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

TOPICS	OBJECTIVES	AREAS OF INTERACTION	ASSESSMENT CRITERIA
Topic 7: The Geometry of Polygons ± 2 Weeks **Unit Question:** How is geometry useful and relevant to construction? **Key Questions** ✓ What geometrical facts should I know from last year? ✓ What special angles are associated with parallel lines? ✓ What should I know about interior and exterior angles of Triangles? ✓ What should I know about the interior and exterior angles of Quadrilaterals and other Polygons? ✓ What are bearings and how do I measure and draw them? ✓ What is deductive geometry?	**Students should have knowledge of / be able to:** **A – Knowledge and Understanding** ⇨ Recognise angle pairs. ⇨ Classify triangles. ⇨ Recognise and solve problems using geometric theorems. ⇨ Find interior and exterior angles of Triangles. (Including Isosceles triangles) ⇨ Find interior and exterior angles of Quadrilaterals and Polygons. ⇨ Classify special quadrilaterals. **B- Investigating Patterns** ⇨ Identify different angle types: revolution, straight angle, right angle, acute angle, obtuse angle and reflex angle. ⇨ Identify the properties of different polygons. **C - Communication in Mathematics** ⇨ Use correct line terminology. ⇨ Measure and solve problems using 3-figure bearings. **D - Reflection in Mathematics** ⇨ Justify why a solution does or does not make sense when using deductive geometry.	**Approaches to learning:** • Be organised, equipped and ready for work. • Group work. • Use of appropriate vocabulary. • Comprehend, interpret and evaluate. • Listening and questioning. **Human Ingenuity:** • Research on the use of triangles in the construction of bridges. • Investigate the use of angles and bearings in aircraft navigation.	**A: Knowledge and Understanding (8)** **B: Investigating Patterns (8)** **C: Communication (6)** **D: Reflection and Evaluation (6)** **TOTAL: 28** **Assessments:** ☐ **Mental Arithmetic Test (A)** ☐ **Formal Test:** The Geometry of Polygons. **(A, C)**