



Support student mathematics learning

## **Table of Contents (Extract)**

NOTE: This is a sample only. This cover page is not included in Catapult Smallprint's printed books.

This Table of Contents extract is taken from Catapult Smallprint's full hardcopy Trainer/Assessor Guide for the unit CHCEDS045.

For more information, including using our enhanced online version of this unit in Catapult LMS, or to purchase the Learner or Trainer printed books, please see this unit on our website by clicking this link:

https://catapultlearning.com.au/product/CHCEDS045/

© Catapult Smallprint Pty Ltd

# Trainer/assessor guide

# CHCEDS045 Support student mathematics learning

### Welcome to this unit of study

This unit describes the performance outcomes, skills and knowledge required to work with teachers to support primary and secondary students to develop mathematics skills in number and algebra, measurements and geometry, and statistics and probability as included in current curriculum documents.

These skills and knowledge enable education support workers to work with the teacher to reinforce mathematics skills across the curriculum.

The unit applies to education support workers who operate under the guidance and supervision of a teacher or other educational professional. They work mainly with students in classroom settings in primary and secondary schools, as defined by State/ Territory legislation.

It may be undertaken as:

- » part of a formal qualification nationally recognised through the Australian Qualifications Framework (AQF)
- >> a stand alone unit
- » part of a formal skill set

### Contents

About this trainer/assessor guide	4
Learning resource	5
Topic 1: Monitor mathematics skills	5
Monitor students' understanding and use of mathematics through observation, listening and	
conversation	5
Provide information to the teacher to inform planning based on observations	8
Identify progress of acquisition of mathematics skills for numeracy and discuss with the teacher	10
Check your understanding	15
Topic 2: Support students to develop mathematics skills	17
Determine appropriate strategies for supporting students in the application of mathematics skills in	
consultation with the teacher	17
Implement planned strategies and scaffolding to enhance the abilities of students and address their	
individual needs	21
Encourage students to problem-solve using mathematics knowledge and skills and make links to	
everyday life contexts	23
Use activities and examples to demonstrate different mathematical functions	25
Use explicit talk to focus students on specific mathematics knowledge and skills	
Check your understanding	29
Topic 3: Enhance students' mathematics knowledge and skills through structured activities	31
Use accurate mathematics terminology and concepts, as planned with the teacher, to support studen	ıts'
learning	31
Encourage students to improve mental computation and calculation skills using strategies appropriat	
to students' developmental levels	35
Ensure students check for reasonableness of solutions when calculating, using a range of strategies	
including estimating and technology	38
Encourage students and build their confidence to attempt problem-solving that requires the use of	
mathematics knowledge and skills	
Check your understanding	
References	45
Assessment workbook	47
Unit information	49
What is competency-based assessment?	50
How will my competency be assessed?	51
Assessment agreement	52
Foundation skills checklist	53
Skills recognition	54
Topic 1: Monitor mathematics skills	
Topic 2: Support students to develop mathematics skills	
Topic 3: Enhance students' mathematics knowledge and skills through structured activities	

Knowledge questions	58
Topic 1: Monitor mathematics skills	
Topic 2: Support students to develop mathematics skills	65
Topic 3: Enhance students' mathematics knowledge and skills through structured activities	75
Project	80
Practical assessment	83
Overview	
Instructions for the learner	85
Learner agreement	
Instructions for trainer/assessor or third party	87
Third party evidence collection agreement	
Practical demonstration	
Completion record	101
Unit mapping	102
Trainer/assessor instructions and requirements	

### About this trainer/assessor guide

### Learning resource

The learning resource is divided into the following topics:

- >> Monitor mathematics skills
- >> Support students to develop mathematics skills
- >> Enhance students' mathematics knowledge and skills through structured activities

Each topic provides information to help you gain the skills and knowledge required to perform the work tasks to which they refer. Read the information and practise the skills described. You should also take the opportunity to undertake additional independent research. Your trainer/assessor may also provide supplementary information including interpretation of the contents of this resource.

At the end of each topic is:

- >> a set of true or false questions
- >> a set of multiple choice questions

These questions provide an opportunity to check your understanding and progress. They are self-marking and do not form part of the assessment for the unit.

#### Assessment workbook

To have this unit recognised as a formal qualification you need to have your skills and knowledge assessed. The assessment workbook provides:

- >> information on competency-based assessment
- >> instructions on how you will be assessed
- >> assessment tools to assess your competence
- >> instructions on how to complete the assessment tasks within each assessment tool

To be assessed as competent you need to provide evidence that you have the skills and knowledge to undertake the requirements of this unit. This assessment of competency is made by a qualified trainer/assessor from a registered training organisation. You must complete all the assessments as directed by your trainer/assessor to the required standard. It is not necessary to work through the guide in the order in which it is written. However this is at the discretion of your trainer/assessor.

#### Disclaimer

Information contained in this resource is drawn from sources believed to be reliable. The firm, its employees, agents and contractors do not warrant the correctness of the sources used and accept no responsibility to any person for any errors or omissions or for any loss or damage howsoever caused from the use of this resource.