

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

TOPICS	OBJECTIVES	AREAS OF INTERACTION	ASSESSMENT CRITERIA
<p><b>Topic 2:</b> Fractions Operations. 2 weeks</p> <p><b>Unit Question:</b> How do we use fractions, in our daily lives?</p> <p><b>Content/Key Questions:</b></p> <ul style="list-style-type: none"> <li>✓ What is the difference between a vulgar fraction and an improper fraction?</li> <li>✓ How do we convert between improper fractions &amp; mixed numbers?</li> <li>✓ How do we find a fraction of a quantity/amount?</li> <li>✓ How do we use equivalent fractions to add, subtract and compare fractions?</li> <li>✓ How do we divide a whole number by a fraction?</li> <li>✓ How do we convert between fractions, decimals and percentages?</li> </ul>	<p><b>Students should have knowledge of / be able to:</b></p> <p><b>A – Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>➤ Add, subtract and order Fractions.</li> <li>➤ Multiply &amp; divide fractions.</li> <li>➤ Estimate answers by rounding;</li> <li>➤ Find fractions of quantities/amounts;</li> <li>➤ Divide whole numbers by fractions;</li> <li>➤ Do simple sharing problems with ratios;</li> <li>➤ Write percentages as fractions &amp; decimals, and vice versa;</li> </ul> <p><b>B- Investigating Patterns</b></p> <ul style="list-style-type: none"> <li>➤ Add, subtract, multiply &amp; divide with fractions.</li> <li>➤ Reciprocals of a fraction.</li> <li>➤ Problem solving with fractions.</li> </ul> <p><b>C - Communication in Mathematics</b></p> <ul style="list-style-type: none"> <li>➤ Interpret place value up to thousandths;</li> <li>➤ Recognise the difference between vulgar fractions and improper fractions;</li> <li>➤ Recognise &amp; convert between improper fractions &amp; mixed numbers;</li> </ul> <p><b>D - Reflection in Mathematics</b></p> <ul style="list-style-type: none"> <li>➤ Explain whether the results make sense in the context of the problem presented.</li> </ul>	<p><b>Approaches to learning:</b></p> <ul style="list-style-type: none"> <li>*Communicate new terminology both verbally and in written form;</li> <li>*Use a scientific calculator effectively;</li> <li>*Compare and analyse equivalent ways of presenting values;</li> <li>*Understand assessment criteria;</li> <li>*Recognise the link between theory &amp; practice.</li> </ul> <p><b>Environments:</b></p> <ul style="list-style-type: none"> <li>*Population demographics;</li> <li>*Fractions associated with Geography;</li> <li>*Fractions of pollutants in the atmosphere.</li> </ul> <p><b>Human Ingenuity:</b></p> <ul style="list-style-type: none"> <li>*The development of the calculator &amp; computers due to the need for simplifying calculations;</li> </ul> <p><b>Health and Social:</b></p> <ul style="list-style-type: none"> <li>*Fractions &amp; percentages of different vitamins, minerals, liquids, etc required for good health;</li> <li>*Heart rate before/after exercise (as a ratio/fraction).</li> </ul>	<p><b><u>A: Knowledge &amp; Understanding (8)</u></b></p> <p><b><u>B: Investigating Patterns (8)</u></b></p> <p><b><u>C: Communication in Mathematics (6)</u></b></p> <p><b><u>D: Reflection in Mathematics (6)</u></b></p> <p><b><u>TOTAL: 28</u></b></p> <p><b>Assessments:</b></p> <ul style="list-style-type: none"> <li>□ Test on fractions, decimals and percentages (A, B).</li> </ul>