

Functional Skills

Mathematics

Entry Level 2



Sample Assessment Materials

Functional Skills qualificationsFirst teaching September 2019

Edexcel, BTEC and LCCI qualifications

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Introduction

The Pearson Edexcel Functional Skills Qualification in Mathematics at Entry Level 2 is designed for use in schools, colleges and training providers. It is part of a suite of Functional Skills qualifications offered by Pearson. These sample assessment materials have been developed to support this qualification and will be used as the benchmark to develop the assessment students will take.

Assessment guidance

Assessment conditions

The completion of an assessment must be under supervised conditions. During the assessment, learners must be in direct sight of the supervisor at all times. Input from the supervisor such as clarification of requirements or reading the questions, is acceptable and must be noted on the Assessment Record Authentication Sheet. However, the supervisor must not provide answers to the assessment questions or lead the learner towards the answer(s).

Learners must be given a suitably quiet, undisturbed location in which to complete assessments.

The room normally used by learners can be used for assessment. There is no need to remove posters, displays or materials containing information relevant to what is being assessed. However, displays should not provide answers to the assessment questions.

Assessments can be scheduled across a maximum of three sessions. If an assessment is completed in more than one session, it is recommended that the first session be used for assessment of the non-calculator section (Section A) only, and the subsequent session(s) be used for the calculator section (Section B) only. Learners' materials must be collected at the end of each session. If a single section is completed in more than one session, learners' material relating to that section must be stored securely and handed back at the beginning of the next session. The assessment response must be collected and retained securely at the end of the assessment.

Learners with agreed particular requirements, in relation to their mode of learning or assessment, can have their usual support unless it compromises the outcome of the assessment. Those providing assistance should refer to the access regulations given on our website.

Learners can have access to:

notes made during the assessment.

Learners must not have access to:

• a prepared response.

Time

Centres should allow 25 minutes for the non-calculator section (Section A) and 65 minutes for the calculator section (Section B).

Calculator and non-calculator sections

If both sections are completed in one session:

- the non-calculator section (Section A) should be completed first
- centres must allow the full time for the non-calculator section (Section A) for all learners before collecting the paper in and distributing the calculator section (Section B) and calculators
- there is no set break between the non-calculator and calculator sections; learners must be kept under supervision at all times while Section A responses are collected in and Section B papers are distributed.

Calculators must be:

- of a size suitable for use on the desk
- either battery or solar powered
- free of lids, cases and covers that include printed instructions or formulas.

Calculators must not:

- be designed or adapted to offer any of these facilities:
 - language translators
 - o symbolic algebra manipulation
 - o symbolic differentiation or integration
 - o communication with other machines or the internet
 - o be borrowed from another learner during an examination for any reason;*
- have retrievable information stored in them, this includes:
 - databanks;
 - o dictionaries;
 - o mathematical formulae;
 - text.

Assessment marking

Tutors/assessors mark the assessment using the mark scheme provided.

Pearson will conduct an annual review of the management of Functional Skills delivery and externally verify the assessment outcomes.

Pearson will sample the assessment outcomes through standards verification.

Authentication

Learners' work must be authenticated by the centre. The work presented for assessment must be completed by the individual learner. An Assessment Record and Authentication Sheet must be completed for each learner.

Evidence

Evidence of the learner's responses may be:

- written answers to the questions
- answers dictated to a scribe (who may be the supervisor)
- video recording of the assessment
- audio recording of the assessment with clear commentary on what is being done or shown.

The purpose of this assessment is to assess a learner's ability to meet the Functional Skills Mathematics Standards at Entry Level 2.

Supervisors should be familiar with the content of the assessments before they administer the assessment.

^{*}Advice: a supervisor may give a learner a replacement calculator.

Assessment of Functional Skills Mathematics at Entry Level 2

Learners should be offered the opportunity to attempt every question on each section. Supervisors must sign and date the record of each learner's responses to this assessment. Arrangements for special consideration should be in accordance with the procedures outlined by guidance on our website.

Marks must be awarded according to the mark scheme.

The total number of marks that can be awarded for this assessment is 28.

The pass mark for this assessment is **XX** [to be added following standard setting activity].

Adaptation

These assessments are designed to enable adaptation to meet local needs. Therefore, centres are permitted to adapt the following aspects of the assessment.

- Centres are permitted to adapt the context of the assessment to meet their learners' needs or interests.
- Centres are permitted to provide physical objects during the assessment to meet their learners' needs. Physical objects could include, for example, card shapes or plastic money which matches the values of money used in a paper. A learner could then select the appropriate shape (if the question requires this) or choose the correct coins to make a value (if the question requires this).
- The content statement assessed through each item of the assessment must be the same as in the Pearson assessment, in order to ensure coverage of the Functional Skills subject content.
- Adapted assessments must replicate the activity and outcome of each assessment item.
 Therefore, while context could be adapted to suit learner needs, the mathematical content e.g. the amounts or units must remain as it is in the assessment.
- Wording of the questions in the assessments must be as similar as possible to the Pearson assessment.
- If the context of the assessment is amended it must be noted on the Assessment Record and Authentication Sheet.
- Learners should be familiar with context-specific vocabulary before the assessment.

Any proposed adaptions must be agreed in advance with the Pearson Standards Verifier.

Interpretation

Centres may interpret and paraphrase the questions, provided the supervisor does not assist the learner in reaching a solution. Supervisors cannot tell learners the meaning of any mathematical term included in the subject content as these terms are an integral part of the assessment and part of the skills the learner needs to demonstrate.

Assessment may take place through assessor mediation, and physical objects may be used. Supervisors may read the questions to the learner and note the learner's responses in the question paper.

Preparation for assessment

Supervisors should have read through the assessments before the assessment and should ensure that learners are prepared in terms of any vocabulary associated with the context of the assessments. For example, for these assessment materials:

drive(s), monthly, parking, bus, journey, apple pie(s), full house, driveway, for sale, petrol, companies/company, tank, gauge, empty, service station, concert, car wax, jet washer, screen wash, brush, wheel cleaner, can, cleaning spray, mixture, measuring jug, water temperature, hot(ter), survey, bike, walk, parking spaces, garage, repair, post office, gym, supermarket, shoe shop, cinema, cafe, chemist library, bank hair salon.

Where 'the correct symbol for money' is required, learners should show their answers in pounds or pence, with the correct symbol, e.g. £12 or 20p

Functional Skills Mathematics Entry 2 Assessment Record and Authentication Sheet

Please complete this sheet. Use a separate sheet for each learner.

Centre name:		Learner name:		
Centre number:		Candidate number:		
The learner must complete both se The completed assessment must be				
Date(s) taken:		Start/finish times		
Section A (Non-calculator) Marks:	Section B (Marks:	•		
/7		/21		
The pass mark is XX* . To pass at E score at least XX* marks out of th	•		Total	l mark achieved:
sections. [*to be added following standard se				/28
Please tick box if the learner ha				
ricuse tiek box ir tile learner na	- Judinieved L	Level 2		
Give details of any assistance provitime and reasons for splitting assess Attach another page if you wish to I confirm that this learner's work has to be a second or splitting assessment to the second of the sec	ssment over i	more than one session	n (if ap _l	plicable).
it is the learner's own work.				
Supervisor name:		Supervisor s	ignat	ure and date:
I confirm that this is my own work.				
Learner name:		Learner sign	ature	e and date:
By signing the declaration, you agree online support and training of both concerns or queries please email under the concerns of the concerns	Centre Asse	ssors and Pearson Sta		-
Please tick if you do not want your	work to be u	sed by Pearson for tra	ining p	ourposes.
Sampling information (to comple	te if work is	sampled)		
Internal Verifier name	S	ignature		Date
Pearson Standards Verifier name	• S	ignature		Date

Pearson Edexcel Functional Skills – Entry 2

Section A - Non-calculator

Mathematics

Sample Assessment Materials for first teaching September 2019



Time: 25 minutes

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Candidate signature

Date

You must have a

- black or blue ink pen
- pencil
- ruler
- rubber.

Instructions

- Answer every question.
- You can write or draw to show your answers.
- You must **not** use a calculator.

Information

The total number of marks for this section is 7.

Advice

- Read each question carefully.
- Check your work at the end.
- Ask if you do not understand any words.

Turn over ▶



Pearson

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1	Liv drives her car to work.
	She works out the monthly cost of parking.

She does this calculation.

What is the missing symbol?

(1)



Tick (✔) the correct answer.

- +
- _
- ()
- ()
- \times
- ÷
- (
- (

2	Liv is thinking about going to work by bus.	
	The journey by bus takes 52 minutes.	
	The journey by car takes 35 minutes.	
	Liv says the car takes 23 minutes less than the bus.	
	Is Liv correct?	
	You must show your working.	(2)
	Show your working and your answer in the box below.	
	Tick (✔) the correct answer.	
	Yes () No ()	

Liv drives 9 km between home and work 8 times a week. 3 She works out how far she drives in a week. $8 \times 9 =$ **Complete the calculation. (1)** Show your answer in the box below. $8 \times 9 =$ ____km

At work Liv puts apple pies into boxes.
Liv has 42 apple pies.
Each full box has 9 apple pies.
How many full boxes of apple pies does Liv have?
Show how many apple pies are left over. (3)
Show your working and your answers in the box below.
full boxes
apple pies left over

Pearson Edexcel Functional Skills – Entry 2

Section B – Calculator

Mathematics

for first teaching September 2019



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(andidata	cianatiira
Candidate	Sidilatuic

Date

You must have a

- black or blue ink pen
- pencil
- ruler
- rubber
- calculator.

Instructions

- Answer every question.
- You can write or draw to show your answers.
- You may use a calculator.

Information

• The total number of marks for this section is 21.

Advice

- Read each question carefully.
- Check your work at the end.
- Ask if you do not understand any words.

Turn over ▶

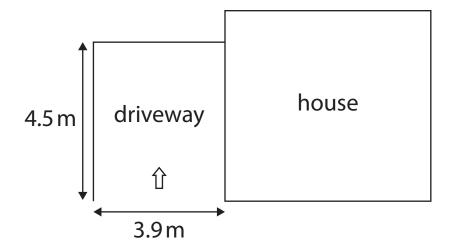
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1 Alex wants to buy a car.

He has a plan of his house and driveway.



Alex wants the longest car that fits his driveway.

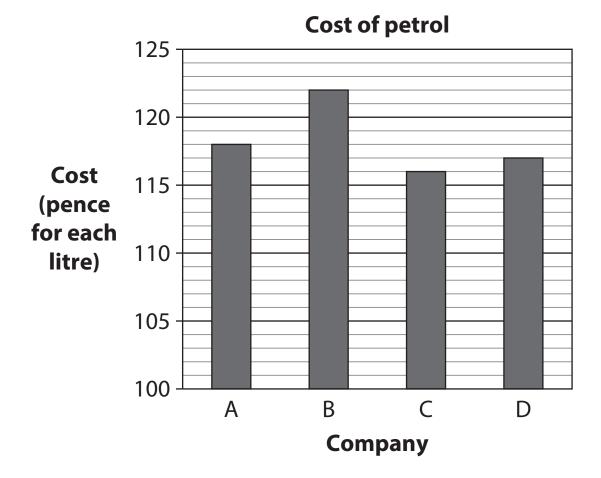
Length of cars for sale						
car A B C D E F						
length (m)	4.2	3.8	4.6	4.8	4.4	4.7

Which car will Alex choose?

(1)

Show your answer in the box below.

2 The chart shows the costs of petrol from different companies.



How much more does petrol cost from company B than company D?

(1)

Show your answer in the box below.

_____ pence for each litre

Alex has a full tank of petrol on Monday. 3 The diagram shows his petrol gauge on Friday. Full **Empty** What fraction of the petrol is left? Show your answer in the box below.

4	Alex needs to buy petrol.								
	He goes to the nearest service station that is op-								
	Which se	rvice station does h	ne choose?						
	Tick (✔) tl	he correct answer.							
		distance 7 km	distance 19 km						
		closed	open						
		()	()						
		distance 23 km	distance 17 km						
		closed	open						
		()	()						
		distance 22 km	distance 15 km						
		open	closed						
		()	()						

5	Alex and his friend go to a concert by car.	
	The 2 friends share the cost equally.	
	The cost of the journey is £36	
	How much money does each of them pay?	
	Use the correct symbol for money.	(3)
	Show your working and your answer in the box below.	
6	(a) Round 36 to the nearest 10	(1)
	Show your answer in the box below.	
	(b) Use the rounded number to check your answer to question 5	(1)
	Show your check in the box below.	

7 Alex needs to buy car wax.

Price list				
Turbo jet washer	£55			
Solo car wax	£32			
Quix car wax	£26			
Kleano screen wash	£21			
Auto car wax	£19			
Handy brush	£13			
Maxon wheel cleaner	£11			

Alex has £25 to spend.

Which car wax can Alex buy?

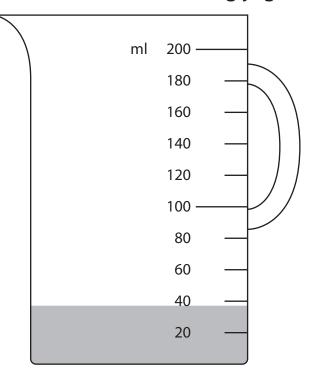
(1

Show your answer in the box below.

8	This is the shape of a can of cleaning spray.
	What is the name of this shape? (1)
	Show your answer in the box below.

9 Alex makes a mixture of screen wash and water.

He pours screen wash into a measuring jug.



Alex will add 80 ml of water to the jug.

How much mixture will he have to the nearest division?
Use the correct unit for capacity.

Show your answer in the box below.

(3)

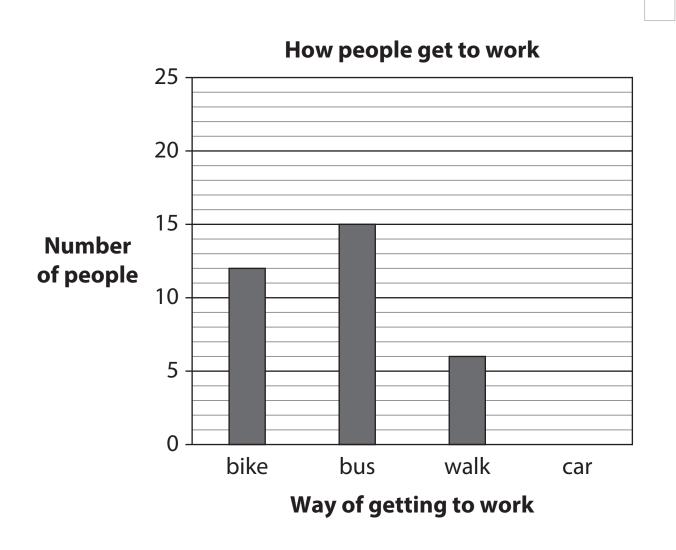
10 Alex looks at the water temperature gauge in his car. Water temperature 98°C The normal water temperature is 79°C. How much hotter is the water than normal? (2) Show your working and your answer in the box below. °C

11 The results of a survey show how people get to work.

How people get to work	Number of people
bike	12
bus	15
walk	6
car	23

Alex needs a bar chart of the survey results.

Show how many people get to work by car on the chart. (1)



12 Alex parks his car at the company where he works. These are the parking spaces. in out Key: is one parking space The company needs 57 parking spaces. Are there enough parking spaces? Show why you think this. (1)Show your answer in the box below. parking spaces Tick (✔) the correct answer. Yes () No()

13	A row of parking space	s ha	s odd r	umbers.	
	23		25	27	
	What is the next odd	num	ber?		(1)
	Show your answer in th	ne bo	ox belo	W.	
	23	25	27		

14 Alex needs his car repaired.

He wants his car repaired between the 30th August and the 10th September.

The garage gives Alex dates when they can repair his car.

Which date will Alex choose?

(1)

Tick (✔) the correct answer.

Dates when the garage can repair the car

 09/08/2019
 18/09/2019

 ()
 ()

 08/09/2019
 19/08/2019

15 Alex takes his car to a garage. He has a street map. bank chemist gym supermarket library shoe cinema bank shop supermarket cafe The garage is on the left between a supermarket and a bank. Show where the garage is on the map. (1)

General guidance on the use of the mark scheme

- 1. Where the answer is a number, accept:
- figures
- words in any understandable spelling
- tallies where appropriate
- pictorial representations.
- 2. Where the mark scheme states 'indicates', accept any clear indication, for example:
- tick
- cross
- underline
- circling
- highlighting.
- 3. If the answer is clearly given, accept even if it is not in the answer box.
- 4. If the answer is in words, accept any understandable spelling.
- 5. Units can be ignored unless required explicitly by the mark scheme.
- 6. Information in brackets is optional, it is not required to award marks.
- 7. Mark crossed-out work, if it is legible and has not been replaced.
- 8. Where more than one response is indicated, award a mark only if all incorrect responses are crossed out.
- 9. 'Valid process' means any method that is complete and correct.
- 10. Where the mark scheme states '1 or' and '2' marks, see example below.

Valid working, e.g. 350 + 150	1 or	
(£)500	2	

Learner answer examples	Mark awarded	Explanation
500	2	No process shown, correct answer
350 + 150 = 500	2	Valid process and correct answer
350 + 100 = 500	2	Process not valid, correct answer
150 + 350	1	Valid process, no answer
350 + 150 = 600	1	Valid process, wrong answer
350 + 100 = 450	0	Process not valid, wrong answer

Mark scheme, Section A - Non-calculator

Question	Answer	Mark(s)	Content
1	Indicates ÷ and no other	1	E2.4
2	Valid process to compare the journeys e.g.	1 or	E2.5
	52 – 35 OR		
	52 – 23 OR		
	23 + 35		
	No AND 17 (minutes) OR	2	E2.5
	No AND 29 (minutes) OR		
	No AND 58 (minutes) OR		
	No AND 6 (minutes)		
3	72 (km)	1	E2.6
4	Valid process to find the number of full boxes e.g.	1 or	E2.8
	42 ÷ 9		
	4 (full boxes) OR	2 or	E2.8
	6 (apple pies left over)		
	4 (full boxes) AND	3	E2.8
	6 (apple pies left over)		
	Accept only if 4 is clearly the number of full boxes and 6 is the remainder		

Total marks for Section A: 7

Mark scheme, Section B - Calculator

Question	Answer	Mark(s)	Content
1	Indicates (car) E OR 4.4 (m) and no other	1	E2.22
2	5 (pence for each litre)	1	E2.23
3	1 4	1	E2.10
	Accept in words, e.g. one quarter		
4	Indicates (the service station) 17 (km away) and no other	1	E2.24
5	Valid process to find each friend's share e.g. 36 ÷ 2	1 or	E2.8
	(£)18	2	E2.8
	Correct use of £ symbol with their value	1	E2.12
6a	40		E2.9
6b	Correct answer from the check, i.e.	1	
	(40 ÷ 2 =) 20		E2.9
	Accept (40 ÷ 18 =) 2.2	1	
	Award this mark for a correct answer based on an incorrect rounding of 36		
7	Indicates Auto (car wax) OR £19 and no other	1	E2.22
8	cylinder Accept any reasonable spelling	1	E2.19
9	Indicates 40 (ml) Accept written answers from 36 (ml) and less than 40 (ml) OR written answers from 116 (ml) and less than 120 (ml)	1 or	E2.18
	Indicates 120 (ml)	2	E2.18
	Correct use of units i.e. ml or millilitres with their value	1	E2.16

Question	Answer	Mark(s)	Content
10	Valid process to compare the temperatures, e.g.	1 or	E2.17
	98 – 79		
	19 (°C)	2	E2.17
11	Draws a correct bar to show 23 people who use a car.	1	E2.25
	Accept a clear point or line indicating the correct value		
	in the correct position (above the category label for car)		
12	No AND 53 (parking spaces) OR	1	E2.1
	No AND 4 (parking spaces)		
13	29	1	E2.3
14	Indicates 08/09/2019 and no other	1	E2.13
15	Indicates on the left between the supermarket and the	1	E2.21
	bank and no other		

Total marks for Section B: 21

Total marks for assessment: 28

July 2019

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