

MATHEMATICS – MYP 3 (YEAR 9), TERM 2
AL JAZEERA ACADEMY
MIDDLE YEARS PROGRAMME, 2009-2010

TOPICS	OBJECTIVES	AREAS OF INTERACTION	ASSESSMENT CRITERIA
<p>Topic 10: Length and Area ± 2 Weeks</p> <p>Unit Question: Is measurement of any use to builders, engineers, architects, landscapers and surveyors?</p> <p>Key Questions</p> <ul style="list-style-type: none"> ✓ How do I convert between units of length? ✓ What formulae do I need know to find perimeters? ✓ How do I use π to find the circumference of a circle? ✓ How do I convert between units of area? ✓ What formulae do I need know to find areas? ✓ How do I use π to find the areas of circles and ellipses? ✓ How do I calculate areas of composite figures? ✓ How do I calculate surface areas of 3D figures with plane faces? ✓ How do I calculate surface areas of 3D figures with curved faces? ✓ How do I use appropriate formulae to solve real life perimeter and area problems? 	<p>Students should have knowledge of / be able to:</p> <p>A – Knowledge and Understanding</p> <ul style="list-style-type: none"> ⇒ Use formulae to calculate perimeter. ⇒ Find the circumference of a circle using π. ⇒ Use formulae to calculate area. ⇒ Find the areas of a circles and ellipses using π. <p>B- Investigating Patterns</p> <ul style="list-style-type: none"> ⇒ Convert between units of measure. ⇒ Convert between units of area. <p>C - Communication in Mathematics</p> <ul style="list-style-type: none"> ⇒ Calculate areas of composite figures. ⇒ Calculate surface areas of 3D figures with plane faces. ⇒ Calculate surface areas of 3D figures with curved faces. <p>D - Reflection in Mathematics</p> <ul style="list-style-type: none"> ⇒ Select and use appropriate formulae to solve real life perimeter and area problems. 	<p>Approaches to learning:</p> <ul style="list-style-type: none"> • Be organised, equipped and ready for work. • Use concepts and skills associated with measures. • Apply new mathematical concepts such as π. • Assess and evaluate own work. • Develop critical thinking. • Use scientific calculator. • Visualise perimeters and areas. <p>Environments, Health and Social Education:</p> <ul style="list-style-type: none"> • Investigate oxygen production of trees, plants and grasses. 	<p>A: Knowledge and Understanding (8) B: Investigating Patterns (8) C: Communication(6) D: Reflection and Evaluation (6) TOTAL: 28</p> <p>Assessments:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Mental Arithmetic Test (A). <input type="checkbox"/> Formal Test: Length and Area (A, C).