

MATHEMATICS – MYP 1(YEAR 7), TERM 2
AL JAZEERA ACADEMY
MIDDLE YEARS PROGRAMME, 2009-2010

TOPICS	OBJECTIVES	AREAS OF INTERACTION	ASSESSMENT CRITERIA
<p>Topic 5: Operation with Decimals. 2 weeks</p> <p>Unit Question: How do we use decimals, fractions, ratio and percentages in our daily lives?</p> <p>Content/Key Questions:</p> <ul style="list-style-type: none"> ✓ What are decimals? ✓ How do we add, subtract and order decimals up to 2dp? ✓ What is the effect of multiplying or dividing decimals by powers of 10? ✓ How do we round decimals in order to estimate solutions? ✓ How do we convert between decimals? ✓ How do I add, subtract, multiply and divide with decimals? ✓ How do I deal with large decimal numbers? ✓ How do I divide decimals with whole numbers? ✓ What is terminating and recurring decimals? ✓ How do I use a calculator to work decimals? 	<p>Students should have knowledge of / be able to:</p> <p>A – Knowledge and Understanding</p> <ul style="list-style-type: none"> ➤ Add, subtract and order decimals up to 2dp; ➤ Multiply & divide decimals by whole numbers; ➤ Round to the nearest unit, tenth or hundredth; ➤ Estimate answers by rounding; ➤ Find fractions of quantities/amounts; ➤ Divide whole numbers by fractions; ➤ Simplify ratios; ➤ Do simple sharing problems with ratios; ➤ Write percentages as fractions & decimals, and vice versa; ➤ Find percentages of amounts with/without a calculator; ➤ Perform calculations large decimal numbers. <p>B- Investigating Patterns</p> <ul style="list-style-type: none"> ➤ Multiply & divide decimals by 10, 100, 1000, 0.1 & 0.01; <p>C - Communication in Mathematics</p> <ul style="list-style-type: none"> ➤ Why do you think using the BMI, the height is squared? Is this sensible? <p>D - Reflection in Mathematics</p> <ul style="list-style-type: none"> ➤ Explain whether the results make sense in the context of the problem presented. 	<p>Approaches to learning:</p> <ul style="list-style-type: none"> *Communicate new terminology both verbally and in written form; *Use a scientific calculator effectively; *Compare and analyse equivalent ways of presenting values; *Understand assessment criteria; *Recognise the link between theory & practice. <p>Environments:</p> <ul style="list-style-type: none"> *Population demographics using BMI. *Determine how the environment plays a role in your BMI. <p>Human Ingenuity:</p> <ul style="list-style-type: none"> *The development of the calculator & computers due to the need for simplifying calculations; <p>Health and Social:</p> <ul style="list-style-type: none"> *There are many health problems associated with overweight people. How do we use this BMI formula to determine if someone is actually overweight? $BMI = \frac{\text{weight}}{\text{height}^2}$	<p>A: Knowledge & Understanding (8)</p> <p>B: Investigating Patterns (8)</p> <p>C: Communication in Mathematics (6)</p> <p>D: Reflection in Mathematics (6)</p> <p>TOTAL: 28</p> <p>Assessments:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Test on decimals and Operations with Decimals (A, B). <input type="checkbox"/> Mental Arithmetic test (A) <input type="checkbox"/> Body Mass Index project in class. (A, B, C, D)