Pearson Edexcel Level 1 Award in Working with Whole Numbers (QCF)

Sample Assessment Materials (SAMs)

First teaching January 2014

PEARSON

Contents

Introduction

Sample assessment materials (SAMs) provide learners and centres with specimen questions and mark schemes. These are used as the benchmark to develop the external assessment learners will take.

Working with Whole Numbers

The SAM for this unit has been provided for the following qualification:

• Pearson Edexcel Level 1 Award in Working with Whole Numbers (QCF).

Working with Whole Numbers – Sample assessment test and mark scheme

This sample assessment test and mark scheme is for the following qualification:

- Pearson Edexcel Level 1 Award in Working with Whole Numbers (QCF).

Pearson Edexcel

Award in Working with Whole Numbers (QCF) Level 1

Sample Assessment Material	Paper Reference
Time: 1 hour	XXX/XX

Resources: Calculator	Total marks: 30

Center Name:

Centre Number:

Candidate's Name:

Registration Number:

Instructions

- A calculator must **not** be used in Part A of the test paper.
- **Use** a calculator where necessary to answer questions for Part B.
- You **must** show your working to gain full marks.
- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and registration number.
- Answer all questions.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 30.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*
- Some questions must be answered with one tick in a box (✔).
  If you change your mind about an answer, put a line through the box ([☒]) and then mark your new answer with a tick [✔].

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

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Part A

A calculator must **NOT** be used in this part of the test paper.

You **must** show your working

Please turn to the next page

Question 1

Choose numbers from this box to answer the questions below.

51	25	81
6	79	56
83	11	15
43	63	92

Identify **one** square number from the box.

(1)

Answer:

(Total for Question 1 = 1 mark)

Question 2

A company delivers parcels from four warehouses (A, B, C, D).

These are the numbers of parcels delivered from the warehouses in January last year.

Warehouse	Number of parcels in January
A	50 842
B	54 072
C	45 630
D	50 248

(a)   Put the list of parcels delivered for January in ascending order.

(1)

	Number of parcels in January
Lowest number	

These are the numbers of parcels delivered from the warehouses in February last year.

Warehouse	Number of parcels in February
A	50 201
B	53 704
C	49 615
D	52 450

(b) (i) Put the list of parcels delivered for February in descending order.

(1)

	Number of parcels in February
Highest number	

(b) (ii) Work out the difference between the highest number of parcels delivered in February and the lowest number of parcels delivered?

(2)

You must show your working here:

Answer:

(c)   Round the number of parcels delivered from each warehouse in February to the nearest 1000.

Put your answers in the table.

The first two have been done for you.

(2)

Warehouse	Number of parcels in February	Number of parcels rounded to the nearest 1000
A	50201	50000
B	53704	54000
C	49615	
D	52450	

(d)   Work out the **total** of the **rounded** numbers of parcels delivered in February?

(2)

You must show your working here:

Answer:

(Total for Question 2 = 8 marks)

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Question 3

In cold weather, salt is spread on a school playground to prevent ice.

Salt is used when the minimum temperature falls **below zero**.

The table shows the minimum temperatures forecast for 10 days in January.

Date	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th
Minimum temperature (°C)	0	-1	5	-2	-3	-1	1	-1	2	-2

(a)   What is the **lowest** temperature forecast?

(1)

Answer: °C

(b)   On how many of the days is the temperature forecast to be **below zero**?

(1)

Answer:

The playground has an area of 72 square metres.
One bag of salt is enough to cover 9 square metres.

(c)   How many bags of salt are needed to cover the playground?

You must show your working here:

Answer:

(Total for Question 3 = 4 marks)

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Part B

USE a calculator where necessary to answer questions for Part B.

You **must** show your working.

Please turn to the next page

Question 4

This is a headline in a local newspaper.

'Council earns half a million pounds from parking fines.'

(a) Write half a million in figures.

(1)

> **Answer:**

A council report states that car parking improvements will cost £72 500.

(b) What is 72 500 in words?
Put a tick ✓ against the correct answer.

(1)

		✔
A	Seven thousand two hundred and fifty	
B	Seventy thousand two hundred and fifty	
C	Seventy two thousand five hundred	
D	Seven hundred and twenty five thousand	

The car parking improvements will cost £72 500 in total.

The council gets sponsorship from two local firms, KAL Mobile and JR Cars.
KAL Mobile gives £5700 and JR Cars gives £3900.

The rest of the money will come from council funds.

(c)   Calculate how much money will come from council funds.

(2)

You must show your working here:

Answer: £

In the car park, one **wide** parking space is needed for every 20 **standard** parking spaces.

The car park will have 440 **standard** spaces.

(d)   Work out how many wide spaces are needed?

(2)

You must show your working here:

Answer:

(Total for Question 4 = 6 marks)

Question 5

A mobile phone shop offers a 24-month contract for a smartphone.

The total cost of a contract is the price of the smartphone plus the call time cost.

The call time cost is the monthly cost multiplied by 24.

The manager writes this information in symbols, where

        h is the price of the smartphone
        c is the monthly cost for call time.

(a)   Which of these formulae gives the total cost of the contract?

       Put a tick ✓ against the correct answer.

		✔
A	Total cost of the contract = h + 24c	
B	Total cost of the contract = h + 24 + c	
C	Total cost of the contract = c + 24h	
D	Total cost of the contract = c + 24 + h	

(1)

The shop also offers 18-month contracts for a smartphone.

In the Gold 18-month contract:
- the smartphone costs £95
- call time is £28 per month.

(b)   Calculate the total cost of the Gold contract for18 months?

(3)

You must show your working here:

Answer: £

In the Platinum 18-month contract:
- the smartphone is free
- call time is £37 per month.

(c) Calculate the total cost of the Platinum contract for 18 months?

(2)

You must show your working here:

Answer: £

(d) Show how you could check your answer for part c.

(1)

You must show your working here:

Answer:

In one week, the shop sells 28 Gold contracts and 7 Platinum contracts.

(e) What is the ratio of sales of Gold contracts to Platinum contracts?

Give your answer in a simple form.

(1)

Answer:

(Total for Question 5 = 8 marks)

Question 6

A recipe for broccoli and blue cheese soup uses 140 grams of blue cheese.

The recipe makes 10 servings of the soup.

A chef wants to make 40 servings of the soup.

How much blue cheese does the chef need?

(3)

You must show your working here:

Answer: grams

(Total for Question 6 = 3 marks)

TOTAL FOR PAPER 30 MARKS

General Marking Guidance

- All candidates must receive the same treatment. Assessors must mark the first candidate in exactly the same way as they 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.

- Assessors should mark according to the mark scheme.

- All marks on the mark scheme should be used appropriately.

- All marks on the mark scheme are designed to be awarded. Assessors should always award full marks if deserved, i.e. if the answer matches the mark scheme. Assessors should also be prepared to award zero marks if a candidate's response is not worthy of credit according to the mark scheme.

- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

- When assessors are in doubt about applying the mark scheme to a candidate's response, the centre's internal verifier must be consulted.

- Crossed-out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question	AC	Answer	Notes	Total marks
1	2.3	81 or 25.	1 mark for correct answer (award maximum of 1 mark).	1
2a	1.2	**Number of parcels in January** 45630 50248 50842 54072	1 mark for correct order shown.	1
2b (i)	1.2	**Number of parcels in February** 53704 52450 50201 49615	1 mark for correct order shown.	1
2b (ii)	2.2	53704– 49615= 4089	1 mark for correct method for subtraction. 1 mark for correct answer. Allow follow through using highest and lowest number as learner identified from question 2b.	2
2c	1.4	C 50 000 D 52 000	1 mark for each number correctly rounded.	2
2d	2.1	50 000 + 54 000 + 50 000 + 52 000 = 206 000	1 mark for correct method for addition. 1 mark for correct total. Allow any error to follow through from question 2e.	2
3a	1.3	-3 (°C)	1 mark for correct answer.	1
3b	1.3	6	1 mark for correct answer.	1
3c	2.4	$72 \div 9 =$ 8	1 mark for correct method. 1 mark for correct solution.	2
4a	1.1	500 000	1 mark for correct answer.	1
4b	1.1	C or Seventy two thousand five hundred.	1 mark for correct number in words.	1
4c	3.2	72500 - 5700 - 3900 or 5700 + 3900 = 9600, 72500 - 9600 (£)62900.	1 mark for correct method 1 mark for correct answer	2
4d	3.1	$440 \div 20$ 22	1 mark for correct method. 1 mark for correct answer.	2
5a	3.2	Total cost = h + 24c.	1 mark for correct answer.	1
5b	3.2	18 x 28 = 504. '504' + 95. (£)599.	1 mark for correct multiplication method. 1 mark for correct addition (of 95) to learner result (of multiplication). 1 mark for correct answer.	3
5c	2.3	37 x 18 = (£)666.	1 mark for correct method. 1 mark for correct total cost.	2

Question	AC	Answer	Notes	Total marks
5d	2.4	666 ÷ 18 = 37 Or 666÷37=18	1 mark for correct answer.	1
5e	3.1	4 : 1	1 mark for correct answer. Do **NOT** accept 1 : 4	1
6	3.1	140 ÷ 10 or 40 ÷ 10 14 x 40 or 4 x 140 560 (grammes)	1 mark for correct method to find amount per serving or scale factor 1 mark for correct method to find total 1 mark for correct answer.	3
			Total Marks	**30**

SAM Mark Scheme Coverage of Learning Outcomes

Question number	LO 1	LO2	LO3	Total
1		1		
2a	1			
2b(i)	1			
2b(ii)		2		
2c	2			
2d		2		
3a	1			
3b	1			
3c		2		
4a	1			
4b	1			
4c			2	
4d			2	
5a			1	
5b			3	
5c		2		
5d		1		
5e			1	
6			3	
Total marks available	8	10	12	30
Pass Mark	6	7	8	21

Candidates must achieve the pass mark for each learning outcome achieved plus minimum total of 21 out of 30 to achieve unit.

Learning Outcome and Unit Achievement Record

Center Name:							
Centre Number:							
Candidate's Name:							
Registration Number:							
Assessor Name:							
Signature:							
Date Test Taken:							

Question number	LO 1	LO2	LO3	Total
1				
2a				
2b(i)				
2b(ii)				
2c				
2d				
3a				
3b				
3c				
4a				
4b				
4c				
4d				
5a				
5b				
5c				
5d				
5e				
6				
Total marks required to pass LO	6	7	8	21
Candidate marks total				
Pass Y/N?				

Candidates must achieve the pass mark for each learning outcome achieved plus minimum total of 21 out of 30 to achieve unit.

DECLARATION

I confirm that the assessment was conducted properly and fairly and that the marks awarded are an accurate reflection of the performance of the candidate.

Assessor Signature _____

If this candidate has had any assisstance during this test please state the nature of the assistance and who provided it

If there any special circumstances that may have had a negative effect on the candidate's performance in this test please give details.

If internally verified:

Internal Verifier's Name:

Signature:

Date:

LEARNING OUTCOME	MARKS AVAILABLE	ASSESSOR MARKS	IV MARKS
1	8		
2	10		
3	12		
Pass mark: minimum for each learning outcome met and a minimum total of 21 marks. Delete pass or fail as appropriate.		**PASS – FAIL**	**PASS – FAIL**

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