Entry Pathways Qualifications in MATHEMATICS

UNITS AND GUIDANCE

(To be read in conjunction with the Entry Pathways Specification)

Qualifications available	Cash-in Code
Entry 2 Award in Mathematics	6009/A2
Entry 2 Certificate in Mathematics	6009/C2
Entry 3 Award in Mathematics	6009/A3
Entry 3 Certificate in Mathematics	6009/C3

*For Entry 1 Qualifications in Mathematics, please refer to the **Entry 1 Qualifications in Personal Progress**

Updated September 2013

Contents

Units and Guidance for Centres

Amendments History

Date	Page	Amendment
September 2013	8,9,17,18,31,32,41,42,54, 68,82,83,93,94,101,102	Summary grids inserted at end of every unit
	77	Working with measures 6375/E3 At Entry 3, learners should show two examples of reading scales harder than those chosen for Entry 2. One of the scales should be read to one decimal place and one scale should *not increase by 1 or 10 each time.*

Units that contribute to qualifications in

Unit Code	Unit title	Unit Level and Unit Reference Code			
		Entry 1	Entry 2	Entry 3	Level 1
6370/E2 6370/E3	Introduction to whole numbers	N/A	Y/503/3461	D/503/3462	N/A
6371/E2 6371/E3	Working with whole numbers	N/A	H/503/3463	K/503/3464	N/A
6372/E2 6372/E3	Working with fractions	N/A	Y/503/3475	D/503/3476	N/A
6373/E2 6373/E3	Using money	N/A	A/503/3467	F/503/3468	N/A
6374/E2 6374/E3	Working with 2D and 3D shapes	N/A	F/503/3471	J/503/3472	N/A
6375/E2 6375/E3	Working with measures	N/A	A/503/3470	J/503/3469	N/A
6376/E2 6376/E3	Working with angles and position	N/A	L/503/3473	R/503/3474	N/A
6377/E2 6377/E3	Data handling	N/A	M/503/3465	T/503/3466	N/A

Title:	**Introduction to whole numbers**	
Unit Ref. Nos.	**Entry 2: Y/503/3461**	**Entry 3: D/503/3462**
Entry Codes	**Entry 2: 6370/E2**	**Entry 3: 6370/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**1**	
Unit aim:	This unit aims to enable learners to identify and use place value in whole numbers.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
L01 **Understand the value of whole numbers.**	AC1 .1 Identify HTU place value. AC1.2 Order whole numbers (for numbers up to 1,000).	AC1.1 Identify ThHTU place value. AC1 .2 Order whole numbers (for numbers up to 10,000).
LO2 **Be able to recognise a written form of whole numbers.**	AC2.1 Match whole numbers written in words with the numbers written in digit form (for numbers up to 1,000). AC2.2 Change whole numbers written in words into digit form (for numbers up to 1,000). AC2.3 Change whole numbers written in digit form into words (for numbers up to 1,000).	AC2.1 Match whole numbers written in words with the numbers written in digit form (for numbers up to 10,000). AC2.2 Change whole numbers written in words into digit form (for numbers up to 10,000). AC2.3 Change whole numbers written in digit form into words (for numbers up to 10,000).
LO3 **Be able to recognise number patterns involving whole numbers.**	AC3.1 Count up and back in 2s, 5s and 10s.	AC3.1 Count up and back in 2s, 5s and 10s. AC3.2 Count up to and back from 1,000 in 100s.

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

Calculators should not be allowed. 

LO1 Understand the value of whole numbers.

Learners should know and identify place value, Hundreds, Tens and Units (HTU) [Entry 2], Thousands, Hundreds, Tens and Units (ThHTU) [Entry 3] and order whole numbers.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concept of place value.

AC1.1 At Entry 2 and 3, learners should show that they are able to identify the place value in **three different** numbers.

AC1.2 At Entry 2 and 3, learners should order **at least four different** numbers in ascending or descending order. Learners are not expected to know the terms 'ascending or descending'.

At Entry 2, numbers up to 1,000 (not inclusive) should be used and at Entry 3, numbers up to 10,000 (not inclusive) should be used.

LO2 Recognise the written form of whole numbers.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concept of recognising the written form of whole numbers.

AC2.1 Learners should show that they are able to match **three different** whole numbers written in words with numbers, with similar digits, written in digit form for numbers up to 1,000 (not inclusive) at Entry 2 and for numbers up to 10,000 (not inclusive) at Entry 3.

Guidance may be used by reading the number written in words to the candidate.

E.g. which of the following shows **three hundred and three**?

3030 **303** **3003** **330** **33**

AC2.2 Learners should change **three different** whole numbers written in words into digit form for numbers up to 1,000 (not inclusive) at Entry 2 and for numbers up to 10,000 (not inclusive) at Entry 3. Guidance may be used by reading the number written in words to the candidate.

AC2.3 Learners should change **three different** whole numbers written in digit form into words for numbers up to 1,000 (not inclusive) at Entry 2 and for numbers up to 10,000 (not inclusive) at Entry 3. Ignore spelling as long as the responses are unambiguous.

LO3 Recognise number patterns involving whole numbers.

At Entry 2 and Entry 3, learners should count up in 2s, 5s and 10s to a number less than 100. It is sufficient for learners to give between 5 and 10 numbers, and this could be done using a 100 square or number line.

At Entry 2 and Entry 3, learners should count back in 2s, 5s and 10s from a number less than 100. It is sufficient for learners to give between 5 and 10 numbers, and this could be done using a 100 square or number line.

At Entry 3, learners should demonstrate that they are able to count up to and back from 1,000 in 100s.

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

Units most likely to be taught alongside *Introduction to whole numbers*:

Working with whole numbers (Entry 2 & Entry 3)

3.2 Resources

http://www.primaryresources.co.uk/maths/mathsB4.htm - numerous place value resources

http://www.bbc.co.uk/schools/ks1bitesize/numeracy/units/index.shtml - interactive games

http://www.teachingideas.co.uk/maths/contents04number.htm - place vale and whole number resources

http://www.familylearning.org.uk/place_value_games.html - interactive games

http://www.ngfl-cymru.org.uk/eng/vtc-home/vtc-ks2-home/vtc-ks2-maths(2)/vtc-ks2-maths-number/vtc-ks2-maths-number-number_and_number_notation/vtc_-_tenths_and_hundredths.htm - interactive activities to allow the class to understand tenths and hundredths

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:

- photocopy from pupils' book
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- card sort activities
- jigsaw activities

4.2 Examples of Tasks

Tasks specific to *Introduction to whole numbers*

AC1.1 - use 'base 10' blocks to develop an understanding of place value.
- tasks using flash cards
- create jigsaw puzzles (free software available from the Internet)
- bingo or similar place value games
- ask questions such as:
  What is the **value** of the 2 in these numbers? 426 325 521? [Entry 3]
  What is the **value** of the 2 in these numbers? 4261 3251 9217? [Entry 3]

AC1.2 - learners receive flash cards with whole numbers up to 1,000 [Entry 2] and 10,000 [Entry 3] and must order them in order starting with the smallest (or largest).

AC2.1 - learners receive a card sort activity where they must match the number written in words with the number written in digit form for whole numbers up to 1,000 [Entry 2] and 10,000 [Entry 3]. The numbers should have similar digits.

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Which of the following number shows **three hundred and three**?

3030 **303** **3003** **330** **33**

AC2.2 - ask questions such as "write down in **figures** the number **nine hundred and seven"** [Entry 2] "write down in **figures** the number **nine thousand three hundred and seven"** [Entry 3]

AC2.3 - ask questions such as "write down the number 986 in **words"** [Entry 2] "write down the number 4010 in **words"** [Entry 3]

AC3.1 - ask learners to count up to 38 in 2s aloud, starting from 2.
- ask learners to count up to 70 in 2s and 5s by colouring squares on a 100 square.
- ask learners to count back from 90 in 10s by colouring squares on a 100 square.
- ask learners to complete sequences such as 10, 20, ?, ?, 50, 60

AC3.2 - [Entry 3] ask learners to complete the sequence of counting up to 1,000 starting with 300 in 100s

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6370/E2 INTRODUCTION TO WHOLE NUMBERS - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Identify HTU place value.	Identify the place value in **three different** numbers up to 1,000 (not inclusive).
AC1.2 Order whole numbers (for numbers up to 1,000).	Order **at least four different** numbers up to 1,000 (not inclusive) in ascending or descending order.
AC2.1 Match whole numbers written in words with the numbers written in digit form (for numbers up to 1,000).	Match **three different** whole numbers written in words with numbers, with similar digits, written in digit form for numbers up to 1,000 (not inclusive).
AC2.2 Change whole numbers written in words into digit form (for numbers up to 1,000).	Change **three different** whole numbers written in words into digit form for numbers up to 1,000 (not inclusive)
AC2.3 Change whole numbers written in digit form into words (for numbers up to 1,000).	Change **three different** whole numbers written in digit form into words for numbers up to 1,000 (not inclusive)
AC3.1 Count up and back in 2s, 5s and 10s.	Count up in 2s, 5s and 10s to a number less than 100. Between 5 and 10 numbers is sufficient. Count back in 2s, 5s and 10s to a number less than 100. Between 5 and 10 numbers is sufficient.

6370/E3 INTRODUCTION TO WHOLE NUMBERS - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Identify ThHTU place value.	Identify the place value in **three different** numbers up to 10,000 (not inclusive).
AC1.2 Order whole numbers (for numbers up to 10,000).	Order **at least four different** numbers up to 10,000 (not inclusive) in ascending or descending order.
AC2.1 Match whole numbers written in words with the numbers written in digit form (for numbers up to 10,000).	Match **three different** whole numbers written in words with numbers, with similar digits, written in digit form for numbers up to 10,000 (not inclusive).
AC2.2 Change whole numbers written in words into digit form (for numbers up to 10,000).	Change **three different** whole numbers written in words into digit form for numbers up to 10,000 (not inclusive)
AC2.3 Change whole numbers written in digit form into words (for numbers up to 10,000).	Change **three different** whole numbers written in digit form into words for numbers up to 10,000 (not inclusive)
AC3.1 Count up and back in 2s, 5s and 10s.	Count up in 2s, 5s and 10s to a number less than 100. Between 5 and 10 numbers is sufficient. Count back in 2s, 5s and 10s to a number less than 100. Between 5 and 10 numbers is sufficient.
AC3.2 Count up to and back from 1,000 in 100s.	Count up to and back from 1,000 in 100s.

Introduction to whole numbers Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1 .1 Identify HTU place value.			
AC1.2 Order whole numbers (for numbers up to 1,000).			
AC2.1 Match whole numbers written in words with the numbers written in digit form (for numbers up to 1,000).			
AC2.2 Change whole numbers written in words into digit form (for numbers up to 1,000).			
AC2.3 Change whole numbers written in digit form into words (for numbers up to 1,000).			
AC3.1 Count up and back in 2s, 5s and 10s.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Introduction to whole numbers Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify ThHTU place value.			
AC1 .2 Order whole numbers (for numbers up to 10,000).			
AC2.1 Match whole numbers written in words with the numbers written in digit form (for numbers up to 10,000).			
AC2.2 Change whole numbers written in words into digit form (for numbers up to 10,000).			
AC2.3 Change whole numbers written in digit form into words (for numbers up to 10,000).			
AC3.1 Count up and back in 2s, 5s and 10s.			
AC3.2 Count up to and back from 1,000 in 100s.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title:	**Working with whole numbers**	
Unit Ref. Nos.	**Entry 2: H/503/3463**	**Entry 3: K/503/3464**
Entry Codes	**Entry 2: 6371/E2**	**Entry 3: 6371/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**2**	
Unit aim:	This unit aims to enable learners to round numbers and use the four operators (adding, subtracting, multiplying and dividing) when dealing with whole numbers in real life situations.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to round numbers.**	AC1 .1 Approximate whole numbers (up to 1,000) to the nearest 10 and 100.	AC1 .1 Approximate whole numbers (up to 10,000) to the nearest 10,100 and 1,000.
LO2 **Be able to use four operators dealing with whole numbers in real life situations.**	AC2.1 Add two-digit whole numbers in real life situations. AC2.2 Subtract two-digit whole numbers in real life situations. AC2.3 Multiply two single digit numbers in real life situations. AC2.4 Divide two-digit numbers by a single digit number in real life situations (that do not involve remainders).	AC2.1 Add three-digit whole numbers in real life situations. AC2.2 Subtract three-digit whole numbers in real life situations. AC2.3 Multiply two-digit and three-digit numbers by a single digit number in real life situations. AC2.4 Divide two-digit and three-digit numbers by a single digit number in real life situations. AC2.5 Deal with any remainder correctly when solving a problem in a real life situation.

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

Calculators should not be allowed. 

LO1 Be able to round numbers.

As an introduction, learners should know and identify place value, Hundreds, Tens and Units (HTU) [Entry 2], Thousands, Hundreds, Tens and Units (ThHTU) [Entry 3] in order to be able round numbers.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concept of rounding numbers.

AC1.1 Learners should demonstrate, independently, that they are able to round **two different** numbers to the nearest 10 **and** 100 [Entry 2] and to the nearest 10,100 **and** 1,000 [Entry 3].

At Entry 2, numbers up to 1,000 (not inclusive) should be used and at Entry 3, numbers up to 10,000 (not inclusive) should be used.

LO2 Be able to use four operators dealing with whole numbers in real life situations.

Learners should know how and when to add, subtract, multiply and divide number in real life situations.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of using the four operators.

At Entry 2 and 3, 'real life' contexts can often appear quite complex but can be approached by identifying familiar aspects and accessing the more straightforward, simple elements. Entry Level learners would be expected to apply their skills to make sense of familiar situations and contexts and to apply a limited range of techniques to simple activities.

At Entry 2 & 3, although the context should be very familiar and accessible to the learner, a range of different 'real life' contexts should be introduced.

AC2.1 At Entry 2, learners should show **two** examples of adding at least two two-digit whole numbers (that are **not** a multiple of 10) in real life situations without using a calculator.

At Entry 3, learners should show **two** examples of adding at least two three-digit whole numbers (that are **not** a multiple of 10 or 100) in real life situations without using a calculator.

AC2.2 At Entry 2, learners should show **two** examples of subtracting two two-digit whole numbers in real life situations without using a calculator. At least one the numbers should **not** be a multiple of 10 and the difference between the numbers should **not** be a multiple of 10.

At Entry 3, learners should show **two** examples of subtracting two three-digit whole numbers in real life situations without using a calculator. At least one of the numbers should **not** be a multiple of 10 or 100 and the difference between the numbers should **not** be a multiple of 10 or 100.

AC2.3 At Entry 2, learners should show **two** examples of multiplying two single digit whole numbers in real life situations without using a calculator.

At Entry 3, learners should show **two** examples of multiplying a two-digit whole number (that is **not** a multiple of 10) by a single digit in real life situations and **two** examples of multiplying a three-digit whole number (that is **not** a multiple of 10 or 100) by a single digit in real life situations without using a calculator.

AC2.4 At Entry 2, learners should show **two** examples of dividing a two-digit whole number (that is **not** a multiple of 10) by a single digit number (that is **not** 1 or 2) in real life situations without a calculator and does not involve remainders.

At Entry 3, learners should demonstrate **two** examples of dividing a two-digit whole number (that is **not** a multiple of 10) by a single digit number (that is **not** 1 or 2) in real life situations without a calculator and does not involve remainders.

In addition, Entry 3 learners should demonstrate **two** examples of dividing a three-digit whole number (that is **not** a multiple of 10 or 100) by a single digit (that is **not** 1 or 2) in real life situations that does not involve remainders without using a calculator.

AC2.5 At Entry 3, learners should demonstrate **two** examples of how to deal with any remainder when solving a problem in a real life situation.

e.g. number of egg boxes needed, number of buses needed, tins of paint needed to paint a room, rows of chairs in a hall.

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

Units most likely to be taught alongside *Working with whole numbers*:

Introduction to whole numbers (Entry 2 & Entry 3)
Using money (Entry 2 & Entry 3)

3.2 Resources

http://www.tes.co.uk/taxonomySearchResults.aspx?mode=browse&parametrics=42198,43720,43721,43728 - numerous resources on addition, subtraction, multiplication and division

http://www.bbc.co.uk/schools/ks2bitesize/maths/number - interactive games and quizzes on number

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:

- photocopy from pupils' book
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- card sort activities
- jigsaw activities
- witness statements

4.2 Examples of Tasks

(a) Tasks specific to Working with whole numbers

AC1.1 - Card sort activity
- Rounding numbers found in newspaper articles or in other real life situations e.g. rugby crowds, pop concerts, height of Snowdon.

L01 & LO2 - The following task could be a teacher mediated task supported by learners' workings and witness statements as evidence that the assessment criteria has been achieved, or a work sheet could be produced for learners to complete.

The attendance to a football game is 876 [Entry 2] or 8,451 [Entry 3]. A local newspaper wants to use the attendance numbers in their headlines but rounded to the nearest 10 and 100 [Entry 2 & 3] and to the nearest 1,000 [Entry 3]. What numbers would the newspaper use in their headlines? (AC1.1)

There are 11 players in each football team. How many players are there on the field altogether? [AC2.1 Entry 2]
Two away supporters have travelled 245 miles and 198 miles to get to the game. How far have they have travelled in total? [AC2.1 Entry 3]

One half of a football game lasts 45 minutes. The teams have played for 17 minutes. How long have they got to play until half time? [AC2.2 Entry 2]

Tickets to the football match cost £7 each. Mr Jones buys 6 tickets. What is the total costs of the tickets? [AC2.3 Entry 2]

The best tickets to the football match cost £36 each. Mr Jones buys 6 tickets. What is the total cost of the tickets? [AC2.3 Entry 3]

A season ticket for the football club costs £465. Mr Thomas buys a season ticket for himself and his 4 daughters. How much will the season tickets cost Mr Thomas in total? [AC2.3 Entry 3]

Mrs Williams buys 6 programmes during the game. The 6 programmes cost Mrs Williams £42. How much does one programme cost? [AC2.4 Entry 2 and 3]

134 supporters from a local nearby town have arranged taxis to take them home. They can fit 6 people in each taxi. How many taxis will they have to order to take everyone home? [AC2.4 & AC2.5 Entry 3]

Other scenarios could include:

- arranging a school trip
- arranging a children's party
- a trip to the garden centre

(b) Tasks Providing Evidence for Other Units

If the context used in AC2.1 and AC2.2 is money, this evidence could used in the Using Money unit.

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6371/E2 WORKING WITH WHOLE NUMBERS - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Approximate whole numbers (up to 1,000) to the nearest 10 and 100.	Round **two different** numbers up to 1,000 (not inclusive) to the nearest 10 **and** 100.
AC2.1 Add two-digit whole numbers in real life situations.	**Two** examples of adding at least two two-digit whole numbers (that are **not** a multiple of 10) in real life situations without using a calculator.
AC2.2 Subtract two-digit whole numbers in real life situations.	**Two** examples of subtracting two two-digit whole numbers in real life situations without using a calculator. At least one the numbers should **not** be a multiple of 10 and the difference between the numbers should **not** be a multiple of 10.
AC2.3 Multiply two single digit numbers in real life situations.	**Two** examples of multiplying two single digit whole numbers in real life situations without using a calculator.
AC2.4 Divide two-digit numbers by a single digit number in real life situations (that do not involve remainders).	**Two** examples of dividing a two-digit whole number (that is **not** a multiple of 10) by a single digit number (that is **not** 1 or 2) in real life situations without a calculator and does not involve remainders.

6371/E3 WORKING WITH WHOLE NUMBERS - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Approximate whole numbers (up to 10,000) to the nearest 10,100 and 1,000.	Round **two different** numbers up to 10,000 (not inclusive) to the nearest 10, 100 **and** 1000.
AC2.1 Add three-digit whole numbers in real life situations.	**Two** examples of adding at least two three-digit whole numbers (that are **not** a multiple of 10 or 100) in real life situations without using a calculator.
AC2.2 Subtract three-digit whole numbers in real life situations.	**Two** examples of subtracting two three-digit whole numbers in real life situations without using a calculator. At least one of the numbers should **not** be a multiple of 10 or 100 and the difference between the numbers should **not** be a multiple of 10 or 100.
AC2.3 Multiply two-digit and three-digit numbers by a single digit number in real life situations.	**Two** examples of multiplying a two-digit whole number (that is **not** a multiple of 10) by a single digit in real life situations without using a calculator. **Two** examples of multiplying a three-digit whole number (that is **not** a multiple of 10 or 100) by a single digit in real life situations without using a calculator.
AC2.4 Divide two-digit and three-digit numbers by a single digit number in real life situations.	**Two** examples of dividing a two-digit whole number (that is **not** a multiple of 10) by a single digit number (that is **not** 1 or 2) in real life situations without a calculator and does not involve remainders. **Two** examples of dividing a three-digit whole number (that is **not** a multiple of 10 or 100) by a single digit (that is **not** 1 or 2) in real life situations that does not involve remainders without using a calculator.
AC2.5 Deal with any remainder correctly when solving a problem in a real life situation.	**Two** examples of how to deal with any remainder when solving a problem in a real life situation without using a calculator.

Working with whole numbers Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1 .1 Approximate whole numbers (up to 1,000) to the nearest 10 and 100.			
AC2.1 Add two-digit whole numbers in real life situations.			
AC2.2 Subtract two-digit whole numbers in real life situations.			
AC2.3 Multiply two single digit numbers in real life situations.			
AC2.4 Divide two-digit numbers by a single digit number in real life situations (that do not involve remainders).			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Working with whole numbers Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1 .1 Approximate whole numbers (up to 10,000) to the nearest 10,100 or 1,000.			
AC2.1 Add three-digit whole numbers in real life situations.			
AC2.2 Subtract three-digit whole numbers in real life situations.			
AC2.3 Multiply two-digit and three-digit numbers by a single digit number in real life situations			
AC2.4 Divide two-digit numbers and three-digit numbers by a single digit number in real life situations.			
AC2.5 Deal with any remainder correctly when solving a problem in a real life situation.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title:	**Working with fractions**	
Unit Ref. Nos.	**Entry 2: Y/503/3475**	**Entry 3: D/503/3476**
Entry Codes	**Entry 2: 6372/E2**	**Entry 3: 6372/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**2**	
Unit aim:	This unit aims to enable learners to understand what is meant by a fraction, identify common fractions and equivalent fraction forms. Learners will also have opportunity to calculate fractions of quantities in practical situations.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to identify common fractions.**	AC1.1 Record unit fractions as one part of the whole. (The denominators of the fractions will be restricted to 2, 3, 4 and 8). AC1.2 Record non-unit fractions as several equal parts of a whole. (The denominators of the fractions will be restricted to 3, 4 and 8).	AC1.1 Record unit fractions as one part of the whole. AC1.2 Record non-unit fractions as several equal parts of a whole.

L02 **Be able to use equivalent fraction forms.**	AC2 .1 Identify equivalent fractions for a half. AC2.2 Identify equivalent fractions for a whole. (The denominators of the fractions will be restricted to 2, 3, 4 and 8).	AC2 .1 Identify equivalent fractions for: • half • quarter • third AC2.2 Identify equivalent fractions for a whole.
LO3 **Be able to calculate fractions of a quantity.**	AC3.1 Calculate $\frac{1}{2}$ and $\frac{1}{4}$ of quantities in practical situations.	AC3.1 Calculate simple fractions of quantities in practical situations. (The denominators of the fractions will be restricted to 2, 3, 4, 5 and 10)

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

Calculators are allowed to be used. 

LO1 Be able to identify common fractions.

Learners should know and understand that a unit fraction is one part of the whole divided into equal parts, with the bottom number (denominator) indicating the number of equal parts.

AC1.1 At Entry 2, learners should identify **each** of the following fractions:

- $\frac{1}{2}$
- $\frac{1}{3}$
- $\frac{1}{4}$
- $\frac{1}{8}$

At Entry 3, learners should identify the following fractions:

- $\frac{1}{2}$
- $\frac{1}{3}$
- $\frac{1}{4}$
- $\frac{1}{8}$
- **two** other unit fractions where the denominator is **not** 2,3,4 or 8

Learners should know and understand that a non-unit fraction is several equal parts of a whole, the number of parts indicated by the top number (numerator), for common simple fractions less than 1.

AC1.2 At Entry 2, learners should identify the following fractions:

- ⅔
- **any** non-unit fraction with 4 as a denominator
- **any** non-unit fraction with 8 as a denominator

At Entry 3, learners should identify the following fractions:

- ⅔
- **any** non-unit fraction with 4 as a denominator
- **any** non-unit fraction with 8 as a denominator
- **two** other non-unit fraction where the denominator is not 4 or 8

LO2 Be able to use equivalent fraction forms.

AC2.1 At Entry 2, learners should identify an equivalent fraction for a half in written or diagram form.

At Entry 3, learners should identify any equivalent fraction for **each** of the following in written or diagram form:

- half
- quarter
- third

AC2.2 At Entry 2, learners should identify a fraction with the numerator and denominator the same as equivalent to a whole one, where the denominator of the fractions is restricted to 2, 3, 4 or 8.

At Entry 3, learners should identify **two** fractions with the numerator and denominator the same as equivalent to a whole one, where the denominators of the fractions are **not** 2, 3, 4 or 8.

LO3 Be able to calculate fractions of a quantity.

The below examples for both Entry 2 and 3 could be shown in written form or practically using counters for example.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concept of calculating quantities in practical situations.

AC3.1 At Entry 2, learners should show

- **two** examples of calculating $\frac{1}{2}$ of a quantity in practical situations that does not involve remainders.
- **two** examples of calculating $\frac{1}{4}$ of a quantity in practical situations that does not involve remainders.

At Entry 3, learners should show

- **an** example of calculating $\frac{1}{2}$ of a quantity in a practical situation that does not involve remainders.
- **an** example of calculating $\frac{1}{4}$ of a quantity in a practical situation that does not involve remainders.
- **three** different examples of calculating non-unit fractions of a quantity in practical situations that does not involve remainders, where the denominator is restricted to 3,4,5 and 10.

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

Units most likely to be taught alongside ***Using Money****:*

- *Introduction to whole numbers [Entry 2 & 3]*
- *Working with whole numbers [Entry 2 & 3]*

3.2 Resources

http://www.bbc.co.uk/schools/ks2bitesize/maths/number/ - activities introducing fractions

http://www.ngfl-cymru.org.uk/vtc/ngfl/maths/108/index_e.html

http://www.primaryresources.co.uk/maths/mathsB6.htm - numerous fraction resources

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:
- practical activities
- photographs
- witness statements
- card sort activities
- photocopy from pupils' book
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- written test
- jigsaw activities

4.2 Examples of Tasks

(a) Tasks specific to *Working with fractions*

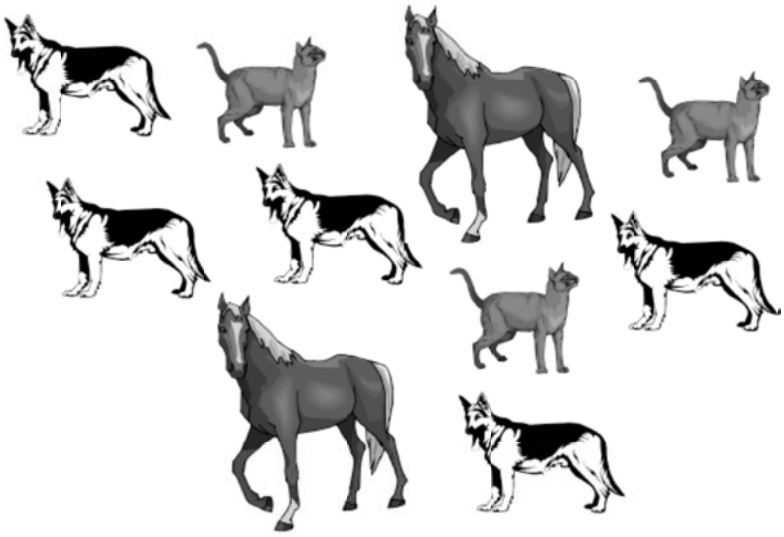
LO1 Be able to identify common fractions.

Learners could be given cakes cut in different ways, for example 2 slices, 3 slices, 4 slices and 8 slices (and in another way for Entry 3). Using the slices of cake, learners must identify common fractions.

Using the idea of the cake, learners could then identify the non-unit fractions.

Alternatively, the following questions could be asked (with the appropriate denominators for Entry 2 and Entry 3).

9. The diagrams show pictures of some animals.



(a) How many dogs are shown in these pictures?

Answer: .....

(b) What fraction of the animals shown are cats?

Answer: .....

What fraction of the following figure has been shaded?

Answer: .....

LO2 Be able to use equivalent fraction forms.

Learners are asked to write an equivalent fraction for the required fraction. This could be done practically using cakes or counters for example.

LO3 Be able to calculate fractions of a quantity.

Learners are asked to calculate fractions of quantities. Counters or any other resources could be used to assist learners.

Examples of questions that could be asked at Entry 2

$\frac{1}{4}$ of these belt buckles are sold.

How many is this?

Here are 12 bread rolls.

$\frac{1}{2}$ of the bread rolls are sold.

How many bread rolls is this?

Examples of questions that could be asked at Entry 3

$\frac{2}{3}$ of these belt buckles are sold.

How many is this?

13. Here are 12 bread rolls.

$\frac{3}{4}$ of the bread rolls are sold.
How many bread rolls are sold?

(b) Tasks Providing Evidence for Other Units

If learners do not use calculators to calculate fractions of a quantity, then this evidence could be used in the Working with whole numbers unit (dividing and multiplying).

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6372/E2 WORKING WITH FRACTIONS - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Record unit fractions as one part of the whole. (The denominators of the fractions will be restricted to 2, 3, 4 and 8).	Identify **each** of the following fractions: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{8}$
AC1.2 Record non-unit fractions as several equal parts of a whole. (The denominators of the fractions will be restricted to 3, 4 and 8).	Identify the following fractions: • ⅔ • **any** non-unit fraction with 4 as a denominator • **any** non-unit fraction with 8 as a denominator
AC2 .1 Identify equivalent fractions for a half.	Identify an equivalent fraction for a half in written or diagram form.
AC2.2 Identify equivalent fractions for a whole. (The denominators of the fractions will be restricted to 2, 3, 4 and 8).	Identify a fraction with the numerator and denominator the same as equivalent to a whole one. The denominator of the fractions is restricted to 2, 3, 4 or 8.
AC3.1 Calculate $\frac{1}{2}$ and $\frac{1}{4}$ of quantities in practical situations.	**Two** examples of calculating $\frac{1}{2}$ of a quantity in practical situations that does not involve remainders. **Two** examples of calculating $\frac{1}{4}$ of a quantity in practical situations that does not involve remainders.

6372/E3 WORKING WITH FRACTIONS - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Record unit fractions as one part of the whole.	Identify **each** of the following fractions: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ and $\frac{1}{8}$ and **two** other unit fractions where the denominator is **not** 2,3,4 or 8
AC1.2 Record non-unit fractions as several equal parts of a whole.	Identify the following fractions: • ⅔ • **any** non-unit fraction with 4 as a denominator • **any** non-unit fraction with 8 as a denominator • **two** other non-unit fraction where the denominator is not 4 or 8
AC2 .1 Identify equivalent fractions for a half, quarter and a third.	Identify any equivalent fraction for a half, quarter and a third in written or diagram form.
AC2.2 Identify equivalent fractions for a whole.	Identify **two** fractions with the numerator and denominator the same as equivalent to a whole one. The denominators of the fractions **not** be 2, 3, 4 or 8.
AC3.1 Calculate simple fractions of quantities in practical situations. (The denominators of the fractions will be restricted to 2, 3, 4, 5 and 10)	**One** example of calculating $\frac{1}{2}$ of a quantity in a practical situation that does not involve remainders. **One** example of calculating $\frac{1}{4}$ of a quantity in a practical situation that does not involve remainders. **Three** different examples of calculating non-unit fractions of a quantity in practical situations that does not involve remainders, where the denominator is restricted to 3,4,5 and 10.

Working with fractions Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Record unit fractions as one part of the whole (The denominators of the fractions will be restricted to 2, 3, 4 and 8).			
AC1.2 Record non-unit fractions as several equal parts of a whole. (The denominators of the fractions will be restricted to 3, 4 and 8).			
AC2 .1 Identify equivalent fractions for a half.			
AC2.2 Identify equivalent fractions for a whole. (The denominators of the fractions will be restricted to 2, 3, 4 and 8).			
AC3.1 Calculate $\frac{1}{2}$ and $\frac{1}{4}$ of quantities in practical situations.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Working with fractions Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Record unit fractions as one part of the whole.			
AC1.2 Record non-unit fractions as several equal parts of a whole.			
AC2 .1 Identify equivalent fractions for: • half • quarter • third			
AC2.2 Identify equivalent fractions for a whole.			
AC3.1 Calculate simple fractions of quantities in practical situations. (The denominators of the fractions will be restricted to 2, 3, 4, 5 and 10)			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title:	**Using money**	
Unit Ref. Nos.	**Entry 2: A/503/3467**	**Entry 3: F/503/3468**
Entry Codes	**Entry 2: 6373/E2**	**Entry 3: 6373/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**2**	
Unit aim:	This unit aims to enable learners to demonstrate that they can work with money in everyday situations. Learners will calculate the cost of items and calculate the change due.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to choose coins and notes to make amounts of money.**	AC1.1 Identify different sums of money using coins and notes.	AC1.1 Identify different sums of money using coins and notes.
LO2 **Be able to add sums of money to calculate total.**	AC2 .1 Calculate the total cost of different items.	AC2 .1 Calculate the total cost of different items. AC2.2 Check calculations for accuracy.
LO3 **Be able to calculate change.**	AC3.1 Calculate change due after paying for a single item. AC3.2 Calculate change due when paying for more than one item.	AC3.1 Calculate change due after paying for a single item. AC3.2 Calculate change due when paying for more than one item.

2. Amplification of Content

The following suggestions should be considered in the context of:

- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

Calculators are allowed for this unit. 

LO1 Be able to choose coins and notes to make amounts of money.

Learners should be introduced to and be familiar with different coins and notes and make different amounts of money using them.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concepts.

AC1.1 At Entry 2, learners should demonstrate that they, independently, can make **three** different amounts of money up to £10.00 using a combination of coins and notes.

Alternative currencies can be used e.g. euros

At Entry 3, learners should demonstrate that they, independently, can make **three** different amounts of money up to £50.00 using a combination of coins and notes.

Alternative currencies can be used e.g. euros

LO2 Be able to add sums of money to calculate total.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concepts.

AC2.1 Learners should demonstrate **two** examples of calculating the total cost of at least 2 different items where the prices of the items are in whole pounds [Entry 2] and pounds and pence written in decimal form e.g. £1.36 [Entry 3].

At Entry 3, learners should demonstrate **one** example of using an appropriate check that their solution is accurate. This could involve using approximating costs, using a calculator or counting out money for individual items and then adding the total.

LO3 Be able to calculate change.

Learners should be able to replicate these skills on more than one occasion to show that they have an understanding of the concepts.

AC3.1 At Entry 2, learners should demonstrate **two** examples of calculating the change due from £1.00 after paying for an item costing less than £1.00.The cost of the item should be less than 10p or a multiple of 10p e.g. 6p, 70p and so on.

At Entry 3, learners should demonstrate **two** examples of calculating the change due from £10.00 after paying for an item costing less than £10.00.The cost of the item should be in pounds and pence written in decimal form and not a multiple of 10p e.g. £3.62, £8.42 and so on (not £1.40 or £8.40).

AC3.2 At Entry 2, learners should demonstrate **two** examples of calculating the change due from £10.00 after paying for at least 2 different items, where the total of the items is less than £10.00 and a multiple of 10p e.g. £5.40, £3.40 and so on (not £3.62 or £8.42).

At Entry 3, learners should demonstrate on **two** occasions that they have calculated the change due from £50.00 after paying for at least 2 different items, where the total of the items is less than £50.00 and a multiple of 10p e.g. £15.40, £33.40 and so on (not £37.62 or £18.42).

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

Units most likely to be taught alongside ***Using Money****:*

- *Introduction to whole numbers [Entry 2 & 3]*
- *Working with whole numbers [Entry 2 & 3]*

3.2 Resources

http://www.bbc.co.uk/schools/ks1bitesize/numeracy/money/ - interactive money games

http://www.moneymatterstome.co.uk/Community-area/Sub1/OG-Numeracy-EntryLevel3.htm - interactive money games

http://www.ngfl-cymru.org.uk/eng/vtc-home/vtc-ks2-home/vtc-ks2-maths(2)/vtc-ks2-maths-measures/vtc-ks2-maths-measures-money - a resource to develop skills for using and writing amounts of money

http://www.ecb.int/euro/coins/common/html/index.en.html
http://www.ecb.int/euro/banknotes/html/index.en.html - images of euro coins and notes

http://www.bankofengland.co.uk/education/poundsandpence/index.htm - provides a range of resources that will encourage pupils to think about money and prices (some tasks may be beyond Entry 3)

www.nationwideeducation.co.uk - numerous financial activities and resources.

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:

- photocopy from pupils' book
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- card sort activities
- jigsaw activities
- witness statements

4.2 Examples of Tasks

(a) Tasks specific to Using money

AC1.1 – Learners make sums of money using a selection of cut out coins and notes e.g.

£6.53	
£5.79	

L01 & LO2
The following task could be a teacher mediated task supported by learners' workings and witness statements as evidence that the assessment criteria has been achieved, or a work sheet could be produced for learners to complete.

Explain that you have ordered some pizzas and the total cost of the pizzas comes to £8.64 [Entry 2] and £23.59 [Entry 3], ask the learner to select the correct money (from real money or otherwise) to pay for the pizzas (AC1.1).

The learner is given a selection of items needed to make a pizza – pizza bases and toppings (use real items or cut out resource cards).

The prices should be attached to the items and should be in whole pounds [Entry 2] or pounds and pence [Entry 3].

For example,

	E2	**E3**
Pizza thin base	£4	£4.50
Pizza deep-pan base	£3	£3.75
Tomato sauce	£1	£1.05
Cheese	£3	£3.20
Onion	£1	£1.35
Pineapple rings	£2	£2.50
Pepperoni	£4	£5.50

Learners are asked to create a pizza by choosing a base and some toppings and calculate the total cost of the pizza (AC2.1). The total cost of the pizza should be less than £10. Ask the learner how they would check their answer to see if it is correct [Entry 3 - AC2.2].

Ask the learner how much change they would have

- if they were to buy a can of pop which costs 60p with £1.00 [Entry 2 – AC3.1]
- if they were to buy their pizza and the can of pop with £10.00 [Entry 2 – AC3.2]
- if they were pay for just a deep-pan pizza base with £10.00 [Entry 3 – AC3.1]
- if they were buy your pizza (£23.59) **and** their pizza with £50.00 [Entry 3 – AC3.2].

(b) Tasks Providing Evidence for Other Units

The pizza task above could provide some evidence for the following units -

Interpreting the table of prices - *Data handling*
Be able to add sums of money to calculate total – *Working with whole numbers (LO2)*
Be able to calculate change - *Working with whole numbers (LO2)*
Discussing the shapes of the pizza bases and toppings – *Working with 2D and 3D shapes*
Introducing pizza boxes to the scenario and discussing 3D shapes and nets - *Working with 2D and 3D shapes [Entry 3]*
Estimate and measure the width and weight of a pizza - *Working with measures*
Calculating the cost of the pizzas/items in a half price sale - *Working with fractions*

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6373/E2 USING MONEY - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Identify different sums of money using coins and notes.	Make **three** different amounts of money up to £10.00 using a combination of coins and notes.
AC2.1 Calculate the total cost of different items.	**Two** examples of calculating the total cost of at least 2 different items where the prices of the items are in whole pounds
AC3 .1 Calculate change due after paying for a single item.	**Two** examples of calculating the change due from £1.00 after paying for an item costing less than £1.00.The cost of the item should be less than 10p or a multiple of 10p e.g. 6p, 70p and so on.
AC3.2 Calculate change due when paying for more than one item.	**Two** examples of calculating the change due from £10.00 after paying for at least 2 different items, where the total of the items is less than £10.00 and a multiple of 10p e.g. £5.40, £3.40 and so on (not £3.62 or £8.42).

6373/E3 USING MONEY - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Identify different sums of money using coins and notes.	Make **three** different amounts of money up to £50.00 using a combination of coins and notes.
AC2.1 Calculate the total cost of different items.	**Two** examples of calculating the total cost of at least 2 different items where the prices of the items are in pounds and pence written in decimal form e.g. £1.36.
AC2.2 Check calculations for accuracy.	**One** example of using an appropriate check that their solution is accurate. This could involve using approximating costs, using a calculator or counting out money for individual items and then adding the total.
AC3 .1 Calculate change due after paying for a single item.	**Two** examples of calculating the change due from £10.00 after paying for an item costing less than £10.00. The cost of the item should be in pounds and pence written in decimal form and not a multiple of 10p e.g. £3.62, £8.42 and so on (not £1.40 or £8.40).
AC3.2 Calculate change due when paying for more than one item.	**Two** examples of calculating the change due from £50.00 after paying for at least 2 different items, where the total of the items is less than £50.00 and a multiple of 10p e.g. £15.40, £33.40 and so on (not £37.62 or £18.42).

Using money Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify different sums of money using coins and notes.			
AC2 .1 Calculate the total cost of different items.			
AC3.1 Calculate change due after paying for a single item.			
AC3.2 Calculate change due when paying for more than one item.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Using money Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify different sums of money using coins and notes.			
AC2 .1 Calculate the total cost of different items.			
AC2.2 Check calculations for accuracy.			
AC3.1 Calculate change due after paying for a single item.			
AC3.2 Calculate change due when paying for more than one item.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title	**Working with 2D and 3D shapes**
Unit Ref. No.	**F/503/3471**
Entry Code	**6374/E2**
Level	**Entry 2**
Credit value	**2**
Unit aim	This unit aims to enable learners to work with common 2D and 3D shapes, by identifying them and using everyday language to describe their properties. Learners will look at simple 2D representations of 3D shapes and identify reflective symmetry in simple 2D shapes.

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to recognise common 2D and 3D shapes.**	AC1.1 Identify 2D shapes: • square • rectangle • circle • triangle • regular or irregular pentagon • regular or irregular hexagon • regular or irregular octagon AC1.2 Identify 3D shapes: • cube • cuboid • cylinder • sphere • triangular prism • pyramid

LO2 **Be able to use everyday language to compare 2D and 3D shapes.**	AC2.1 Use appropriate words to compare 2D and 3D shapes, such as: • straight • flat • curved • round • taller • longer • shorter • solid
LO3 **Be able to describe the properties of common 2D and 3D shapes.**	AC3.1 Describe the properties of common 2D shapes: • number of sides • number of corners • number of right angles AC3.2 Describe the properties of common 3D shapes: • number of edges • number of corners • number of faces • shape of faces
LO4 **Be able to identify simple 2D representations of 3D shapes.**	AC4.1 Identify 3D shapes from their 2D representation.
LO5 **Be able to identify reflective symmetry.**	AC 5.1 Find lines of symmetry of simple 2D shapes: • square • rectangle • equilateral triangle • regular pentagon • regular hexagon

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

LO1 Be able to recognise common 2D and 3D shapes.

AC1.1 Learners should identify **each** of the following 2D shapes:

- square
- rectangle
- circle
- triangle
- regular or irregular pentagon
- regular or irregular hexagon
- regular or irregular octagon

Learners could identify a regular or irregular pentagon, hexagon or octagon. The words irregular or regular need not be known or used.

AC1.2 Learners should identify **each** of the following 3D shapes:

- cube
- cuboid
- cylinder
- sphere
- triangular prism
- pyramid

Learners can identify any type of pyramid.

LO2 Be able to use everyday language to compare 2D and 3D shapes.

AC2.1 Learners should make a **single** comparison between two 2D **OR** two 3D shapes **and two** comparisons between a 2D shape and a 3D shape.

The comparisons could be showing similarities or differences.
E.g. they both have straight edges or one has straight edges and the other has round edges.

Learners could use words such as:

- straight
- flat
- curved
- round
- taller
- longer
- shorter
- solid

This list is not exhaustive; credit should be given if the learners use their own words and descriptions as long as they are unambiguous.

LO3 Be able to describe the properties of common 2D and 3D shapes.

Learners should be familiar with and understand vocabulary such as sides, corners, edges and right angles.

AC3.1 Learners should find the number of sides, number of corners and number of right angles in the following 2D shapes:

- square
- rectangle
- triangle
- regular or irregular pentagon
- regular or irregular hexagon
- regular or irregular octagon

Note that the circle is **not** included in the list.

AC3.2 Learners should find the number of edges, number of corners, number of faces and shape of faces in the following 3D shapes:

- cube
- cuboid
- triangular prism
- pyramid

Note that the sphere and cylinder are **not** included in the list.

LO4 Be able to identify simple 2D representations of 3D shapes.

Learners should understand that it's possible to sketch 2D drawings to show what a 3D shape will look like from each side. Learners should be familiar with vocabulary such as top view (or plan) side view (or side elevation) and front view (or front elevation).

AC4.1 Learners should identify the top view (or plan), side view (or side elevation) and front view (or side elevation) of a simple 3D shape made of cubes.

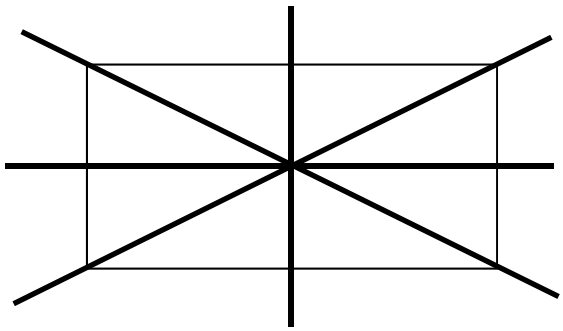
LO5 Be able to identify reflective symmetry.

Learners should be familiar with and understand the meaning of the word symmetry. The words ‘mirror line’ could be used.

AC5.1 Learners should find lines of symmetry of the following simple 2D shapes:

- square
- rectangle
- equilateral triangle
- regular pentagon
- regular hexagon

Learners can use any method of finding the lines of symmetry e.g. folding, using a mirror. If learners identify the incorrect lines of symmetry as well as the correct lines, then learners will only able to meet the assessment criteria if they identify the incorrect lines of symmetry.



3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

Units most likely to be taught alongside *Introduction to whole numbers*:

Working with angles and position (Entry 2 & Entry 3)

3.2 Resources

http://www.ngfl-cymru.org.uk/eng/investigating_2-d_and_3-d_shapes - a resource pack giving pupils the opportunity to identify and investigate 2D and 3D shapes in the context of a Welsh castle.

http://www.ngfl-cymru.org.uk/eng/sorting_3d_shapes - an interactive whiteboard activity that explores the properties of 3D shapes, by classifying them according to the number of faces, edges or vertices.

http://www.ngfl-cymru.org.uk/eng/reflective_symmetry_exercises - a resource to I investigate reflective symmetry with built in differentiation.

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:

- card sort activities
- practical activities
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- jigsaw activities
- witness statements

4.2 Examples of Tasks

(a) Tasks specific to Working with 2D and 3D shapes

AC1.1 & AC1.2

SNAP! Learners receive cards of the shapes and names which they must match. e.g. the following grids can be cut out to make cards. The 2D and 3D names and shapes could be mixed as one task, or set as separate tasks assessing AC1.1 and AC1.2.

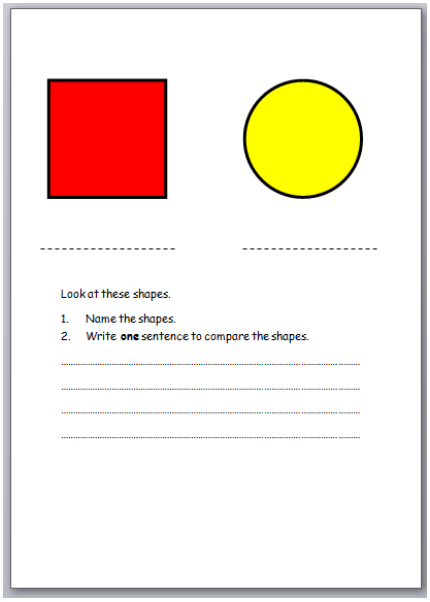
Learners could also identify shapes in real-life situations e.g. a piece of A4 paper, golf ball, tent, tins of beans, pizza.

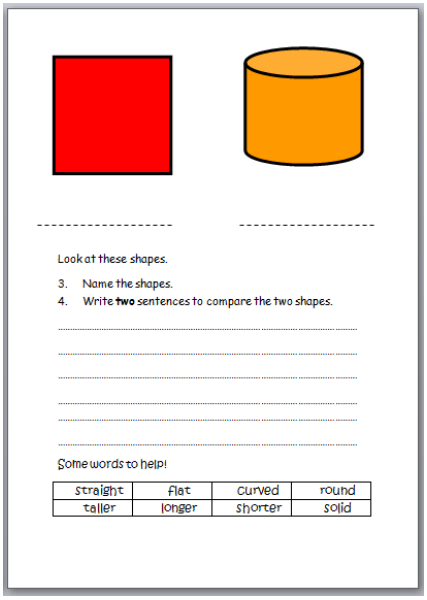
square	
	rectangle
	
circle	triangle
hexagon	
octagon	pentagon
	

cube	
	
cuboid	cylinder
	sphere
triangular prism	
pyramid	

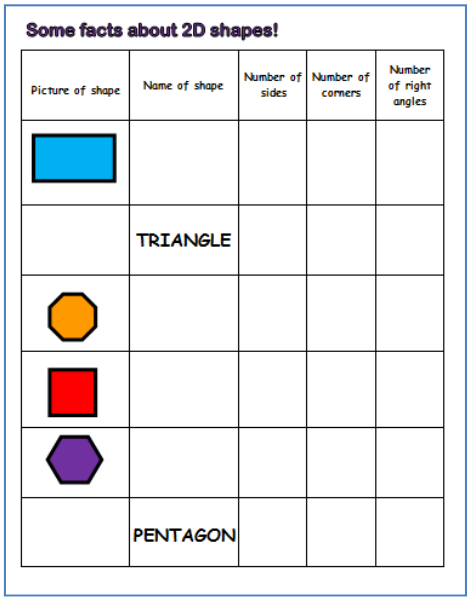
AC2.1 Learners are given a picture of two 2D shapes (or 3D shapes) and are asked to compare them. Some words are given on cards as guidance whilst comparing a 2D and 3D shape. By also naming the shapes, this will provide some evidence for AC1.1 and AC1.2.

E.g.





AC3.1 Learners are given 2D shapes and are ask to complete a table of the properties. By also naming the shapes, this will provide some evidence for AC1.1 and AC1.2.

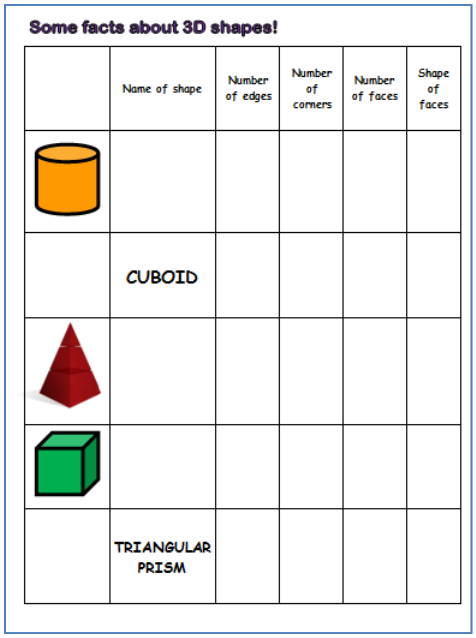


Some facts about 2D shapes!

Picture of shape	Name of shape	Number of sides	Number of corners	Number of right angles
	TRIANGLE			
	PENTAGON			

AC3.2 Learners are given 3D models and are asked to complete a table of the properties. Learners are given straws and pipe cleaners to make some of the 3D models (with guidance) and fill the table of the properties.

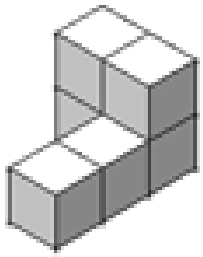
By also naming the shapes, this will provide some evidence for AC1.1 and AC1.2.



Some facts about 3D shapes!

	Name of shape	Number of edges	Number of corners	Number of faces	Shape of faces
	CUBOID				
	TRIANGULAR PRISM				

AC4.1 Learners are given a 3D model made from cubes.
E.g.



Six different 2D views of the 3D shape is given to the learner.
Learners should identify which of the 6 views is the top, side and front view of the shape.
Alternatively, learners should receive the 3D model and sketch the top, side and front view of the shape or learners could be given the top, side and front view of a 3D shape. Learners are given 6 different 3D shapes made of cubes and must identify the shape represented in the 2D images.

AC5.1 Learners are given paper cuts out of a square, rectangle, equilateral triangle, regular pentagon and regular hexagon and are asked to find the lines of symmetry. This could be achieved by folding the shapes or by using a mirror.

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6374/E2 WORKING WITH 2D AND 3D SHAPES - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1.1 Identify 2D shapes: • square • rectangle • circle • triangle • regular or irregular pentagon • regular or irregular hexagon • regular or irregular octagon	Identify each of the named 2D shapes.
AC1.2 Identify 3D shapes: • cube • cuboid • cylinder • sphere • triangular prism • pyramid	Identify each of the named 3D shapes.

AC2.1 Use appropriate words to compare 2D and 3D shapes, such as: • straight • flat • curved • round • taller • longer • shorter • solid	**One** comparison between two 2D **OR** two 3D shapes **and** **two** comparisons between a 2D shape and a 3D shape.
AC3.1 Describe the properties of common 2D shapes: • number of sides • number of corners • number of right angles	Find the number of sides, number of corners and number of right angles in the following 2D shapes: square, rectangle, triangle, regular or irregular pentagon, regular or irregular hexagon and regular or irregular octagon. The circle is **not** included in the list.
AC3.2 Describe the properties of common 3D shapes: • number of edges • number of corners • number of faces • shape of faces	Find the number of edges, number of corners, number of faces and shape of faces in the following 3D shapes: cube, cuboid, triangular prism and pyramid. The sphere and cylinder are **not** included in the list.
AC4.1 Identify 3D shapes from their 2D representation.	Identify the top view (or plan), side view (or side elevation) and front view (or side elevation) of a simple 3D shape made of cubes.
AC 5.1 Find lines of symmetry of simple 2D shapes: • square • rectangle • equilateral triangle • regular pentagon • regular hexagon	Find the lines of symmetry of the named 2D shapes.

Working with 2D and 3D shapes Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify 2D shapes: • square • rectangle • circle • triangle • regular or irregular pentagon • regular or irregular hexagon • regular or irregular octagon			
AC1.2 Identify 3D shapes: • cube • cuboid • cylinder • sphere • triangular prism • pyramid			
AC2.1 Use appropriate words to compare 2D and 3D shapes, such as: • straight • flat • curved • round • taller • longer • shorter • solid			

Assessment Criteria	Met	Evidence	Office Use
AC3.1 Describe the properties of common 2D shapes: • number of sides • number of corners • number of right angles			
AC3.2 Describe the properties of common 3D shapes: • number of edges • number of corners • number of faces • shape of faces			
AC4.1 Identify 3D shapes from their 2D representation.			
AC 5.1 Find lines of symmetry of simple 2D shapes: • square • rectangle • equilateral triangle • regular pentagon • regular hexagon			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title	**Working with 2D and 3D shapes**
Unit Ref. No.	**J/503/3472**
Entry Code	**6374/E3**
Level	**Entry 3**
Credit value	**2**
Unit aim	This unit aims to enable learners to work with common 2D and 3D shapes, by identifying them and using everyday language to describe their properties. Learners will look at 2D representations of 3D shapes and identify and draw reflective symmetry in 2D shapes.

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to recognise common 2D and 3D shapes.**	AC1.1 Identify 2D shapes: • square • rectangle • circle • triangle • regular or irregular pentagon • regular or irregular hexagon • regular or irregular octagon AC 1.2 Identify 3D shapes: • cube • cuboid • cylinder • sphere • triangular prism • triangular based pyramid (tetrahedron) • square based pyramid
LO2 **Be able to identify and draw reflective symmetry.**	AC 2.1 Identify lines of symmetry in shapes. AC 2.2 Complete simple shapes, so that they have one line of symmetry. AC2.3 Draw the reflection of simple shapes given one line of symmetry.

LO3 **Be able to use everyday language to compare 2D and 3D shapes.**	AC3.1 Use appropriate words to compare 2D and 3D shapes such as: • straight • flat • curved • round • taller • longer • shorter • solid
LO4 **Be able to describe the properties of common 2D and 3D shapes.**	AC4.1 Describe the properties of common 2D shapes: • number of sides • number of corners • number of right angles AC4.2 Describe the properties of common 3D shapes: • number of edges • number of corners • number of faces • shape of faces
LO5 **Be able to use 2D representations of 3D shapes.**	AC5.1 Identify 3D shapes from their 2D representation. AC5.2 Recognise simple nets of common 3D shapes: • cube • cuboid • cylinder • triangular prism • triangular based pyramid (tetrahedron) • square based pyramid AC5.3 Draw a net of a cube.

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

LO1 Be able to recognise common 2D and 3D shapes.

AC1.1 Learners should identify **each** of the following 2D shapes:

- square
- rectangle
- circle
- triangle
- regular or irregular pentagon
- regular or irregular hexagon
- regular or irregular octagon

Learners could identify a regular or irregular pentagon, hexagon or octagon. The words irregular or regular need not be known or used.

AC1.2 Learners should identify **each** of the following 3D shapes:

- cube
- cuboid
- cylinder
- sphere
- triangular prism
- triangular based pyramid (tetrahedron)
- square based pyramid

Candidates need not use the term 'tetrahedron'.

LO2 Be able to identify and draw reflective symmetry.

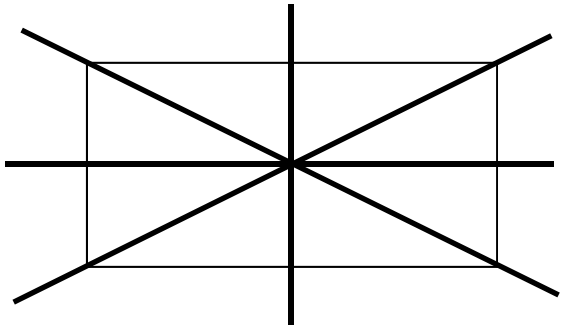
Learners should be familiar with and understand the meaning of the word symmetry. The words 'mirror line' could be used.

AC2.1 Learners should show the lines of symmetry in **each** of the following simple 2D shapes:

- square
- rectangle
- equilateral triangle
- regular pentagon
- regular hexagon

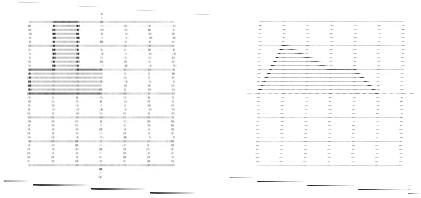
In addition, learners should also should show **two** examples of finding the lines of symmetry in images other than simple regular 2D shapes e.g. road signs, patterns.

Learners can use any method of finding the lines of symmetry e.g. folding, using a mirror. If learners identify the incorrect lines of symmetry as well as the correct lines, then learners will only able to meet the assessment criteria if they identify the incorrect lines of symmetry.

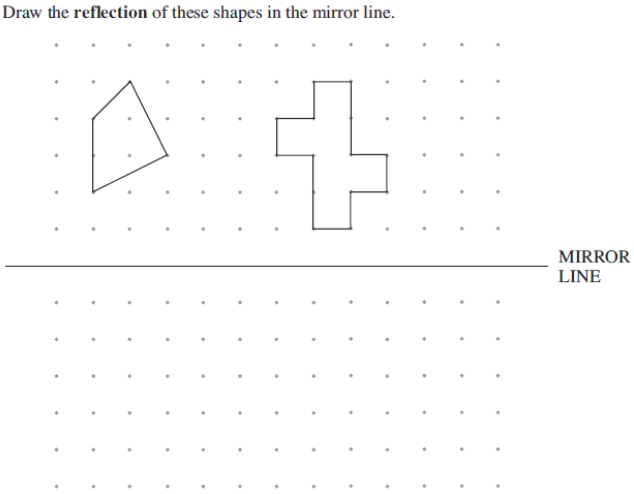


AC2.2 Learners should complete **two** different shapes so that they have one line of symmetry. The shapes should **not** include curved lines.

E.g.



AC2.3 Learners should draw the reflection of **two** different simple shapes given one line of symmetry. The shapes should **not** include curved lines.



LO3 Be able to use everyday language to compare 2D and 3D shapes.

AC3.1 Learners should make a **single** comparison between two 2D **OR** two 3D shapes **and two** comparisons between a 2D shape and a 3D shape.

The comparisons could be showing similarities or differences.
E.g. they both have straight edges or one has straight edges and the other has round edges.

Learners could use words such as:

- straight
- flat
- curved
- round
- taller
- longer
- shorter
- solid

This list is not exhaustive; credit should be given if the learners use their own word or descriptions as long as they are unambiguous.

LO4 Be able to describe the properties of common 2D and 3D shapes.

Learners should be familiar with and understand vocabulary such as sides, corners, edges and right angles.

AC4.1 Learners should find the number of sides, number of corners and number of right angles in the following 2D shapes:

- square
- rectangle
- triangle
- regular or irregular pentagon
- regular or irregular hexagon
- regular or irregular octagon

Note that the circle is **not** included in the list.

AC4.2 Learners should find the number of edges, number of corners, number of faces and shape of faces in the following 3D shapes:

- cube
- cuboid
- triangular prism
- triangular based pyramid (tetrahedron)
- square based pyramid

Note that the sphere and cylinder are **not** included in the list.

LO5 Be able to identify simple 2D representations.

Learners should understand that it's possible to sketch 2D drawings to show what a 3D shape will look like from each side. Learners should be familiar with vocabulary such as top view (or plan) side view (or side elevation) and front view (or front elevation).

AC5.1 Learners should identify the top view (or plan), side view (or side elevation) and front view (or side elevation) of a simple 3D shape made of cubes.

AC5.2 Learners should recognise the nets for each of the common 3D shapes:

- cube
- cuboid
- cylinder
- triangular prism
- triangular based pyramid (tetrahedron)
- square based pyramid

Guidance can be given if learners need to do a practical activity e.g. cutting, folding.

AC5.3 Learners should show **one** example of drawing a correct net of a cube. Square paper could be used.

3. Delivery

3.1 Planning Courses

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Working with angles and position (Entry 2 & Entry 3)

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4.1 Ways of demonstrating that the criteria have been met

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The following types of evidence are likely to feature:
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4.2 Examples of Tasks

(a) Tasks specific to Working with 2D and 3D shapes

AC1.1 & AC1.2

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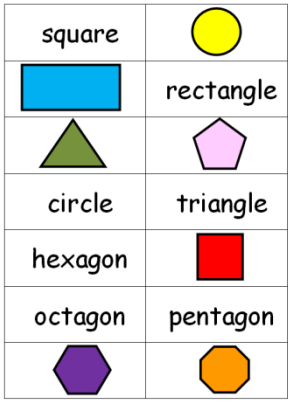

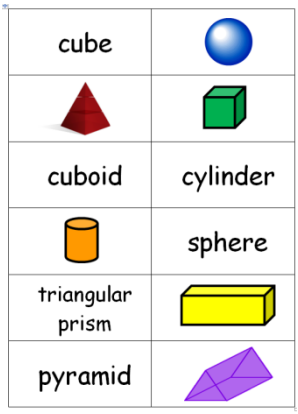

AC3.1 Learners are given a picture of two 2D shapes (or 3D shapes) and are asked to compare them. Some words are given on cards as guidance whilst comparing a 2D and 3D shape. By also naming the shapes, this will provide some evidence for AC1.1 and AC1.2.

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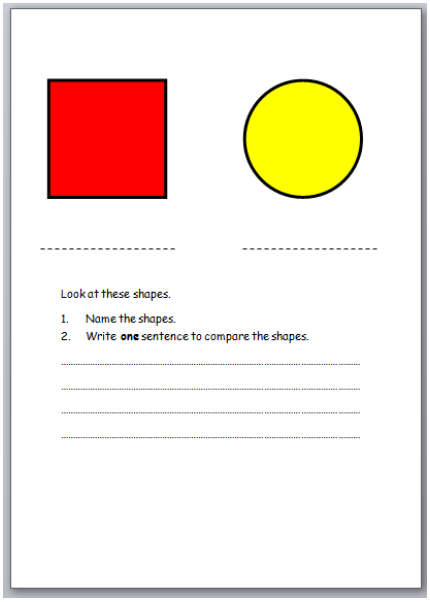
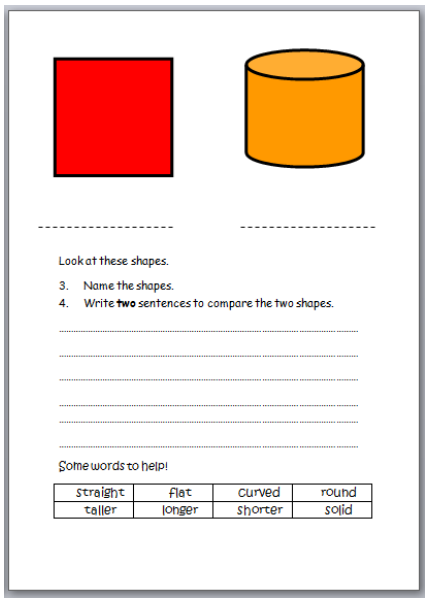




AC4.1 Learners are given 2D shapes and are asked to complete a table of the properties. By also naming the shapes, this will provide some evidence for AC1.1 and AC1.2.

Some facts about 2D shapes!

Picture of shape	Name of shape	Number of sides	Number of corners	Number of right angles
				
	TRIANGLE			
				
				
				
	PENTAGON			

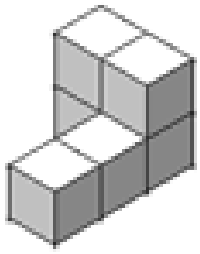
AC4.2 Learners are given 3D models and are asked to complete a table of the properties. Learners are given straws and pipe cleaners to make some of the 3D models (with guidance) and fill the table of the properties.

By also naming the shapes, this will provide some evidence for AC1.1 and AC1.2.

Some facts about 3D shapes!

	Name of shape	Number of edges	Number of corners	Number of faces	Shape of faces
					
	CUBOID				
					
					
	TRIANGULAR PRISM				

AC5.1 Learners are given a 3D model made from cubes.
E.g.



Six different 2D views of the 3D shape is given to the learner.
Learners should identify which of the 6 views is the top, side and front view of the shape.
Alternatively, learners should receive the 3D model and sketch the top, side and front view of the shape or learners could be given the top, side and front view of a 3D shape. Learners are given 6 different 3D shapes made of cubes and must identify the shape represented in the 2D images.

AC5.2 Learners are given cards which show nets, names and diagrams of 3D shapes. Learners need to match the net with the name and diagram.

AC5.3 Learners are given a cube and are asked to draw the net of the cube on square paper. Learners cut and fold the net to check that it does make a cube.

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

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- Post-Results Services

6374/E3 WORKING WITH 2D AND 3D SHAPES - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1.1 Identify 2D shapes: • square • rectangle • circle • triangle • regular or irregular pentagon • regular or irregular hexagon • regular or irregular octagon	Identify each of the named 2D shapes.
AC1.2 Identify 3D shapes: • cube • cuboid • cylinder • sphere • triangular prism • triangular based pyramid (tetrahedron) • square based pyramid	Identify each of the named 3D shapes.
AC 2.1 Identify lines of symmetry in shapes.	Show the lines of symmetry in **each** of the following simple 2D shapes: square, rectangle, equilateral triangle, regular pentagon and regular hexagon **and** show **two** examples of finding the lines of symmetry in images other than simple regular 2D shapes e.g. road signs, patterns.

AC 2.2 Complete simple shapes, so that they have one line of symmetry.	Complete **two** different shapes so that they have one line of symmetry. The shapes should **not** include curved lines.
AC2.3 Draw the reflection of simple shapes given one line of symmetry.	Draw the reflection of **two** different simple shapes given one line of symmetry. The shapes should **not** include curved lines
AC3.1 Use appropriate words to compare 2D and 3D shapes, such as: • straight • flat • curved • round • taller • longer • shorter • solid	**One** comparison between two 2D **OR** two 3D shapes **and** **two** comparisons between a 2D shape and a 3D shape.
AC4.1 Describe the properties of common 2D shapes: • number of sides • number of corners • number of right angles	Find the number of sides, number of corners and number of right angles in the following 2D shapes: square, rectangle, triangle, regular or irregular pentagon, regular or irregular hexagon and regular or irregular octagon. The circle is **not** included in the list.
AC4.2 Describe the properties of common 3D shapes: • number of edges • number of corners • number of faces • shape of faces	Find the number of edges, number of corners, number of faces and shape of faces in the following 3D shapes: cube, cuboid, triangular prism, triangular based pyramid (tetrahedron) and square based pyramid. The sphere and cylinder are **not** included in the list.
AC5.1 Identify 3D shapes from their 2D representation.	Identify the top view (or plan), side view (or side elevation) and front view (or side elevation) of a simple 3D shape made of cubes.

AC5.2 Recognise simple nets of common 3D shapes: • cube • cuboid • cylinder • triangular prism • triangular based pyramid (tetrahedron) • square based pyramid	Recognise the nets for each of the named 3D shapes.
AC5.3 Draw a net of a cube.	Show **one** example of drawing a correct net of a cube.

Working with 2D and 3D shapes Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify 2D shapes: • square • rectangle • circle • triangle • regular or irregular pentagon • regular or irregular hexagon • regular or irregular octagon			
AC 1.2 Identify 3D shapes: • cube • cuboid • cylinder • sphere • triangular prism • triangular based pyramid (tetrahedron) • square based pyramid			
AC 2.1 Identify lines of reflective symmetry in shapes.			
AC 2.2 Complete simple shapes, so that they have one line of symmetry.			
AC2.3 Draw the reflection of simple shapes given one line of symmetry.			

AC3.1 Use appropriate words to compare 2D and 3D shapes such as: • straight • flat • curved • round • taller • longer • shorter • solid			
AC4.1 Describe the properties of common 2D shapes: • number of sides • number of corners • number of right angles			
AC4.2 Describe the properties of common 3D: • number of edges • number of corners • number of faces • shape of faces			
AC5.1 Identify 3D shapes from their 2D representation.			
AC5.2 Recognise simple nets of common 3D shapes: • cube • cuboid • cylinder • triangular prism • triangular based pyramid (tetrahedron) • square based pyramid			
AC5.3 Draw a net of a cube.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title:	**Working with measures**	
Unit Ref. Nos.	**Entry 2: A/503/3470**	**Entry 3: J/503/3469**
Entry Codes	**Entry 2: 6375/E2**	**Entry 3: 6375/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**3**	
Unit aim:	This unit aims to enable learners to demonstrate that they can estimate and measure using appropriate standard units when measuring length/height, weight and capacity and to read scales to the labelled division.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to use standard units of measurement.**	AC1.1 Identify appropriate units for measurements of • length/height • weight	AC1.1 Identify appropriate units for measurements of • length/height • weight • capacity
LO2 **Be able to estimate using standard metric units of measure in everyday situations.**	AC2.1 Estimate length/height using standard metric units of measure in everyday situations. AC2.2 Estimate weight using standard metric units of measure in everyday situations.	AC2.1 Estimate length/height using standard metric units of measure in everyday situations. AC2.2 Estimate weight using standard metric units of measure in everyday situations. AC2.3 Estimate capacity using standard metric units of measure in everyday situations.

LO3 **Be able to measure using standard units of measure.**	AC3.1 Use an appropriate measuring instrument to measure: • length/height • weight AC3.2 Read simple scales to the nearest labelled division.	AC3.1 Use appropriate measuring instruments to measure: • length/height • weight • capacity AC3.2 Read scales to the nearest labelled division.
LO4 **Be able to review estimates.**		AC4.1 Compare estimated and actual measurements.

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

LO1 Be able to use standard units of measurement.

Learners should be introduced to and be familiar with different units used to measure length and mass [Entry 2 & 3] and capacity [Entry 3].

AC1.1 At Entry 2, learners should identify different standard units used to measure **two** lengths and **two** masses.

Only the units are needed to achieve this assessment criteria. Learners need not estimate the actual length or mass of the items. Ignore any incorrect estimation that may be given.

Learners may use any appropriate metric or imperial unit, but need not use the terms metric and imperial.

At Entry 3, learners should identify different standard units used to measure **two** lengths, **two** masses and **one** capacity. Only the units are needed to achieve this assessment criteria. Learners need not estimate the actual length, mass and capacity of the items. Ignore any incorrect estimation that may be given.

Learners may use any appropriate metric or imperial unit, but need not use the terms metric and imperial.

LO2 Be able to estimate using standard metric units of measure in everyday situations.

Learners should have opportunities to estimate length/height, weight [Entry 2 & 3] and capacity [Entry 3] using standard metric units of measure in everyday situations.

AC2.1 Learners should be introduced to and be familiar with standard metric units of measure especially 1mm, 1cm, 30cm and 1 metre.

At Entry 2, learners should show **two** examples of estimating a length or height in an everyday situation.
Learners could use a ruler, metre rule or any other resource as a reference when estimating. The words “between”, “less than”, “more than”, “about” etc are sufficient at Entry 2.
E.g. “The desk is between 1 and 2 metres”
“The door is about 2 metres”
“The pen is less than 30cm”
There should be some degree of accuracy e.g. “the height of a two-storey building is more than 1 metre” would be an inappropriate estimate.

At Entry 3, learners should show **two** examples of estimating a length or height in an everyday situation.
Learners could use a ruler, metre rule or another other resource as a reference when estimating. Answers should be more accurate than those expected at Entry 2. Candidates should not be penalised if their notation is incorrect as long as the answers are unambiguous.
E.g. “The desk is about 1 metre 20 cm”
“The pen is about 15cm”

AC2.2 Learners should have opportunities to estimate weight [Entry 2 & 3] using standard metric units of measure in everyday situations.

Learners should be introduced to and be familiar with standard metric units of measure.

At Entry 2, learners should show **two** examples of estimating a weight in everyday situation.
Learners could use any resource as a reference when estimating for example, a bag of sugar (1kg), an apple (about 150g), glue stick (about 40g) or pound coin (about 10g).
The words "between", "less than", "more than", "about" etc are sufficient at Entry 2.
E.g. "The bag of tea weighs about 1kg"
"The sweet weighs less than 10g"
There should be some degree of accuracy e.g. "the weight of the cake is more than 10g" would be an inappropriate estimate.

At Entry 3, learners should show **two** examples of estimating a weight in everyday situation.
Learners could use any resource as a reference when estimating, for example, a bag of sugar (1kg), an apple (about 150g), glue stick (40g) or pound coin (about 10g).
Answers should be more accurate than those expected at Entry 2.
Candidates should not be penalised if their notation is incorrect as long as the answers are unambiguous.
E.g. "The baby weighs about 5kg"
"The adult weighs about 100kg"

AC2.3
At Entry 3, learners should have opportunities to estimate capacity using standard metric units of measure in everyday situations.

Learners should be introduced to and be familiar with standard metric units of measure for capacity.

Learners should show **two** examples of estimating a capacity in everyday situation.
Learners could use any resource to assist with estimating for example, a litre of water, can of pop (about 300ml) etc.
Candidates should not be penalised if their notation is incorrect as long as the answers are unambiguous.
E.g. "There's about 500ml in this bottle of pop"
"The bath holds about 150 litres of water"

LO3 Be able to measure using standard units of measure.

Learners should be aware that when measuring length/height, weight [Entry 2 & 3] or capacity [Entry 3] you use instruments with scales, such as a ruler for measuring length, cooking scales to measure weight and measuring jug to measure capcity.

AC3.1 At Entry 2, learners should show **one** example of choosing an appropriate measuring instrument to measure a length/height.

Learners should show **one** example of choosing an appropriate measuring instrument to measure a weight.

At Entry 3, learners should show **one** example of choosing an appropriate measuring instrument to measure a length/height.

Learners should show **one** example of choosing an appropriate measuring instrument to measure a weight.

Learners should show **one** example of choosing an appropriate measuring instrument to measure a capacity.

AC3.2 At Entry 2, learners should show **two** examples of reading **different** simple scales to the nearest labelled division.

At Entry 3, learners should show **two** examples of reading scales harder than those chosen for Entry 2. One of the scales should be read to one decimal place and one scale should not increase by 1 or 10 each time.

LO4 Be able to review estimates.

At Entry 3, learners should show **one** example of comparing their estimated and actual measurements.
Learners should be able to express if their estimates were accurate, less than the actual measurement or more than the actual measurement.

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

Units most likely to be taught alongside ***Working with measures****:*

- *Introduction to whole numbers [Entry 2 & 3]*
- *Working with whole numbers [Entry 2 & 3]*

3.2 Resources

http://www.bbc.co.uk/skillswise/numbers/measuring/lwc/tutor.shtml - factsheets and quizzes on measuring and estimation

http://www.bbc.co.uk/schools/ks2bitesize/maths/shape_space/ - activities on measures

http://www.primaryresources.co.uk/maths/mathsE1.htm - numerous resources created by teachers on estimating and measuring

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:

- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:

- practical measuring activity
- photocopy from pupils' book
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- card sort activities
- jigsaw activities
- witness statements

4.2 Examples of Tasks

(a) Tasks specific to *Working with measures*

AC1.1 Learners are given cards with different objects and different units.
Learners need to match the object with the appropriate unit.
For example, at Entry 2, learners could be given the following cards to match.

 The height of a boy	g	 The distance from Cardiff to London
 The weight of a sweet	feet and inches	 The weight of a dog
miles	m	 The length of an ant
kg	 The length of a running track	mm

AC2.1, AC2.2, AC2.3, AC3.1, AC3.2, AC4.1 [Entry 3]

Learners are asked to complete the table to:

- estimate the length/height, weight or capacity of a number of objects found in a classroom
- choose an appropriate measuring instrument to measure the height/weight/capacity [Entry 3]
- read scales
- compare their estimated and actual measurements [Entry 3]

For example, at Entry 2, learners could be given the following table to complete.

Estimating and Measuring

OBJECT	Estimation	Actual Measurement
Height of the desk		
Height of the door		
Length of a pencil		
Length of the room		
Weight of an apple		
Weight of a bag of sweets		

AC4.1

Learners could be given a number of measuring instruments or pictures of measuring instruments and asked to read the scales to the degree of accuracy required e.g. thermometer, speedometer, weighing scales, ruler.

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6375/E2 WORKING WITH MEASURES - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Identify appropriate units for measurements of: length/height and weight	Identify different standard units used to measure **two** lengths and **two** masses.
AC2.1 Estimate length/height using standard metric units of measure in everyday situations.	Show **two** examples of estimating a length or height in an everyday situation. There should be some degree of accuracy.
AC2.2 Estimate weight using standard metric units of measure in everyday situations.	Show **two** examples of estimating a weight in everyday situation. There should be some degree of accuracy.
AC3 .1 Use an appropriate measuring instrument to measure: length/height and weight	Show **one** example of choosing an appropriate measuring instrument to measure a length/height and a weight.
AC3.2 Read simple scales to the nearest labelled division.	Show **two** examples of reading **different** simple scales to the nearest labelled division.

6375/E3 WORKING WITH MEASURES - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1 .1 Identify appropriate units for measurements of: length/height, weight and capacity.	Identify different standard units used to measure **two** lengths, **two** masses and **one** capacity.
AC2.1 Estimate length/height using standard metric units of measure in everyday situations.	Show **two** examples of estimating a length or height in an everyday situation. Answers should be more accurate than those expected at Entry 2.
AC2.2 Estimate weight using standard metric units of measure in everyday situations.	Show **two** examples of estimating a weight in everyday situation. Answers should be more accurate than those expected at Entry 2.
AC2.3 Estimate capacity using standard metric units of measure in everyday situations.	Show **two** examples of estimating a capacity in everyday situation. There should be some degree of accuracy.
AC3 .1 Use an appropriate measuring instrument to measure: length/height, weight and capacity.	Show **one** example of choosing an appropriate measuring instrument to measure a length/height, a weight and a capacity.
AC3.2 Read scales to the nearest labelled division.	Show **two** examples of reading scales harder than those chosen for Entry 2. One of the scales should be read to one decimal place and one that does not increase by 1 or 10 each time (with 10 labelled divisions).
AC4.1 Compare estimated and actual measurements	Show **one** example of comparing their estimated and actual measurements.

Working with measures Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify appropriate units for measurements of • length/height • weight			
AC2.1 Estimate length/height using standard metric units of measure in everyday situations.			
AC2.2 Estimate weight using standard metric units of measure in everyday situations.			
AC3.1 Use an appropriate measuring instrument to measure: • length/height • weight			
AC3.2 Read simple scales to the nearest labelled division.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Working with measures Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify appropriate units for measurements of • length/height • weight • capacity			
AC2.1 Estimate length/height using standard metric units of measure in everyday situations.			
AC2.2 Estimate weight using standard metric units of measure in everyday situations.			
AC2.3 Estimate capacity using standard metric units of measure in everyday situations.			
AC3.1 Use appropriate measuring instruments to measure: • length/height • weight • capacity			
AC3.2 Read scales to the nearest labelled division.			
AC4.1 Compare estimated and actual measurements.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title:	**Working with angles and position**	
Unit Ref. Nos.	**Entry 2: L/503/3473**	**Entry 3: R/503/3474**
Entry Codes	**Entry 2: 6376/E2**	**Entry 3: 6376/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**1**	
Unit aim:	This unit aims to enable learners to use suitable language whilst describing position, understanding what is meant by an angle and describing different angles.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
LO1 **Be able to use everyday language to describe position.**	AC1.1 Use words to describe position.	AC1.1 Use words to describe position.
LO2 **Be able to describe angles.**	AC2.1 Identify right angles and acute angles on everyday items.	AC2.1 Identify right angle, acute angles and obtuse angles on everyday items.
LO3 **Be able to use angles as a measurement of turn.**	AC3 .1 Give instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles AC3.2 Follow instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles AC3.3 Use the 4 points (N, E, S and W) of the compass to show direction.	AC3 .1 Give instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles AC3.2 Follow instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles AC3.3 Use the 8 points of the compass to show direction.

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

LO1 Be able to use everyday language to describe position.

AC1.1 At Entry 2 and 3, learners should show **two** examples of using appropriate words to describe the position of an object in relation to another.
Words such as the following could be used.

- inside
- outside
- above
- under
- next to
- behind
- left
- right

LO2 Be able to describe angles.

Learners should be familiar with right-angles and that acute angles are smaller than a right-angle and that obtuse angles are between a right-angle and straight line.
Learners need not measure angles to achieve these assessment criteria, but resources such as an angle measurer made out of cardboard strips and a paper fastener may be useful.

AC2.1 At Entry 2, learners should identify **two** right angles and **two** acute angles on everyday items or images that are not 2D shapes.

At Entry 3, learners should identify **two** right angles, **two** acute angles and **two** obtuse angles on everyday items or images that are not 2D shapes.

LO3 Be able to use angles as a measurement of turn.

AC3.1 At Entry 2 and 3, learners should show **one** example of giving instructions for movement along a route.

AC3.2 At Entry 2 and 3, learners should show **one** example of following instructions for movement along a route.

Evidence of using or understanding the following words should be shown overall within the two examples:

- clockwise/anticlockwise turns
- right/left turns
- right-angles

AC3.3 At Entry 2, learners should know the 4 points (N, E, S and W) of the compass and at Entry 3, learners should know the 8 points (N, E, S, W, NE, NW, SE and SW) of the compass.

At Entry 2, learners should show **two** examples of describing the position of an object in relation to another using the 4 points (N, E, S and W) of the compass.

At Entry 3, learners should show **two** examples of describing the position of an object in relation to another using the 4 points (N, E, S and W) of the compass **and** show **two** examples of describing the position of an object in relation to another using the 8 points of the compass (but **not** including N, E, S and W).

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

3.2 Resources

http://www.bbc.co.uk/schools/ks2bitesize/maths/shape_space/angles/read1.shtml - interactive resources introducing angles.

http://www.tes.co.uk/taxonomySearchResults.aspx?mode=browse&parametrics=42198,43720,43767,43770 - numerous angle resources

http://www.mathsisfun.com/angles.html

http://gwydir.demon.co.uk/jo/angle/boat.htm - activity to identify angles

http://www.bbc.co.uk/schools/starship/printanddo/ - treasure chest activity describing position

http://www.bbc.co.uk/schools/digger/7_9entry/6.shtml - interactive game assessing ordering whole numbers and using position.

http://www.ngfl-cymru.org.uk/vtc_-_ks2_-_geog_-_north__south__east_and_west
http://www.ngfl-cymru.org.uk/vtc/compass_bearings/eng/Introduction/default.htm
- excellent resources introducing points of the compass.

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:
- practical activities
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- jigsaw activities
- witness statements

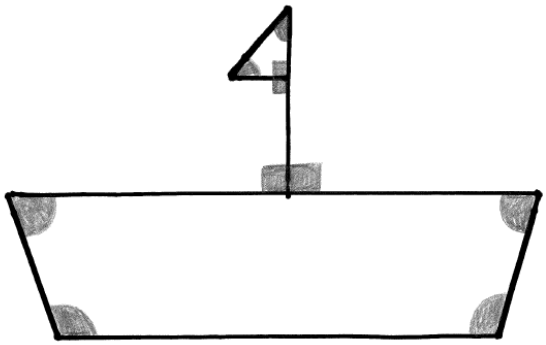
4.2 Examples of Tasks

Tasks specific to Working with angles and position

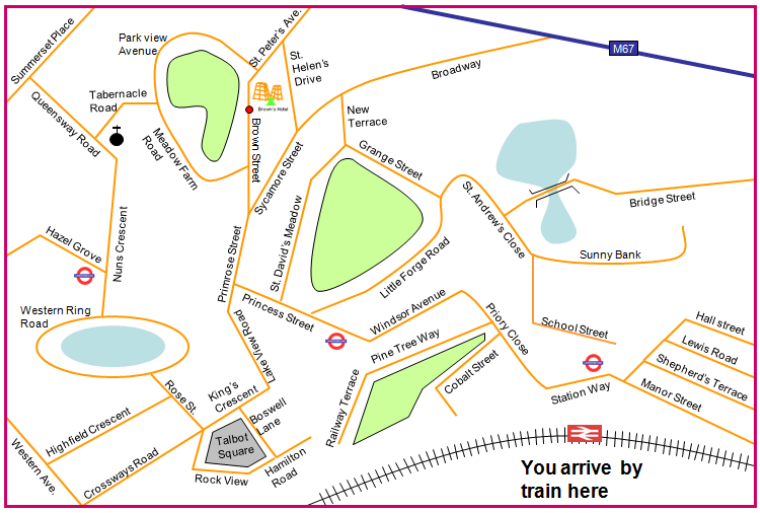
AC1.1 Learners are given a set of objects or picture of different objects and have to use appropriate words to describe the position of an object in relation to another. Words such as inside, outside, above, under, next to, behind, left and right could be written on flashcards and used to assist learners.

AC2.1 Learners are given a picture or are asked to point out right angles, acute angles and obtuse angles [Entry 3] around the classroom.

For example, an Entry 2 task could be:

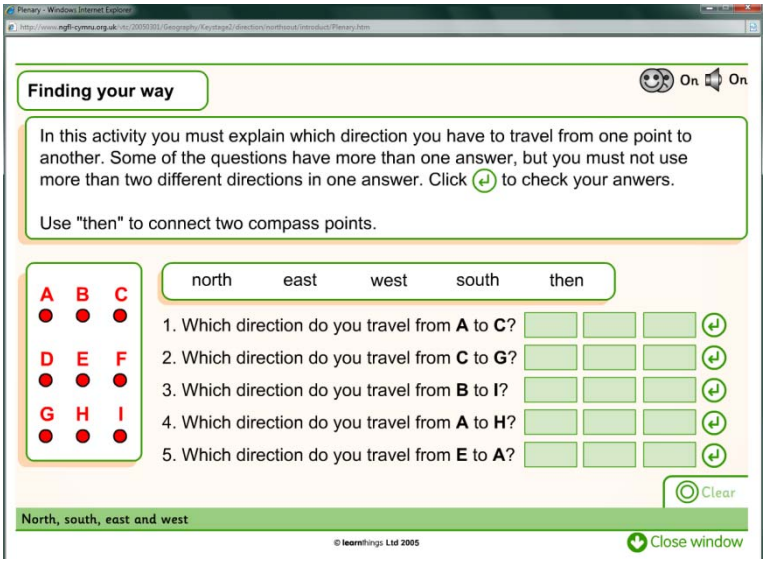


AC3.1 Learners are given a map (see below) and are asked to describe how to get from one place to another.

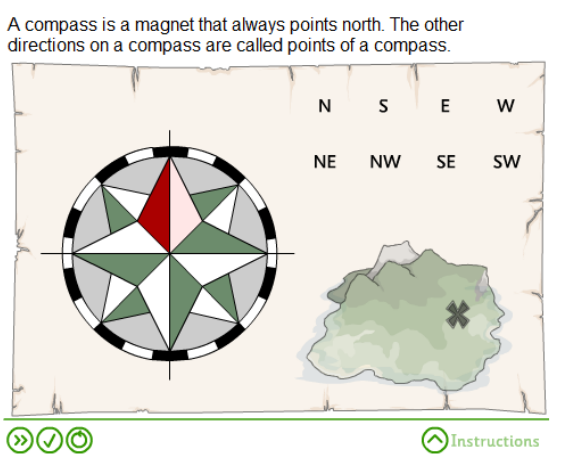


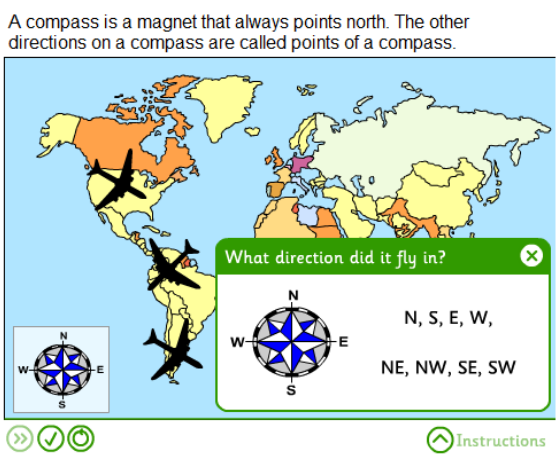
AC3.2 Learners are given a map and have to follow a set of instructions on getting from place to another.

AC3.3 At Entry 2, learners describe the position of an object in relation to another using the 4 points (N, E, S and W) of the compass.
The following is taken from a resource on NGFL-Cymru
http://www.ngfl-cymru.org.uk/vtc_-_ks2_-_geog_-_north__south__east_and_west



At Entry 3, learners describe the position of an object in relation to another using the 8 points of the compass.
The following is taken from a resource on NGFL-Cymru
http://www.ngfl-cymru.org.uk/vtc/compass_bearings/eng/Introduction/default.htm





4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6376/E2 WORKING WITH ANGLES AND POSITION - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1.1 Use words to describe position.	Show **two** examples of using appropriate words to describe the position of an object in relation to another. Words such as the following could be used: inside, outside, above, under, next to, behind, left and right.
AC2.1 Identify right angles and acute angles on everyday items.	Identify **two** right angles and **two** acute angles on everyday items or images that are not 2D shapes.
AC3 .1 Give instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles	Show **one** example of giving instructions for movement along a route. Evidence of using or understanding the following words should be shown overall within AC3.1 and AC3.2: clockwise/anticlockwise turns, right/left turns and right-angles.
AC3.2 Follow instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles	Show **one** example of following instructions for movement along a route. Evidence of using or understanding the following words should be shown overall within AC3.1 and AC3.2: clockwise/anticlockwise turns, right/left turns and right-angles.
AC3.3 Use the 4 points (N, E, S and W) of the compass to show direction.	Show **two** examples of describing the position of an object in relation to another using the 4 points (N, E, S and W) of the compass.

6376/E3 WORKING WITH ANGLES AND POSITION - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1.1 Use words to describe position.	Show **two** examples of using appropriate words to describe the position of an object in relation to another. Words such as the following could be used: inside, outside, above, under, next to, behind, left and right.
AC2.1 Identify right angle, acute angles and obtuse angles on everyday items.	Identify **two** right angles, **two** acute angles and **two** obtuse angles on everyday items or images that are not 2D shapes.
AC3 .1 Give instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles	Show **one** example of giving instructions for movement along a route. Evidence of using or understanding the following words should be shown overall within AC3.1 and AC3.2: clockwise/anticlockwise turns, right/left turns and right-angles.
AC3.2 Follow instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles	Show **one** example of following instructions for movement along a route. Evidence of using or understanding the following words should be shown overall within AC3.1 and AC3.2: clockwise/anticlockwise turns, right/left turns and right-angles.
AC3.3 Use the 8 points of the compass to show direction.	Show **two** examples of describing the position of an object in relation to another using the 4 points (N, E, S and W) of the compass **and** Show **two** examples of describing the position of an object in relation to another using the 8 points of the compass (but **not** including N, E, S and W).

Working with angles and position Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Use words to describe position			
AC2.1 Identify right angles and acute angles on everyday items.			
AC3 .1 Give instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles			
AC3.2 Follow instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles			
AC3.3 Use the 4 points (N, E, S and W) of the compass to show direction.			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Working with angles and position Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Use words to describe position.			
AC2.1 Identify right angles, acute angles and obtuse angles on everyday items.			
AC3 .1 Give instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles			
AC3.2 Follow instructions for movement along a route using: • clockwise/anticlockwise turns • right/left turns • right-angles			
AC3.3 Use the 8 points of the compass to show direction			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Title:	**Data handling**	
Unit Ref. Nos.	**Entry 2: M/503/3465**	**Entry 3: T/503/3466**
Entry Codes	**Entry 2: 6377/E2**	**Entry 3: 6377/E3**
Level	**Entry 2 and Entry 3**	
Credit value:	**3**	
Unit aim:	This unit aims to enable learners to collect and record numerical information practically, based on categories selected. Learners will present and interpret information from various sources.	

Learning Outcomes **To be awarded credit for this unit, the learner will:**	**Assessment Criteria Entry 2** **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**Assessment Criteria Entry 3** **Assessment of the learning outcome will require a learner to demonstrate that they can:**
L01 **Be able to collect and record numerical data.**	AC1.1 Identify appropriate categories for collections of data. AC1.2 Collect numerical data (at least 10 responses) using a suitable method.	AC1.1 Identify appropriate categories for collections of data. AC1.2 Collect numerical data (at least 20 responses) using a suitable method.
LO2 **Be able to present numerical information.**	AC2.1 Display data in appropriate ways**.**	AC2.1 Display data with appropriate labelling.
LO3 **Be able to interpret information.**	AC3.1 Make observations by reviewing information from: • simple lists • simple tables • simple charts	AC3.1 Make observations by reviewing information from: • lists • tables • simple charts • pictograms AC3.2 Make comparisons by reviewing information from: • lists • tables • simple charts • pictograms

2. Amplification of Content

The following suggestions should be considered in the context of:
- the level the learner is working at;
- providing opportunities for progression;
- centre facilities and resources.

LO1 Be able to collect and record numerical data.

AC1.1 Learners should identify **at least three** appropriate categories for a collection of data. For example categories for favourite colour, month of birthday, favourite football team etc.

AC1.2 Learners should demonstrate that they can collect data for categories using a suitable method (the categories can be pre-determined or chosen from AC1.1). Suitable methods include using tallies or using a table.

At Entry 2, at least 10 responses should be collected.

At Entry 3, at least 20 responses should be collected.

LO2 Be able to present numerical information.

AC2.1 At Entry 2, learners should demonstrate that they can display data in **one** appropriate way. For example, a bar chart would be appropriate; the labelling does not have to be accurate to meet the assessment criteria.

At Entry 3, learners should demonstrate that they can display data in **two** appropriate different ways. For example, a bar chart **and** pictogram would be suitable, **with** appropriate correct labelling (axis labelled, title, key).

LO3 Be able to interpret information.

AC3.1 Learners should show **one** example showing that they can make observations by reviewing information from **each** of the following sources:

- simple lists - learners should interpret information from lists such as price lists, time tables etc
- simple tables - At Entry 2, learners should interpret information from simple tables e.g. simple frequency tables.
  At Entry 3, learners should interpret information from harder tables e.g. tables with multiple columns, two-way tables.
- simple charts – At Entry 2, learners should interpret information from simple charts such as bar charts or line graphs.
  At Entry 3, learners should interpret information from two different charts such as bar charts, line graphs, pictograms.

AC3.2 At Entry 3, learners should show **one** example of comparing information from **each** of the following sources:

- lists - learners could compare price lists from two different shops, two buses on a timetable etc
- tables - learners could compare the categories from two frequency tables, etc
- simple charts - learners could compare the results displayed in two bar charts etc
- pictograms - learners could compare the results displayed in two pictograms etc

3. Delivery

3.1 Planning Courses

Achievement of each unit is confirmed through a 'statement of achievement', so that learners will gain some recognition for all completed work. However, in planning courses teachers will need to consider the possible qualification outcomes for individual learners. **For full details of the qualifications (Awards and Certificates) that this unit may contribute to, and rules of combination, please refer to the WJEC Entry Pathways specification.**

3.2 Resources

http://www.ngfl-cymru.org.uk/vtc-home/vtc-ks2-home/vtc-ks2-maths(2)/vtc-ks2-maths-data_handling/vtc-ks2-maths-data_handling-collect_represent_and_interpret_data - activities involving collecting, representing and interpreting data

http://www.bbc.co.uk/schools/ks2bitesize/maths/data/ - activities looking at understanding and presenting data

http://www.tes.co.uk/taxonomySearchResults.aspx?mode=browse&parametrics=42198,43720,43740 - numerous activities on collecting, representing and interpreting data

4. Assessment

4.1 Ways of demonstrating that the criteria have been met

In planning assessment opportunities it will be necessary to consider:
- formative as well as summative assessment
- coverage of Assessment Criteria for this unit
- coverage of Assessment Criteria for linked units

The following types of evidence are likely to feature:

- data handling investigation
- photocopy from pupils' book
- evidence of class work tasks
- evidence of homework tasks
- aural tests
- photographs of practical activities
- written test
- card sort activities
- jigsaw activities
- witness statements

4.2 Examples of Tasks

Tasks specific to Data handling

Learners could carry out a data handling investigation which will cover most of the assessment criteria.

For example, asking people which healthy foods and snacks they would buy from a school tuck shop.
Learners must choose appropriate categories [Entry 2 & 3 - AC1.1] and collect at least 10 responses [Entry 2 - AC1.2] or at least 20 responses [Entry 3 - AC1.2] using tallies and presenting the information in a table [Entry 2 & 3 - AC1.2].

Results are presented in a bar chart [Entry 2 & 3 - AC2.1] and pictogram [Entry 3 - AC2.1]. At Entry 3, learners will label the axis and select an appropriate key for the pictogram (AC2.1).
By reviewing the bar chart [Entry 2 & 3 - AC3.1] and pictogram [Entry 3 - AC3.1], learners make observations such as “chocolate bars was the most common response”, “not as many people chose apples”.
At Entry 3, learners can make comparisons between the results collected from the boys and girls e.g.“10 more boys than girls chose chocolate bars” or learners are given a pictogram of another survey and comparisons are made between the two classes (AC3.2).

Learners could receive supplementary lists and tables to interpret in order to achieve the assessment criteria not met.

4.3 Recording

Assessment will be recorded on the attached form by indicating successful completion of each Assessment Criterion. All criteria must be met for the unit to be achieved and credit awarded. Where a unit is provided at both Entry 2 and Entry 3, Learning Outcomes may be common but Assessment Criteria will be differentiated and must be met at the relevant level.

5. Administrative Arrangements

For details of administrative arrangements, please refer to the WJEC Entry Pathways specification, which includes information about:

- Entry Procedures
- Internal Assessment and External Moderation
- Awarding and Reporting
- Issue of Results
- Access Arrangements
- Post-Results Services

6377/E2 DATA HANDLING - ENTRY 2	
ENTRY 2 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1.1 Identify appropriate categories for collections of data.	Identify **at least three** appropriate categories for a collection of data (favourite colour, month of birthday, favourite football team etc)
AC1.2 Collect numerical data (at least 10 responses) using a suitable method.	At least 10 responses should be collected using a suitable methods include using tallies or using a table.
AC2.1 Display data in appropriate ways**.**	Display data in **one** appropriate way. For example, a bar chart would be appropriate; the labelling does not have to be accurate.
AC3.1 Make observations by reviewing information from: • simple lists • simple tables • simple charts	Show **one** example showing that they can interpret information and make observations from: simple lists - e.g. price lists, time tables simple tables - e.g. simple frequency tables simple charts – e.g. bar charts or line graphs

6377/E3 DATA HANDLING - ENTRY 3	
ENTRY 3 **Assessment of the learning outcome will require a learner to demonstrate that they can:**	**AMPLICATION OF CONTENT**
AC1.1 Identify appropriate categories for collections of data.	Identify **at least three** appropriate categories for a collection of data (favourite colour, month of birthday, favourite football team etc)
AC1.2 Collect numerical data (at least 20 responses) using a suitable method.	At least 20 responses should be collected using a suitable methods include using tallies or using a table.
AC2.1 Display data with appropriate labelling.	Display data in **two** appropriate different ways. For example, a bar chart **and** pictogram would be suitable, **with** appropriate correct labelling (axis labelled, title, key).
AC3.1 Make observations by reviewing information from: • lists • tables • simple charts • pictograms	Show **one** example showing that they can interpret information and make observations from: lists - e.g. price lists, time tables tables - e.g. tables with multiple columns, two-way tables simple charts – two different charts e.g. bar charts, line graphs, pictograms
AC3.2 Make comparisons by reviewing information from: • lists • tables • simple charts • pictograms	Show **one** example of comparing information from **each** of the following sources: lists - learners could compare price lists from two different shops, two buses on a timetable etc tables - learners could compare the categories from two frequency tables, etc simple charts - learners could compare the results displayed in two bar charts etc pictograms - learners could compare the results displayed in two pictograms etc

Data handling Entry 2

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify appropriate categories for collections of data.			
AC1.2 Collect numerical data (at least 10 responses) using a suitable method.			
AC2.1 Display data in appropriate ways**.**			
AC3.1 Make observations by reviewing information from: • simple lists • simple tables • simple charts			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____

Data handling Entry 3

ASSESSMENT RECORD

Candidate Name _____ *Candidate No.*_____

*Centre Name*_____ *Centre No.*_____

Assessment Criteria	Met	Evidence	Office Use
AC1.1 Identify appropriate categories for collections of data.			
AC1.2 Collect numerical data (at least 20 responses) using a suitable method.			
AC2.1 Display data with appropriate labelling.			
AC3.1 Make observations by reviewing information from: • lists • tables • simple charts • pictograms			
AC3.2 Make comparisons by reviewing information from: • lists • tables • simple charts • pictograms			

Additional Comments

Teacher: _____ Date: _____

Moderator: _____ Date: _____