

## UPPER 1 – MAY EXAM – REVISION NOTES

Paper 1 – Non Calculator  
30 minutes

Paper 2 – Calculator  
1 hour

### Content: Maths in Action - Book 1

#### 1. Whole Numbers in Action

Addition, Subtraction, Multiplication, Division.  
Multiplication and Division by 10, 100 and 1000.  
Rounding and Estimating.

#### 2. Angles Around Us

Types of Angles – *acute, right, obtuse, straight, reflex, complete turn*.  
Naming, Measuring and Drawing angles.  
Horizontal and Vertical lines.

Parallel = “lines which  
are the same distance  
apart”  
Perpendicular = “at  
right angles to”

#### 3. Letters and Numbers

Adding and Subtracting *like terms*.  
Forming and Solving Simple Equations.

#### 4. Decimals in Action

Rounding to a given number of decimal places.  
Rounding to the nearest penny, £, kg, cm, etc.  
Adding, Subtracting, Multiplying, and Dividing decimal numbers.

#### 5. Facts, Figures, and Graphs

Collecting and Organising information, using Tally/Frequency Tables.  
Displaying and Interpreting information – *Pictographs, Bar Graphs, Line Graphs, and Pie Charts*.

#### 6. Measuring Time and Temperature

The Calendar.  
The 12 and 24 hour clock.  
Finding the difference between two times.  
Using Bus and Train Timetables  
Measuring Temperature, *below zero – the negative numbers!*

30 days has September,  
April, June and  
November.  
All the rest have 31,  
except February alone,  
which has 28 days clear,

#### 7. Coordinates: X Marks The Spot

Plotting points on the x y grid  
The 4 Quadrants – *more negative numbers*

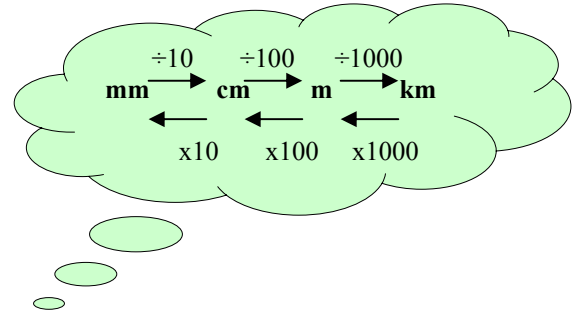
O (0,0) is the origin  
OX is the x axis  
OY is the y axis  
The x coordinate *always* comes first, then  
the y coordinate

## 8. Solving Equations

Solving Simple Equations using the Cover Up Method.  
One Stage and Two Stage Problems  
Forming and Solving Equations from pictures.

## 9. Measuring Length

Units of length – mm, cm, m, km.  
Changing between different units.  
Approximation.  
Calculating Perimeters – *all units must be the same.*



## 10. Tiling and Symmetry

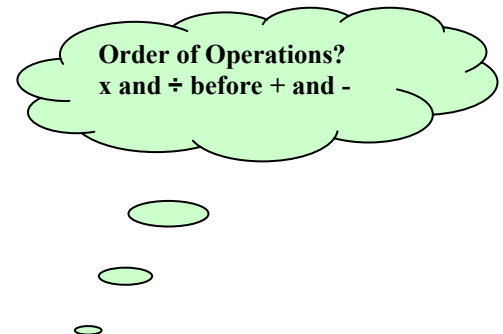
Tiling *Congruent* Shapes.  
Line Symmetry – reflecting shapes, making mirror images.  
Rotational Symmetry – Order of Rotation – *the number of times a shape will fit its outline when turned through  $360^\circ$ .*

## 11. Measuring Area

Calculating Area of Rectangle,  $A = L \times B$ .  
Finding Length of Side given Area and Breadth.  
Composite Areas.  
Calculating Area of Triangle,  $A = \frac{1}{2}bh$

## 12. Letters, Numbers and Sequences

Simple Substitution into Formula.  
Describing a Sequence of numbers using a Formula.  
Continuing a Sequence of numbers using a Formula.



## 13. Two Dimensions: Rectangle and Square

The Rectangle:      2 Axis of Symmetry.  
                             Rotational Symmetry of Order 4.  
                             Opposite Sides are Equal and Parallel.  
                             Diagonals are Equal.  
                             Diagonals Bisect each other.

The Square:         4 Axis of Symmetry.  
                             Rotational Symmetry of Order 4.  
                             4 Equal Sides, Opposite Sides Are Parallel.  
                             Diagonals are Equal.  
                             Diagonals Bisect each other at Right Angles.

## 14. Measuring Volume

Units of Volume;  $1\text{cm}^3 = 1\text{mL}$   
 $1000\text{cm}^3 = 1\text{Litre}$

Volume of a Cuboid =  $L \times B \times H$ .

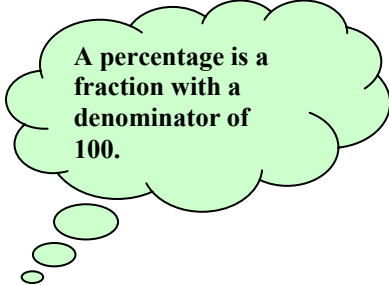
## 15. Fractions and Percentages

Finding Equivalent Fractions/ Simplifying Fractions.

Finding a Fraction of something.

Percentages; A special type of fraction.

Percentage Calculations.



A percentage is a fraction with a denominator of 100.

## 16. Solving More Equations

Solving Equations using the *Balance Method*.

Solving Equations with letters on both sides of the Equals Sign.

Forming and Solving Equations from pictures.

## 17. Three Dimensions

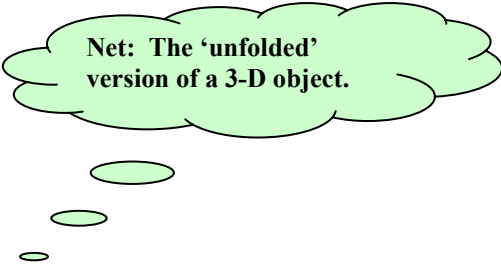
Cubes, Cuboids, Cylinders, Pyramids, Prisms, Spheres.

Describing 3-D objects using; *Faces, Edges, Vertices*.

Nets of 3-D objects.

Skeleton Models.

Diagonals, Face Diagonals, and Space Diagonals.



Net: The 'unfolded' version of a 3-D object.

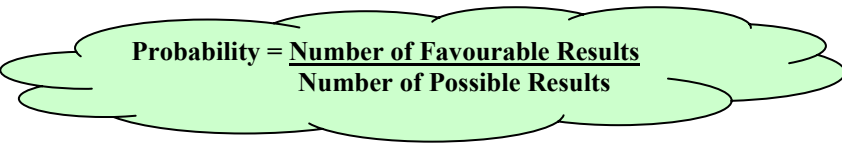
## 18. Probability

Probability – how much chance an event will occur.

Probability is always a number between 0 and 1.

Possible Results = how many different events can occur.

Favourable Results = how many results are you interested in.



**Probability =  $\frac{\text{Number of Favourable Results}}{\text{Number of Possible Results}}$**

