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| Can you name the 4 different transformations and describe what they mean? | Translation – move the shape up or down, left or rightEnlargement – make biggerReflection - mirrorRotation - turn |
| What information do you need to give for a rotation? | 1. Centre of rotation
2. Size of turn (angle)
3. Direction (clockwise/anti-clockwise)

**CHECK WITH TRACING PAPER** |
| What information do you need to give for a reflection? | 1. Line of reflection (mirror line)

**CHECK WITH A MIRROR** |
| What information do you need to give for an enlargement? | 1. Scale Factor (how many times bigger)
2. Centre of enlargement (draw the lines to find it!)
 |
| What information do you need to give for a translation? | 1. How far left/ right
2. http://free-books-online.org/computers/computer-graphics/2d-transformations-i/images/CS602-%201%20to%2019_img_297.jpgHow far up / down

You can write like this: x = left / rightY = up / down |
| What is the perimeter of a shape and what is it measured in? | The distance around the edge* Measure in cm or m
 |
| What is the area of a shape and what is it measured in? | The space inside the shape* Measure in cm² or m²
 |
| How do you calculate the area of a rectangle? | Base x height(or length x width) |
| How do you calculate the area of a triangle? | Base x height2Or (the same thing)Length x width2 |
| How do you calculate the circumference of a circle? | Circumference = π x d(d = diameter) |
| How do you calculate the area of a circle? | Area = Π x r²(r = radius) |
| What is volume and what is it measured in? | The space inside a 3D shape* Measure in cm³ or m³
 |
| How do you calculate the volume of a cuboid?http://www.examples10.com/uploads/34f1be_cuboid.gif | Length x width x height |
| How do you calculate the volume of a prism?http://www.mathsteacher.com.au/year7/ch09_polygons/06_polyhedra/Image11220.gif | Length x area of cross section(length x area of shaded part) |
| Describe how you would construct a perpendicular bisector of a line.  | http://www.onlinemathlearning.com/image-files/perpendicular-bisector_clip_image004.gif |
| Describe how you would bisect an angle.  | http://strader.cehd.tamu.edu/geometry/bisectangle1.0/gifs/img3.gif |
| What three things can you remember about bearings? | 1. Start from North
2. Measure clockwise
3. Remember to give three numbers = eg. 065
 |
| What do angles on straight line add up to? | 180$°$ |
| What do angles in a triangle add up to give? | 180° |
| What can you say about these angles?http://www.mathsisfun.com/geometry/images/vertically-opposite.gif | They are oppositeOpposite angles are equal.  |
| What can you say about these angles?http://bdaugherty.tripod.com/KeySkills/Images/correspondingAngles.gif | Corresponding (F) angles are equal.  |
| What can you say about these angles?http://t0.gstatic.com/images?q=tbn:ANd9GcTgbWIcvu_Zty_X7GbYZT8zVS1R-EWZ8nlDmrK0gtumB4yp0GuC-hsoz4g:www.bbc.co.uk/schools/ks3bitesize/maths/images/alternate.gif | Alternate (Z) angles are equal |
| What do angles around a point add up to?http://www.math-salamanders.com/images/gfs-angles-round-a-point.gif | 360° |
| How do you calculate 1 %? | Divide by 100 |
| How do you calculate 10%? | Divide by 10 |
| How do you multiply 2 fractions? | Top x topBottom x bottom |
| How do you add two fractions? | Cross multiply(multiply the bottoms Multiply diagonals and add) |
| How do you find a fraction of an amount? | Times number by the top of the fraction & Divide your answer by the bottom of the fraction.  |
| What fraction is the same as 50%?What fraction is the same as 25%?What fraction is the same as 10%?What fraction is the same as 1%? | ½¼1/101/100 |
| What is the highest common factor of two numbers and how do you find it with prime factors? | Do ‘prime number trees’ for eachCircle numbers that are the sameMultiply these numbers together |
| How do you find the lowest common multiple of two numbers? | Write out the times table for each number. Circle the smallest number that is the same in both.  |
| How do you write a number as a product of its primes? (Do the prime factor decomposition?) | ‘Prime number tree’ |
| What is a prime number?Give some examples | A number that can only be divided by itself and 1. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29 |
| How do you estimate the answer to something?  | Round all of the numbers to 1 significant figure.  |
| What are the multiples of a number? | All the numbers in its times table |
| What do you get when you :1. Multiply a negative & a negative?
2. Multiply a positive & a negative?
3. Multiply a negative & a positive?
4. Multiply a positive & a positive?

Is it the same with division? | 1. Positive
2. Negative
3. Negative
4. Positive

Yes – division is the same |
| What should you do if you need to add and subtract negatives? | Draw a number line |
| What is a square number? | The answer you get when you multiply a number by itself. |
| Describe the correlations on these scatter graphsCorrelation Graphs | Positive correlationNo correlationNegative correlation |
| Describe the relationship of this scatter graph. image: scatter diagram | As the result in maths increases, the result in science increases.  |
| How do you work out the:MeanMedianModeRange | Mean = add and divideMedian = middle (don’t forget to put them in order)Mode = most frequentRange = biggest - smallest |
| How do you work out the mean of a frequency table?http://mathsteaching.files.wordpress.com/2008/01/frequency-tables1.jpg | 1. Calculate f x ***x***
2. Find the total of f x ***x***
3. Find the total of x
4. Mean = Total (f x x)

 Total f |
| How do you work out an estimate for the mean of grouped data. http://mathsteaching.files.wordpress.com/2008/01/frequency-tables1.jpg | 1. Find the mid points
2. Calculate f x midpoint
3. Find total of f x ***midpoint***
4. Find the total of x
5. Mean = Total (f x midpoint)

 Total f |
| What is the lower quartile?Upper quartile?Inter quartile range? | Lower quartile = quarter of the way alongUpper quartile = ¾ of the way alongInter quartile range = upper quartile – lower quartile |
| What is this graph called? What do you need to remember about it?http://t2.gstatic.com/images?q=tbn:ANd9GcQ5z2g3SSJ1Tw9FyJet_ejueJiRzBotmZpWsq8mRRyNq-fZW89OLQWjGQ:www.webquest.hawaii.edu/kahihi/mathdictionary/images/stem_leaf_graph1.gif | STEM AND LEAF1. Always write the leaf in number order
2. Don’t forget to include a key!
 |
| A scatter graph with line of best fitWhat is this graph called and what do you need to remember about it? | A SCATTER GRAPHRemember to draw a line of best fit through the middle of the points. Do NOT join the points together.  |
| imageWhat is this graph called and what do you need to remember about it? | A FREQUENCY POLYGONDraw a bar chart and then join the middle of the bars together again.  |
| image: cumulative frequency graph, What is this graph called and what do you need to remember about it? | A CUMULATIVE FREQUECY CURVECumulative frequency = running total. Always plot from the highest value in each group.  |
| time (s) on x axis, distance (m) on y axisWhat is this graph called? | A Speed Distance Time Graph |
| What is this called and what do the lines represehttp://edubuzz.org/blogs/nbhs3x1/files/2007/01/boxplot-2.JPGnt? | Boxand WhiskerBox Plot |
| Speed =  | Speed = Distance Time |

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| --- | --- |
| What does Solve mean? | Work out what the letter is(Remember – whatever you do to one side, you do to the other – use opposites!) |
| Simplify1. a + a + a
2. a x a x a
 | Simplify means make simpler1. 3a
2. a³
 |
| How do you Expand? | Multiply out the brackets(Don’t forget to multiply both parts!) |
| How do you Factorise? | Factorise means put into brackets(numbers / letters that go into both parts go at front of the brackets) |
| Find the Nth term of a sequence | 1. Work out the difference
2. Multiply by n
3. See what you need to add or subtract
 |
| Tell me about an Expression | Has no equals sign! |
| How do you Substitute? | Swap the letter for a number |
| How do you find the first three terms of a sequence given the nth term?And how do you find the 10th term? | Let n = 1,Let n = 2Let n = 3Let n = 10 |
| How do you Simplify or collect the terms? | Collect together the things that are the same(REMEMBER to draw circles around them to keep the + or – with the right term. Keep different letters seperate) |
| What does value mean? | A number |