

Pearson Edexcel Level 1 Certificate in Essential Skills – Application of Number (Northern Ireland)

**Sample Assessment Material –
Mark Scheme**
(paper-based and onscreen)

September 2016

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Edexcel, BTEC and LCCI qualifications

Edexcel, BTEC and LCCI qualifications are awarded by Pearson, the UK's largest awarding body offering academic and vocational qualifications that are globally recognised and benchmarked. For further information, please visit our qualification websites at www.edexcel.com, www.btec.co.uk or www.lcci.org.uk. Alternatively, you can get in touch with us using the details on our contact us page at qualifications.pearson.com/contactus

About Pearson

Pearson is the world's leading learning company, with 40,000 employees in more than 70 countries working to help people of all ages to make measurable progress in their lives through learning. We put the learner at the centre of everything we do, because wherever learning flourishes, so do people. Find out more about how we can help you and your learners at qualifications.pearson.com

References to third party material made in this specification are made in good faith. Pearson does not endorse, approve or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

All information in this specification is correct at time of publication.

ISBN 978 1 446 93326 8

All the material in this publication is copyright

© Pearson Education Limited 2016

Guidance for Marking Essential Skills Application of Number Papers

General

- All candidates must receive the same treatment. You must mark the first candidate in exactly the same way as you mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- All the marks on the mark scheme are designed to be awarded. You should always award full marks if deserved, i.e. if the answer matches the mark scheme. You should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

Applying the Mark Scheme

- The mark scheme has a column for **Process** and a column for **Evidence**. In most questions the majority of marks are awarded for the process the candidate uses to reach an answer. The evidence column shows the most likely examples you will see if the candidate gives different evidence for the process, you should award the mark(s).
- **Finding 'the answer'**: in written papers, the demand (question) box should always be checked as candidates often write their 'final' answer or decision there. Some questions require the candidate to give a clear statement of the answer or make a decision, in addition to working. These are always clear in the mark scheme.
- If working is **crossed out and still legible**, then it should be marked, as long as it has not been replaced by alternative work.
- If there is a **choice of methods** shown, then mark the working leading to the answer given in the answer box or working box. If there is no definitive answer then marks should be awarded for the 'lowest' scoring method shown.
- A suspected **misread** may still gain process marks.
- It may be appropriate to **ignore subsequent work (isw)** when the candidate's additional work does not change the meaning of their answer.
- You will often see correct working followed by an incorrect decision, showing that the candidate can calculate but does not understand the functional demand of the question. The mark scheme will make clear how to mark these questions.
- **Transcription** errors occur when the candidate presents a correct answer in working, and writes it incorrectly (on the answer line in a written paper); mark the better answer.
- **Follow through marks (ft)** must only be awarded when explicitly allowed in the mark scheme. Where the process uses the candidate's answer from a previous step, this is clearly shown. Speech marks are used to show that previously incorrect numerical work is being followed through, for example '**240**' means **their** 240.
- Marks can usually be awarded where **units** are not shown. Where units, including money, are required this will be stated explicitly. For example, 5(m) or (£)256.4 indicates that the units do not have to be stated for the mark to be awarded.
- **Correct money notation** indicates that the answer, in money, must have correct notation to gain the mark. This means that money should be shown as £ or p, with

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

the decimal point correct and 2 decimal places if appropriate.
e.g. if the question working led to $£12 \div 5$,
Mark as correct: £2.40 240p £2.40p 2.40£ Mark as incorrect: £2.4 2.40p
£240p 2.4 2.40 240

- Candidates may present their answers or working in many **equivalent** ways. This is denoted **oe** in the mark scheme. Repeated addition for multiplication and repeated subtraction for division are common alternative approaches. The mark scheme will specify the minimum required to award these marks.
- A **range** of answers is often allowed:
 - [12.5, 105] is the inclusive closed interval
 - (12.5, 105) is the exclusive open interval
- **Parts of questions:** because most FS questions are unstructured and open, you should be prepared to award marks for answers seen in later parts of a question, even if not explicit in the expected part.
- Discuss any queries with your Team Leader.
- **Graphs**
The mark schemes for most graph questions have this structure:

Process		Evidence
Appropriate graph or chart – (e.g. bar, stick, line graph)	1 or	1 of: linear scale(s), labels, accurate plotting (2 mm paper-based) ±1 small square onscreen tolerance)
	2 or	2 of: linear scale(s), labels, accurate plotting (2 mm paper-based) ±1 small square onscreen tolerance)
	3	all of: linear scale(s), labels, accurate plotting (2 mm paper-based) ±1 small square onscreen tolerance)

The mark scheme will explain what is appropriate for the data being plotted.
A **linear scale** must be linear **in the range where data is plotted**, whether or not it is broken, whether or not 0 is shown, whether or not the scale is shown as broken. Thus a graph that is 'fit for purpose' in that the **data is displayed clearly and values can be read**, will gain credit.

The minimum requirements for **labels** will be given, but you should give credit if a title is given which makes the label obvious.

Plotting must be correct for the candidate's scale. Candidate's scale must be in numerical order. Award the mark for plotting if you can read the values clearly, even if the scale itself is not linear.

The mark schemes for **Data Collection Sheets** refer to **input opportunities** and to **efficient input opportunities**. When a candidate gives an input opportunity, it is likely to be an empty cell in a table, it may be an instruction to 'circle your choice', or it may require writing in the data in words. These become efficient, for example, if there is a well-structured 2-way table, or the input is a tick or a tally rather than a written list.

Section A: New bathroom

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Question	Skills Standard	Process	Mark	Mark Grid	E
Q1(a)	R1	Process to calculate total cost for basin, bath and toilet or begins to subtract costs from voucher	1 or	A	94.92 + 399.48 + 189 (=683.4) e.g. 750 – 58 (=692) OR e.g. 750 – (94.92 + 399.48 + Allow this mark for any 3 pri
	C4	Full process to find prices to compare	2	AB	94.92 + 399.48 + 189 + 58 (=750) 94.92 + 399.48 + 189 (=683.4) 750 – 58 (=692) OR 750 – (94.92 + 399.48 +
	I6	Correct answer with accurate figures	1	C	Yes and (£)741.4(0) OR Yes and (£)683.4(0) and (£)6 Yes and (£)8.6(0)
Q1(b)	C5	Valid check	1	D	Check by reverse calculation,
Total marks for question			4		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Question	Skills Standard	Process	Mark	Mark Grid	
Q2(a)	R2	Uses consistent units	1	E	300(cm) or 240(cm) OR 0.6(m)
	R3	Fits tiles in 1 dimension or begins to work with area	1 or	F	'300' ÷ 60 (=5) or '240' ÷ 60 (=4) OR 0.6 + 0.6 + 0.6 + 0.6 + 0.6 (=3.0) OR 0.6 + 0.6 + 0.6 + 0.6 (=2.4) OR '300' × '240' (=72000) or 60000 Accept working in mm or m
	I6	Fits tiles in both dimensions or finds both areas in consistent units	2 or	FG	'300' ÷ 60 (=5) and '240' ÷ 60 (=4) OR 0.6 + 0.6 + 0.6 + 0.6 + 0.6 (=3.0) OR 0.6 + 0.6 + 0.6 + 0.6 (=2.4) OR '300' × '240' (=72000) and 60000 Accept working in mm or m
	C4	Full process to find number of tiles needed	3 or	FGH	'5' × '4' (=20) OR '72000' ÷ '3600' (=20) Accept equivalent working in mm or m
	I6	Correct conclusion and accurate figures	4	FGHJ	20 (tiles)
Q2(b)	R1	Full process to work with percentage	1 or	K	0.2 × 75.5(0) (=15.1) or 0.8 × 75.5(0) (=60.4) or
	C4	Correct answer with correct money notation	2	KL	£15.10 (correct money notation)
Total marks for question			7		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Question	Skills Standard	Process	Mark	Mark Grid	E
Q3	R3	Begins to position toilet	1 or	M	Rectangle with 2 of: correct width (2 sq) correct length (5 sq) in a corner OR Rectangle in a corner with side
	I6	Fully correct solution for toilet	2	MN	Rectangle with width 2 squares not blocking door
	C4	Begins to position basin	1 or	P	Square with correct side length Square with sides > 1 against
	I6	Fully correct solution for basin	2	PQ	Square (3 sq by 3 sq) against overlapping the rectangle. Allow missing or incorrect la
Total marks for question			4		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Section B: Cycling holiday

Question	Skills Standard	Process	Mark	Mark Grid	Example
Q4	R1	Starts to process information	1 or	A	$75 \div 2 (=37.5(0))$ OR $20 \times 2 (=40)$ $75 + 75 (=150)$ OR $75 - 20 (=55)$
	C4	Full process to find figures to compare	2 or	AB	Eg '37.5' $\div 2 (=18.75)$ OR $(150 - 112.5) \div 2 (=18.75)$ OR $75 \div 2 (=37.5(0))$ and $20 \times 2 (=40)$ '40' $\times 2 (=80)$ (reverse the half price) '37.5' $+ 75 (=112.5)$ and $75 - 20 (=55)$ $20 (=76.25)$ OR $112.5(0) + 40 (=152.50)$ OR $75 + '37.5' (=112.5)$ and $(75 - 20) (=55)$
	I6	Valid decision and accurate figures	3	ABC	Eg No and (£)18.75 OR No and (£)37.5(0) and (£)40 No and (£)80 (usual price) OR No and (£)56.25 and (£)55 No and (£)76.25 OR No and (£)152.5(0) and (£)112.5 No and (£)112.5(0) and (£)55 No and one saves £20 and the other saves £10
Total marks for question			3		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Question	Skills Standard	Process	Mark	Mark Grid	Expected Answer
Q5(a)	R2	Begins mean process or reverse calculates	1 or	D	$180 + 254 + 288 + 272 + 264$ $250 \times 5 (=1250)$
	C4	Process for figures to compare	2 or	DE	'1258' $\div 5 (=251.6)$ OR $180 + 254 + 288 + 272 + 264$ $250 \times 5 (=1250)$
	I6	Valid decision and accurate figures	3	DEF	E.g. No and 251.6 OR No and 1258 and 1250 OR Yes and 251.6 rounds to 250
Q5(b)	I6	Finds range	1	G	108 (km)
Q5(c)	R1	Begins to draw suitable graph or chart - (e.g. bar, stick, line graph)	1 or	H	One of: linear scale, labels, a for paper-based, or ± 1 small
	C4	Improves graph or chart	2 or	HJ	Two of: linear scale, labels, a for paper-based, or ± 1 small
	I6	Fully correct graph or chart	3	HJK	All of: linear scale, labels, a paper-based, or ± 1 small squ Minimum labelling: one axis: week 1 to week 5 other axis or title: (number of
Q5(d)	I6	Selects correct comment and no other	1	L	The number of kilometres I c selects statement consistent v
Total marks for question			8		

Question	Skills Standard	Process	Mark	Mark Grid	Expected Answer
Q6(a)	R2	Starts to substitutes into rule	1 or	M	$48 \div 6$ OR $40 \div 5$
	C4	Full process to use rule	2 or	MN	$48 \div 6 \times 5 (=40)$ OR $40 \div 5 \times 6 (=48)$
	I6	Finds number of pounds or euros	3	MNP	Yes and (£)40 OR Yes and (€)48 Must be seen with correct cal
Q6(b)	A5	Valid check	1	Q	Check by reverse calculation

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Total marks for question					4

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Section C: The garage

Question	Skills Standard	Process	Mark	Mark Grid	E
Q7 (paper-based)	R2	Starts to schedule bookings in diary	1 or	A	Books 1 customer correctly (job) OR Books 2 customers in valid ti
	R3	Improves schedule in diary	2 or	AB	Books 2 customers correctly (job) OR Books 3 customers in valid ti
	C5	Checks detailed schedule	3 or	ABC	Books 3 customers correctly (job) OR Books all 4 customers correc and job) with one error
	I6	Completes diary clearly and correctly	4	ABC D	Books all 4 customers correc and job) Note: Valid time slot is non-o
Q7 (onscreen)	R2	Correctly books 1 customer	1 or	A	Books 1 customer correctly (Books 2 customers in valid ti
	R3	Correctly books 2 customers	2 or	AB	Books 2 customers correctly Books 3 customers in valid ti
	C5	Correctly books 3 customers	3 or	ABC	Books 3 customers correctly Books all 4 customers correc with one error
	I6	Correctly books 4 customers	4	ABC D	Books all 4 customers correc Note: Valid time slot is non-o
Total marks for question			4		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Question	Skills Standard	Process	Mark	Mark Grid	
Q8(a)	R1	Begins process to work with fraction	1 or	E	$217.5 \div 3 (=72.5)$
	R3	Process to work out total bill with discount	2 or	EF	$217.5 - '72.5' (=145)$ OR $'72.5' \times 2(=145)$
	I6	Correct answers	3	EFG	(£)72.5(0) and (£)145(.00)
Q8(b)	C5	Valid check	1	L	Check by reverse calculation
Total marks for question			4		
Q9	R2	Process to work with required units	1	H	12 (l) or 0.3(00 litres) may be seen or implied by su
	C4	Process to work with ratio	1 or	J	300×50 (1200 ml) OR $'0.3' \times 50(=12$ litres) OR Full build up method seen
	I6	Accurate figure	2	JK	12 (litres) (petrol)
Total marks for question			3		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Question	Skills Standard	Process	Mark	Mark Grid	E
Q10	R3	Starts to use the diagram	1 or	M	Finds a route starting or finishing at Omagh shown by distances or names
	C4	Uses diagram to find a suitable route without repeats	2 or	MN	Finds a route from Omagh to Omagh by any names or unambiguously on the diagram any town but and must start and finish at Omagh below.
	I6	Process to add individual distances to find route total	1 or	P	Adds distances for their complete route (allow repeated towns)
	C5	Shows correct distance for their route	2	PQ	Correct answer for their route E.g. O to B to M to D to O = 56.5 O to D to M to B to O = 56.5 O to B to D to M to O = 60 (1) O to M to D to B to O = 60 (1) O to D to B to M to O = 53.5 O to M to B to D to O = 53.5 P and Q can follow through a
Total marks for question			4		

**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

Example solution to Q7 (paper-based)

Monday	Name of car mechanic			
Time	Emma	Tom	Jack	
8.30 – 9.00	Mr Walsh Service		Mr Kelly Service	
9.00 – 9.30				
9.30 – 10.00		Ms McLaughlin Service		Mr Kelly Service
10.00 – 10.30				
10.30 – 11.00				
11.00 – 11.30				
11.30 – 12.00	Break			
12.00 – 12.30	Pat Best Tyres and Brake change	Break	Break	
12.30 – 1.00		Break		
1.00 – 1.30				
1.30 – 2.00			Kev Dunne MOT + service	
2.00 – 2.30		Chris Clarke MOT		
2.30 – 3.00				
3.00 – 3.30				
3.30 – 4.00				
4.00 – 4.30	Ms Donnelly Repair	Grace Finnegan Repair		
4.30 – 5.00				



**PEARSON EDEXCEL LEVEL 1 CERTIFICATE IN ESSENTIAL SKILLS -
APPLICATION OF NUMBER
MARK SCHEME – SAMPLE ASSESSMENT MATERIAL**

September 2016

**For information about Edexcel, BTEC and LCCI qualifications
visit qualifications.pearson.com**

Edexcel is a registered trademark of Pearson Education Limited

**Pearson Education Limited. Registered in England and Wales No. 872828
Registered Office: 80 Strand, London WC2R 0RL.
VAT Reg No GB 278 53712**