Paper

1

Maths — No Problem!

Number, Proportion, Ratio and Algebra

Name: _____ Class: _____

59

Total Marks

Paper 1 – Sample questions

Number

1   What is the smallest number that can be made from these digits?

<div align="center">

8   2   4   6   4

</div>

<div align="center">

</div>

1 mark

Calculations

2   Solve the equation.
Use a mental method.

<div align="center">

$40 \times 14 \times 5 =$

</div>

Show your method.

2 marks

Fractions, decimals and percentages

3   Calculate.

$$\frac{3}{5} \div 3 = \boxed{}$$

Ratio and algebra

4   Here is an equation.

$$x + 2y = 10$$

When **x** = 4, **y** = 3

Find the value of **y** when **x** = 0

$$y = \boxed{}$$

Paper

2

Maths — No Problem!

Measurement, Geometry and Statistics

Name: _____ Class: _____

35

Paper 2 – Sample questions
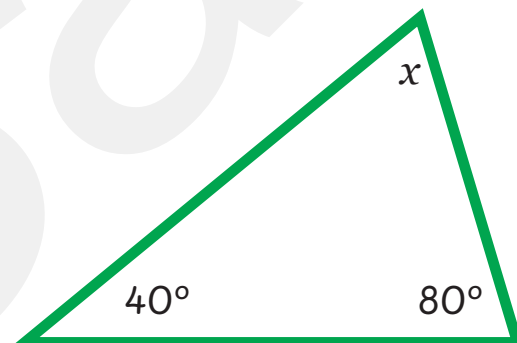
Measures

1 Calculate the volume of the box.

10 cm

Not drawn
to scale.

15 cm   20 cm
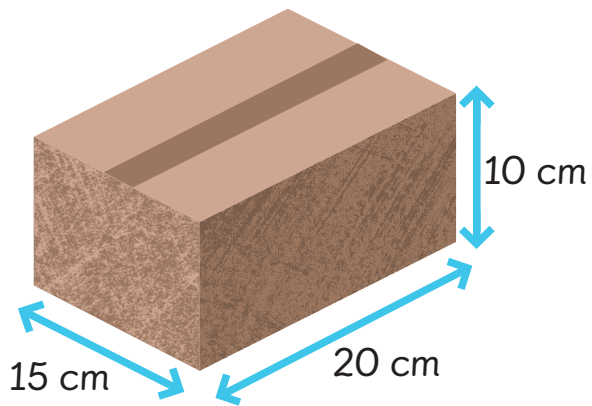
	cm³

1 mark

Geometry

2 Calculate the size of angle x.

x

40°   80°

$x =$	°

1 mark

Statistics

3 The table shows the temperature on 3 days in May.

Day	Temperature
Monday	10 °C
Tuesday	12 °C
Wednesday	8 °C

What is the mean (average) temperature?

| °C |
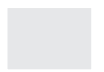
1 mark

Maths — No Problem!

Administration and Mark Scheme

Instructions for delivery

Resources

Pencil, eraser, ruler (mm and cm) and angle measurer (protractor).

Timing

Paper 1: 45 minutes, 59 marks   **Paper 2**: 30 minutes, 35 marks

The timing on the papers is not important and the indications given are for teacher management only. The papers do not need to be taken in one sitting.

Objective

The purpose of these papers is to provide an analysis of the gaps in pupils' knowledge. The questions are not designed to test their reasoning skills but to clearly identify areas of the curriculum that need revision.

Some questions have the code *ExStd* in the mark scheme. These questions are specifically designed to give evidence that the pupil has met that area of the Interim Teacher Assessment Framework (2016)[1] for working at the expected standard.

Assistance

Scribe for those who cannot write clearly/independently.

Questions may only be **read** to pupils if requested unless this is normal procedure for a particular pupil.

Pupils should not discuss the questions with each other.

Mark Schemes

Guidance

- In line with both the national curriculum and international standards we have decided to use a thin space as the thousands delimiter, e.g. 100 000
- Reversed digits are allowed as long as they are clearly recognisable.
- Transposed digits are incorrect, e.g. 31 instead of 13 should be marked wrong.
- If a pupil has crossed/rubbed out the correct answer but not replaced it award the mark.
- If the answer is clearly evident but not in the correct place award the mark.

Note on the references

The questions in both Papers 1 and 2 have references for:
- The Maths — No Problem! Primary Series (MNP);
- The English national curriculum (NC); and
- The expected standard in the Interim Teacher Assessment Framework (ExStd).

These will be referenced under each question as follows:

(MNP reference(s)/NC reference(s) followed by 'ExStd' where applicable)

MNP references will state the relevant book followed by the chapter, e.g. 6A chapter 1.

The national curriculum references are the content domain references in the 2016 Key stage 2: mathematics test framework (Standards and Testing Agency, 2015).

Paper 1 - total marks 59

Number

1   24468
(6A chapter 1/6N3 ExStd)
1 mark

Calculations

4   Award 1 mark for the correct answer 2800 (any method acceptable).
Award 1 mark for an efficient mental strategy, e.g.
$40 \times 5 \times 14 = 200 \times 14 = 2800$
In order to meet the teacher assessment criteria, the pupil must use an efficient mental strategy to solve the calculation.
(6A chapter 2 /4C8/6C6 ExStd)
2 marks

Fractions, decimals and percentages

6 $\dfrac{1}{5}$
(6A chapter 3/6F5b)
1 mark

Ratio and algebra

7 $y = 5$
(6B chapter 9/6A4)
1 mark

Paper 2 – total marks 35

Measures

1 3000 cm³   1 mark
(Allow 0.003 m³ as long as the units have been clearly
indicated.)
(6B chapter 11/6M8a)

Geometry

3 $x = 60°$ 1 mark
(6B chapter 12/6G4a)

Statistics

4 10 °C   1 mark
(6B chapter 14/6S3)

MATHS
NO PROBLEM!

Maths — No Problem! is a series of textbooks and workbooks written to meet the requirements of the 2014 English National Curriculum. The focus of the series is on teaching to mastery. This research-based approach emphasises problem solving and utilises pupils' core competencies to develop a relational understanding of mathematical concepts.

Consultant and Author
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