (eg. 3+4=7.  7=3+4, 2+5=3+4) |

| How to help | Useful links |
|---|---|
| Count regularly with your child forwards and backwards<br>Count objects, people, knives and forks….<br>Spot numbers on the way to school<br>Play board games eg Snakes and Ladders | **National Curriculum/ Development matters-** found on our school website |

| Mental Maths | |
|---|---|
| **Key Vocabulary** | |
| Multiple | A number which can be divided by a another number without leaving a remainder |
| Bonds to 10 | All of the pairs of numbers which add to 10 (3+7, 4+6) |
| Bonds within 10 | All of the pairs numbers which add to each number up to 10 (eg 2+3= 5, 1+4=5) |
| 10s Frame |  Used to solve addition and subtraction problems, normally within 20. |
| Bead string |  Used to solve problems within 100 |
| Associated fact/ fact family | A group of facts which use the same set of numbers eg 3+4=7, 4+3=7, 7-3=4, 7-4=3 |

| Double | Adding a number to itself |
|---|---|

| How to help | Useful links |
|---|---|
| Work regularly on simple addition and subtraction facts within 10<br>Add and subtract physical objects at home eg at dinner time<br>Help your Year 2 child with their mental maths homework<br>Practice times tables facts for 2,3,5,and 10 times tables | **National Curriculum/ Development matters-** found on our school website<br>**Top Marks Website-**<br>http://www.topmarks.co.uk/mathsgames/5-7-years<br>maths games to play with your child **ICT Games Website**<br>http://www.ictgames.com/resources.html maths games to play with your child |

| Operations | |
|---|---|
| **Key Vocabulary** | |
| Operation | Addition, subtraction, multiplication or division |
| Number sentence | A written calculation |
| Addition | The sum of two numbers (plus, add, total, more than) |
| Subtraction | Taking one number away from another or finding the difference between those values (take away, subtract, less than) |

| Operations | |
|---|---|
| **Key Vocabulary** | |
| Difference between | How many between the two numbers- often solved on a number line (how many more, how many less)<br>Eg difference between 11 and 14<br> |
| Multiplication | Multiplying one number by another (times, lots of, multiplied by, product of) |
| Array | A visual representation of multiplication<br>  |
| Division | Sharing or grouping a number into equal parts (share, divide, groups of, how many in) |
| Share | |
| Group | Place objects in groups of a certain number |
| Commutative | The concept that addition and multiplication can be done in any order but subtraction and division cannot |
| Inverse | Reversing the effect of another operation eg 3+4=7 so 7-4=3 |
| Number line | Used to solve calculations of all types- these may be filled or empty |
| Numicon |  Tens and units apparatus used to support calculations |

| | Tens and units apparatus used to support calculations |
|---|---|
| Dienes |  |

| **How to help** | **Useful links** |
|---|---|
| | |
| Help your child with their maths homework (Year 2) | **National Curriculum/ Development matters**- found on our school website<br>**Maths Calculation Strategies documents**- found on our school website |

| **Fluency, Reasoning and Problem Solving** | |
|---|---|
| **Key Vocabulary** | |
| Fluency | Using number and calculation skills accurately and efficiently |
| Reasoning | Following a line of enquiry, justifying their answers |
| Problem solving | Solving real life and logical problems using mathematical understanding |

| **How to help** | **Useful links** |
|---|---|
| Support your child with their maths homework | **National Curriculum/ Development matters**- found on our school website |