

# **In-Service Teacher Training**

## **Assessment in IGCSE Mathematics 0580/0581**

### **Outline of Training Pack**

SESSION No.	DESCRIPTION OF SESSION	POWERPOINT SLIDES	OTHER RESOURCES REQUIRED
	<b>Background preparation</b>	<i>CIE PowerPoint presentation for Assessment in IGCSE Mathematics 0580/0581</i>	<ul style="list-style-type: none"> <li>• Equipment for giving a PowerPoint presentation</li> <li>• Copies of the PowerPoint presentations in 'Handout' format for delegates to annotate</li> <li>• Copies of the current syllabus</li> </ul>
Session 1	<b>Open the session</b>	<b>Slide 1</b> Assessment in IGCSE Mathematics 0580/0581 Session 1	
Session 1	<b>Introduce yourself and explain the background and aims of the training</b>	<b>Slide 2</b> Introductions; Background; Aim of Training	
Session 1	<b>Explain that Session 1 focuses on:</b> <ul style="list-style-type: none"> <li>• Syllabus aims</li> <li>• Syllabus structure</li> <li>• Assessment objectives</li> <li>• Development of different skills</li> <li>• Formative and summative assessment</li> </ul>	<b>Slide 3</b> Session 1 looks at:	
Session 1	<b>The aims in teaching IGCSE Mathematics</b> Slide 4 explains the six broad aims of teaching and learning mathematics.  Slide 5 explains how the syllabus is structured into 37 teaching topics  Slide 6 highlights that all topics fall into four teaching areas of mathematics and refers to the 37 teaching topics in Mathematics	<b>Slide 4</b> Aims of the syllabus  <b>Slide 5</b> Structure of the syllabus (1)  <b>Slide 6</b> Structure of the syllabus (2)	Copies of the current syllabus
Session 1	<b>The structure of the syllabus</b> Grade descriptions - refers to the descriptors at grades A, C and F	<b>Slide 7</b> Structure of the syllabus (3)	Copies of the current syllabus  Short task on grade descriptions in notes on slide
Session 1	Slides 8-11 list highlights the new syllabus content from 2006	<b>Slides 8-11</b> Structure of the syllabus (4-7):	Copies of the current syllabus

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Session 1	<p><b>Assessment Objectives</b> Slide 12 refers to the Assessment Objectives</p> <p>Slide 13 lists the target grades at Core and Extended tiers</p> <p>Slide 14 gives a breakdown on the style and content of the examination papers</p> <p>Slide 15 provides further clarification on the exam papers</p> <p>Slides 16 and 17 discuss the role of the 0581 coursework option</p>	<p>New syllabus content from 2006</p> <p><b>Slide 12</b> Assessment Objectives (1)</p> <p><b>Slide 13</b> Assessment Objectives (2): Core and Extended target grades</p> <p><b>Slide 14</b> Assessment Objectives (3): Composition of the papers</p> <p><b>Slide 15</b> Assessment Objectives (4)</p> <p><b>Slide 16</b> Assessment Objective (5): Coursework</p> <p><b>Slide 17</b> Assessment Objective (6): Coursework</p>	Copies of the current syllabus
Session 1	<p><b>Formative assessment</b> Slide 18 explains the difference between summative and formative assessment</p> <p>Slide 19 discusses the nature of formative assessment</p> <p>Slide 20 looks at the different ways of assessing progress in the classroom</p>	<p><b>Slide 18</b> Formative assessment (1): Formative and summative assessment</p> <p><b>Slide 19</b> Formative assessment (2): The nature of formative assessment</p> <p><b>Slide 20</b> Formative assessment (3): Ways of assessing progress</p>	<p>Handout 1.17 <i>How much formative assessment do you do?</i></p> <p>Handout 1:18 <i>Devising good written formative tests</i></p>
Session 1	<b>Closing Comments</b>	<b>Slide 21</b>	

SESSION No.	DESCRIPTION OF SESSION	POWERPOINT SLIDES	OTHER RESOURCES REQUIRED
Session 2	<b>Open the session</b>	<b>Slide 1</b> Assessment in IGCSE Mathematics 0580 Session 2	
Session 2	<b>Introduce yourself and explain the background and aims of the training</b>	<b>Slide 2</b> Introductions; Background; Aim of Training	
Session 2	<b>Explain that Session 2 focuses on:</b> <ul style="list-style-type: none"> <li>• How question papers are set</li> <li>• The construction of questions</li> <li>• Grade descriptions</li> <li>• Developing mark schemes and applying them.</li> <li>• Analysis of students' scripts and writing mark schemes</li> </ul>	<b>Slide 3</b> Session 2 looks at:	
Session 2	<b>How question papers are set</b> Slide 4 describes how the Assessment Objectives are used in constructing the question papers	<b>Slide 4</b> How question papers are set (1): Assessment Objectives	Copies of the current syllabus and several Paper 3's from previous sessions
Session 2	Slide 5 describes how different levels of difficulty are arranged in question papers 1 to 4	<b>Slide 5</b> How question papers are set (2): Levels of difficulty	
Session 2	Slide 6 deals with style points on question papers and talks about the adoption of a house style for setting IGCSE-style question papers  Slides 7, 8, 9 and 10 deal with mark schemes and the conventions used in setting mark schemes on IGCSE papers. Slide 10 contains important marking points for staff and students.	<b>Slide 6</b> Setting internal summative assessments  <b>Slide 7</b> Devising mark schemes  <b>Slide 8</b> Types of marks used on mark schemes  <b>Slide 9</b> Types of marks used on mark schemes (2)	Handout 2:5: <i>Exam paper styles for IGCSE assessment</i>

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		<p><b>Slide 10</b> Important marking issues</p>	
Session 2	<p><b>The construction of questions</b> Slide 11 discusses the reasons for setting questions in context</p> <p>Slide 12 explains the command words used in mathematics questions</p>	<p><b>Slide 11</b> Setting questions in context</p> <p><b>Slide 12</b> Command words</p>	Handout 2:10 <i>Command words – What answer do you expect?</i>
Session 2	<p><b>Grade Descriptions</b> Slide 13 explains the purpose of grade descriptions and the idea of positive achievement</p> <p>Slide 14 deals with analysis of grade descriptions and development of other descriptors at other grades</p> <p>Slide 15 continues with grade descriptions</p> <p>Slide 16 discusses approximate grade boundaries at Core and Extended tiers</p>	<p><b>Slide 13</b> Grade Descriptions (1): Why have Grade Descriptions?</p> <p><b>Slide 14</b> Grade Descriptions (2): Analysing Grade Descriptions</p> <p><b>Slide 15</b> Grade Descriptions (3)</p> <p><b>Slide 16</b> Grade Boundaries for IGCSE Mathematics</p>	Copies of the current syllabus Reference to question papers
Session 2	<p><b>Strategies for marking questions</b> Slide 17 links into extended activities on the handouts</p> <p>Slide 18 looks at creating a mark scheme and adjusting it in the light of students' responses</p>	<p><b>Slide 17</b> Strategies for marking questions: Core questions</p> <p><b>Slide 18</b> Creating a mark scheme for a question</p>	Handouts 2:15(a) <i>Questions and responses; marks and comments</i> and 2:15(b) <i>Extended – questions and responses ; marks and comments</i> for extended tasks on marking and applying mark schemes  Handouts 2:16(a) <i>Creating a mark scheme</i> , 2:16(b) <i>Reviewing a mark scheme</i> and 2:16(c) <i>CIE mark scheme</i> for Activity 2.16 on mark schemes
Session 2	<b>Closing Comments</b>	<b>Slide 19</b>	

SESSION No.	DESCRIPTION OF SESSION	POWERPOINT SLIDES	OTHER RESOURCES REQUIRED
Session 3	<b>Open the session</b>	<b>Slide 1</b> Resources in IGCSE Mathematics 0580/0581 – Session 3	
Session 3	<b>Introduce yourself and explain the background and aims of the training</b>	<b>Slide 2</b> Introductions; Background; Aim of Training	
Session 3	<b>Explain that Session 3 focuses on resources:</b> <ul style="list-style-type: none"> <li>Using mark schemes</li> <li>Using the Examiner Report</li> <li>Additional resources for IGCSE Mathematics</li> </ul>	<b>Slide 3</b> Session 3 looks at:	
Session 3	<b>Using mark schemes</b> Slide 4 explains the purpose of mark schemes  Slide 5 explains how the mark scheme should be used in tandem with Examiner Reports for best benefit  Slide 6 gives general instructions for marking scripts and gives delegates the opportunity to mark sample questions from candidate scripts.  <b>Note that this work may need to be completed outside the training session if time is short</b>	<b>Slide 4</b> Using mark schemes (1): The importance of mark schemes  <b>Slide 5</b> Using mark schemes (2): Use with the Examiner Report  <b>Slide 6</b> Using mark schemes (3): Analysis of candidates' scripts	Unmarked selected questions from scripts are on the CD as well as extracts from the Examiner Report and answers to the marking exercises Handout 3.5: <i>Analysis of candidate scripts</i>
Session 3	<b>Using Examiner Reports</b> Slide 7 explains the importance of the Examiner Report:  Slide 8 shows how the Examiner Report can be used to analyse candidates' answers	<b>Slide 7</b> Using Examiner Reports (1): The importance of the Reports  <b>Slide 8</b> Using Examiner Reports (2): Analysis of contents	Examiners reports and question papers are also included in the pack for this exercise  Handout 3.7 <i>Analysis of the Examiner Report: Identifying student errors</i>

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	Slide 9 explains how to use the Examiner Reports over a number of years and relates feedback to individual teaching aims	<b>Slide 9</b> Using Examiner Reports (3): Teaching aims/Examiner Report	Examiner Report for June 2003 and June 2004
Session 3	<p><b>Using additional resources</b> Slide 10 explains the CIE Teacher Support website and the schemes of work</p> <p>Slides 11-12 explain the Sessions within the schemes of work on the CIE Teacher Support website</p> <p>Slide 13 explains the test materials on the CIE Teacher Support website.</p> <p>Slide 14 suggests other resources that can be used in teaching of IGCSE Mathematics - the Learn.cie site, discussion lists and online training</p> <p>Slide 15 suggests further resources for teaching</p> <p>Slides 16-17 explain resource trails and developing resources</p>	<p><b>Slide 10</b> Additional resources (1): CIE Teacher Support website</p> <p><b>Slides 11-12</b> Additional resources (2-3): Schemes of work (1-2)</p> <p><b>Slide 13</b> Additional resources (4): Support test materials</p> <p><b>Slide 14</b> Additional resources (5): Other resources</p> <p><b>Slide 15</b> Additional resources (6): Other resources</p> <p><b>Slide 16-17</b> Resource trails</p>	<p>Access to the CIE Teacher Support website would be helpful. NB: not all Centres have access to this website.</p> <p>Access to the Learn.cie website would be an advantage</p> <p>Handout 3:15: <i>Resource packs</i></p>
Summing up of training	<b>Thanks for participating in the training</b> Slide 18 thanks delegates for their interest and invites feedback via CIE	<b>Slide 18</b> Summing up: Thanks to delegates	