

# **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

SESSION No.	DESCRIPTION OF SESSION	POWERPOINT SLIDES	OTHER RESOURCES REQUIRED
		New syllabus content from 2006	
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><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>

SESSION No.	DESCRIPTION OF SESSION	POWERPOINT SLIDES	OTHER RESOURCES REQUIRED
		<b>Slide 10</b> Important marking issues	
Session 2	<b>The construction of questions</b> Slide 11 discusses the reasons for setting questions in context  Slide 12 explains the command words used in mathematics questions	<b>Slide 11</b> Setting questions in context  <b>Slide 12</b> Command words	Handout 2:10 <i>Command words – What answer do you expect?</i>
Session 2	<b>Grade Descriptions</b> Slide 13 explains the purpose of grade descriptions and the idea of positive achievement  Slide 14 deals with analysis of grade descriptions and development of other descriptors at other grades  Slide 15 continues with grade descriptions  Slide 16 discusses approximate grade boundaries at Core and Extended tiers	<b>Slide 13</b> Grade Descriptions (1): Why have Grade Descriptions?  <b>Slide 14</b> Grade Descriptions (2): Analysing Grade Descriptions  <b>Slide 15</b> Grade Descriptions (3)  <b>Slide 16</b> Grade Boundaries for IGCSE Mathematics	Copies of the current syllabus Reference to question papers
Session 2	<b>Strategies for marking questions</b> Slide 17 links into extended activities on the handouts        Slide 18 looks at creating a mark scheme and adjusting it in the light of students' responses	<b>Slide 17</b> Strategies for marking questions: Core questions        <b>Slide 18</b> Creating a mark scheme for a question	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><i>Note that this work may need to be completed outside the training session if time is short</i></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	<p><b>Thanks for participating in the training</b> Slide 18 thanks delegates for their interest and invites feedback via CIE</p>	<b>Slide 18</b> Summing up: Thanks to delegates	