1.6 Reasoning and Problem Solving (Year 3): 30-minute Pack

Total Marks

Calculators not allowed · about 30 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 There are 6 rows of chairs with 6 chairs in each row. How many chairs are there?

Answer: ___

(1)

---

2 Nia has 21 folders and puts 7 in each box. How many boxes are filled?

Answer: ___

(1)

---

3 Lily has 60 stamps. Lily gives 7/10 of them to a friend.

How many stamps does Lily give to the friend?

Answer: ___

(2)

---

4 Work out 1/2 of 12 g.

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

5 Each taxi has 36 seats. There are 163 people to carry.

What is the smallest number of taxis needed?

Answer: ___

(2)

---

6 A car park has 900 spaces. 524 spaces are full and 342 are reserved.

How many spaces are free?

Answer: ___

(2)

---

7 Grace eats 3/6 of a ribbon on Monday and 1/6 on Tuesday.

What fraction of the ribbon is left? Give your answer in its simplest form.

Answer: ___

(2)

---

8 A film starts at 15:20 and takes 3 hours 44 minutes.

What time does it finish? Write your answer as a 24-hour clock time.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

9 Bella buys 2 magnets at £1.62 each, 2 rulers at 81p each and 1 T-shirt at 37p each. Bella pays with £10.

How much change does Bella get?

Answer: £___

(3)

---

10 A zoo had 863 visitors in May and 809 visitors in June.

How many visitors did it have altogether?

Answer: ___

(2)

---

11 Jade eats 2/6 of a ribbon on Monday and 3/6 on Tuesday.

What fraction of the ribbon is left? Give your answer in its simplest form.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

12 A teacher puts 24 counters into 6 equal groups to make classroom games. After that she makes 4 piles of counters with the same number in each pile using all the counters. How many counters are in each of the 4 piles?

(3)

---

13 Work out 6 x 4.

(1)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 1.6 Reasoning and Problem Solving (Year 3): 30-minute Pack

A correct answer earns full marks unless the question asks for working, a method, proof or explanation.

Question 1

36 cao	**B1**

Answer: **36**

Question 2

3 cao	**B1**

Answer: **3**

Question 3

60 divided by 10 = 6 seen	**M1**
42 cao	**A1**

Answer: **42**

Question 4

6 g cao	**B1**

Answer: **6 g**

Question 5

163 / 36 = 4 remainder 19 seen	**M1**
5 cao	**A1**

Answer: **5**

Question 6

866 seen	**M1**
34 cao	**A1**

Answer: **34**

Question 7

4/6 eaten seen	**M1**
1/3 cao	**A1**

Answer: **1/3**

Question 8

adds hours then minutes	**M1**
19:04 cao	**A1**

Answer: **19:04**

Question 9

3.24 seen	**M1**
total 5.23 seen	**M1**
£4.77 cao	**A1**

Answer: **£4.77**

Question 10

addition method seen	**M1**
1,672 cao	**A1**

Answer: **1,672**

Question 11

5/6 eaten seen	**M1**
1/6 cao	**A1**

Answer: **1/6**

Question 12

Recognise initial grouping gives 24 counters (24 = 6 x 4) or equivalent	**M1**
Correct division to change grouping, e.g. 24 ÷ 4 shown	**M1**
6 cao	**B1**

Answer: **6**

Question 13

24 cao	**B1**

Answer: **24**

© Revision Library | revisionlibrary.co.uk