

NOTES :

CHAPTER 6 GEOMETRY AND SYMMETRY

1. SYMMETRY

LINE OF SYMMETRY	ROTATIONAL SYMMETRY
<ul style="list-style-type: none"> - Same as Line of Reflection - A line that divides an object into two (2) images reflecting each other 	<ul style="list-style-type: none"> - After rotating to a certain angle, the image will be EXACTLY the same as the object, e.i. position, orientation, color, shape...
PLANE OF SYMMETRY	ORDER OF ROTATIONAL SYMMETRY
<ul style="list-style-type: none"> - A flat surface [like an A4 paper] that divides a 3D object into two (2) 3D images reflecting each other 	<ul style="list-style-type: none"> - Number [of times] of rotations such that IMAGE = OBJECT.

2. SIMILAR FIGURES

If two figures are similar, then the following ratios and proportions hold true.

RATIO OF SIDES	$a : b$	$a : b = c : d$
RATIO OF AREAS	$a_2 : b_2$	$A_1 : A_2 = a_2 : b_2$
RATIO OF VOLUME	$a_3 : b_3$	$V_1 : V_2 = a_3 : b_3$

3. CONGRUENT FIGURES

(a) Two figures are congruent if all the corresponding parts [sides and angles] are equal.

(b) Two triangles are congruent if at least 3 corresponding parts are equal:

