National Numeracy Tests

PROCEDURAL

7EP14

First name _____

Last name _____

School _____

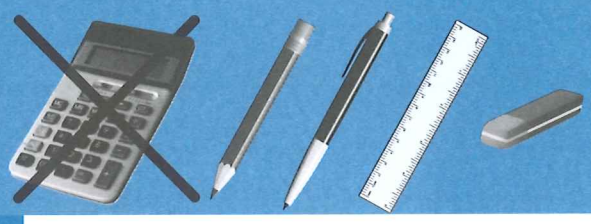
Class _____

Date of birth ◯◯ ◯◯ ◯◯◯◯

Date of test ◯◯ (0)(5) (2)(0)(1)(4)

Total score ☐ (maximum 35)

117562



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1

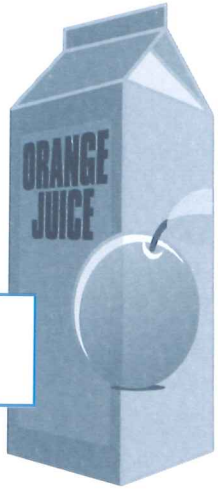
67 + 89 = ☐

1m

123 − 45 = ☐

1m

2 Megan buys juice and biscuits.



£1.35

£1.79

She pays with a £5 note.

How much change should she get?

£

2m

3 What number is one quarter of a million?

1m

What number is one hundred less than twenty thousand?

1m

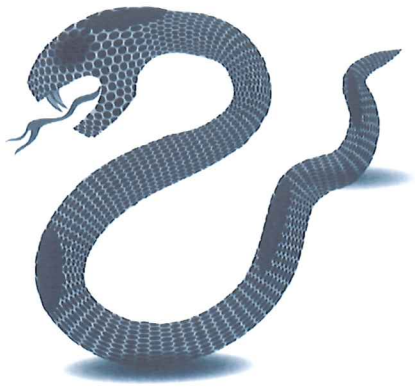
4 $240 \div \square = 40$

1m

$\square \div 9 = 21$

1m

5 The length of a snake is 762 centimetres.



What is its length in **metres**?

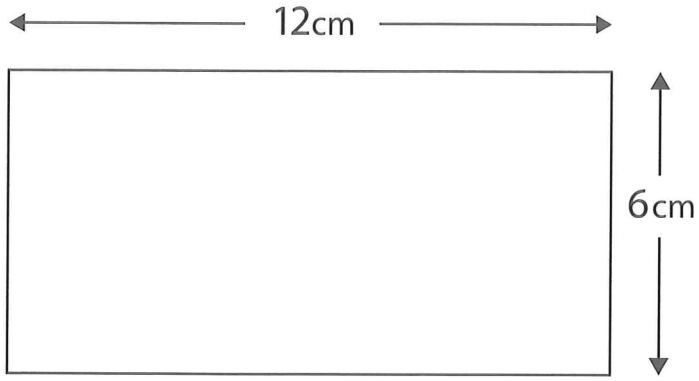
metres

1m

TOTAL

9m

6



Circle the correct **area** of this rectangle.

18cm	36cm	72cm
$18cm^2$	$36cm^2$	$72cm^2$

1m

7 $\frac{3}{5}$ of a class are boys.

What **percentage** of the class are boys?

%

1m

8

What is the sale price?

£

2m

9 What is 100 squared?

1m

The square root of a number is 4

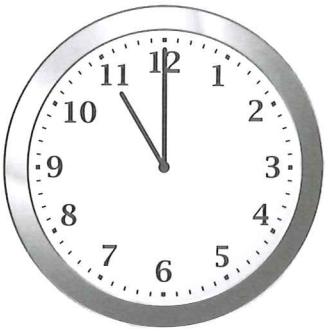
What is the number?

1m

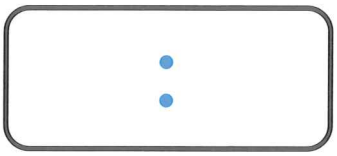
TOTAL

6m

10 The clock shows 11:00



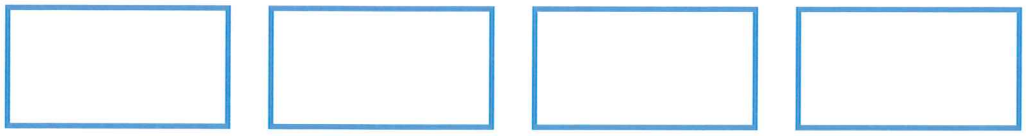
What time will it show when the **minute** hand has turned through 270°?



1m

11 Write in order.

0.2 $\frac{1}{4}$ 23% 0.02



smallest **largest**

1m

12 20 − (12 ÷ 4 − 2) =

1m

13 Complete the frequency table for the list of prices.

Ten prices

£7.99	89p
£18.79	£10
£3.99	£12.95
£15	£7.50
75p	£5.60

Frequency table

Price (£)	Frequency
0 – 4.99	
5 – 9.99	
10 – 19.99	

1m

14 24 × 0.5 = ☐

1m

5 ÷ 0.1 = ☐

1m

15 In a survey, 750 people were asked which colour car they liked best.

$\frac{3}{10}$ of the people chose black.

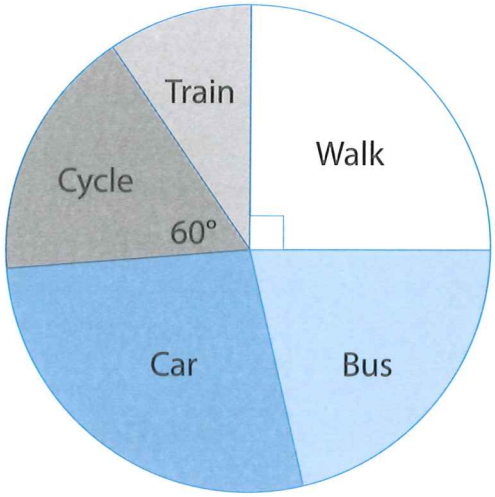
How many people chose black?

☐ people

1m

TOTAL 7m

16 **How pupils in Year 7 travel to school**



There are 120 pupils altogether.

How many of them **walk** to school?

pupils

1m

How many of them **cycle**?

pupils

1m

17 In a nursery school, the ratio of adults to children is 1 : 4

There are 56 children.

How many adults?

adults

1m

18

Time	7am	11am	3pm	7pm	11pm
Temperature (°C)	3	9	8	2	–2

What is the **range** of the temperatures?

°C

1m

Work out the **mean** of the temperatures.

°C

1m

19 Complete the table.

Map distance	Real-life distance	Scale
5cm	m	1 : 1000

1m

TOTAL

6m

20 There are 32 packets of crisps in each box.

Altogether, how many packets in 27 boxes?

packets

2m

21 Round 348.5367 to 2 decimal places.

1m

22 Write the missing decimals.

$10 \div \square = 100$

1m

$300 \times \square = 15$

1m

23 To make Bara Brith for 8 people you need 450 **grams** of dried fruit.

How many **kilograms** of dried fruit do you need for 20 people?

kilograms

2m

TOTAL

7m

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National Numeracy Tests

PROCEDURAL

7EP14

Markscheme

Llywodraeth Cymru
Welsh Government

Markscheme

General marking rules

It is essential that you apply this markscheme, the marking guidance and the general marking rules given below to your own marking, in order for the standardised scores to be valid.

- Incorrect or unacceptable answers are given a mark of 0. No half marks are awarded.
- At the end of each double-page spread of marking, record the total number of marks in the 'total' box in the bottom right-hand corner. Check that the mark recorded does not exceed the maximum number of marks available.
- Once the marking has been completed, add up the total number of marks awarded. This is the total score and should be recorded on the cover of the test booklet and input onto the relevant mark sheet on the school's management information system, together with the details and date of the test taken.
- This data should then be submitted as part of the National Data Collection (NDC). Further details are available from the *National Reading and Numeracy Tests – 2014 test administration handbook* on the Learning Wales website and in *National Data Collection and reporting arrangements 2013/14* available on the Welsh Government website.
- Markers should record their initials on the cover of the test booklet to assist quality assurance.

Marking guidance

It is important that the tests are marked accurately. The questions and answers below help to develop a common understanding of how to mark fairly and consistently.

Must learners use the answer boxes?

Provided there is no ambiguity, learners can respond anywhere on the page. If there is more than one answer, the one in the answer box must be marked, even if incorrect. However, if the incorrect answer is clearly because of a transcription error (e.g. 65 has been copied as 56), mark the answer shown in the working.

Does it matter if the learner writes the answer differently from that shown in the markscheme?

Numerically equivalent answers (e.g. eight for 8, or two-quarters or 0.5 for half) should be marked as correct unless the markscheme states otherwise.

How should I mark answers involving money?

Money can be shown in pounds or pence, but a missing zero, e.g. £4.7, should be marked as incorrect unless the markscheme states otherwise.

How should I mark answers involving time?

In the real world, specific times are shown in a multiplicity of ways so accept, for example, 02:30, 2.30, half past 2, etc. Do not accept 2.3 as this is ambiguous. The same principle should be used for marking time intervals, e.g. for two and a half hours accept 2.5 but not 2.5pm.

What if the method is wrong but the answer is correct?

Unless the markscheme states otherwise, correct responses should be marked as correct even if the working is incorrect as learners may have started again without showing their revised approach.

What if the learner has shown understanding but has misread information in the question?

For a two (or more) mark item, if an incorrect answer arises from misreading information given in the question and the question has not become easier as a result, then deduct one mark only. For example, if the two-mark question is 86×67 and the learner records 96×67 then gives the answer 6432, one mark should be given. In a one-mark question, no marks can be given.

What should I do about crossed-out work?

Working which has been crossed-out and not replaced can be marked if it is still legible.

What is the difference between a numerical error and a conceptual error?

A numerical error is one in which a slip is made, e.g. within 86×67 the learner works out $6 \times 7 = 54$ within an otherwise correct response. A conceptual error is a more serious misunderstanding for which no method marks are available, for example if 86×60 is recorded as 516 rather than 5160

What if learners use a method that is not shown within the markscheme?

There can be a wide range of approaches to a question (e.g. long multiplication) and any correct method, however idiosyncratic, is acceptable.

In one-mark questions, the mark should be given for the correct answer, whatever the method used.

In two-mark questions, the correct answer should be given two marks, whatever the method used, unless the markscheme states otherwise. Most two-mark questions give one mark if the answer is incorrect but the learner shows a correct method: a correct method is one that would lead to a correct answer if there were no numerical errors.

7EP14 Procedural test: Markscheme

Q	Marks	Answer	Comments
1i	1m	156	
1ii	1m	78	
2	2m	£1.86	
	Or 1m	Shows 186 Or Shows 3.14 or 314 Or Shows 3.65 or 365 Or Shows 3.21 or 321 Or Incorrect answer, but shows a method that would lead to £1.86 if calculated correctly, and contains not more than one numerical error	
3i	1m	250 000	
3ii	1m	19 900	
4i	1m	6	
4ii	1m	189	
5	1m	7.62 metres	

Q	Marks	Answer	Comments
6	1m	18cm 36cm 72cm 18cm² 36cm² (72cm²)	Accept any unambiguous indication, e.g. ticking
7	1m	60%	
8	2m	£40.50	
	Or 1m	Shows 40.5 or 4050 Or Shows 4.50 or 450 Or Shows understanding that 10% off is 90% of the original price	Examples for 1m: 90% of 45 0.9×45
9i	1m	10 000	
9ii	1m	16	
10	1m	11:45	Accept any unambiguous alternative, e.g. quarter to twelve Do not accept correct time shown only on the clock
11	1m	0.02, 0.2, 23%, $\frac{1}{4}$	Accept the % sign omitted
12	1m	19	
13	1m	0–4.99: 3 5–9.99: 3 10–19.99: 4	Frequencies must be shown as numbers (ignore tallies given alongside)
14i	1m	12	
14ii	1m	50	
15	1m	225 people	

Q	Marks	Answer	Comments
16i	1m	30 pupils	
16ii	1m	20 pupils	
17	1m	14 adults	
18i	1m	11°C	
18ii	1m	4°C	
19	1m	50 m	
20	2m	864	
	Or 1m	Shows 640 (or 320 + 320) Or Shows 810 (or 270 + 270 + 270)	
21	1m	348.54	Do not accept equivalent fractions or decimals, e.g. 348.540
22i	1m	0.1 or equivalent decimal, e.g. 0.10	Do not accept equivalent fractions
22ii	1m	0.05 or equivalent decimal, e.g. 0.050	Do not accept equivalent fractions
23	2m	1.125 kilograms	
	Or 1m	Shows 1125 or 112.5 or 11.25 Or Shows understanding that 2.5 portions of 450g of dried fruit are needed Or Incorrect answer, but shows a method that would lead to 1.125 kilograms if calculated correctly, and contains not more than one numerical error	Example for 1m: 450 + 450 + 225

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