Grade 2 Unit 1 test: Fluency within 20, odd and even (answer key)

8 questions, 11 points

ANSWERS AT A GLANCE

1. 14 frogs
2. 9 crayons
3. 64
4. Page 45
5. Yes, one kid is left over. 25 is odd.
6. 2 more fruits
7. 22 legs
8. One button is left over, since 9 pairs is only 18. So 19 is odd.

WORKED SOLUTIONS

1. There are 9 frogs on the log. Then 5 more hop on. How many frogs are there now? (1 point)

ANSWER

14 frogs

SOLUTION

Add: 9 + 5. Make ten or use a double you know.

9 + 5 = 14. There are 14 frogs now.

2. The big box has 16 crayons. The small box has 7 fewer. How many crayons are in the small box? (1 point)

ANSWER

9 crayons

SOLUTION

Find 16 − 7. Think of adding: 7 + ☐ = 16.

Since 7 + 9 = 16, the missing part is 9. The small box has 9 crayons.

3. The houses on David's street go up by twos. They are 60, 62, ☐, 66. What number is missing? (1 point)

ANSWER

64

SOLUTION

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Each house number is two more than the one before. Two more than 62 is 64.

Check: two more than 64 is 66, the next number printed. The missing number is 64.

4. Isabel reads 2 pages each night. Tonight Isabel is on page 39. What page is Isabel on after 3 more nights? (1 point)

ANSWER

Page 45

SOLUTION

Count on by twos from 39, one jump for each night.

After 3 jumps of 2, the count is 6 more. Isabel is on page 45.

5. The dance class has 25 kids. Each kid needs a partner. Is one kid left over? Is 25 even or odd? (1 point)

ANSWER

Yes, one kid is left over. 25 is odd.

SOLUTION

Every ten pairs up with nothing left, so only the ones matter.

The ones digit of 25 is 5. Pair up 5 ones: 1 is left over. So 25 is odd. Yes, one kid is left over.

6. Maya puts 8 apples and 5 pears in a basket. The basket holds 15 fruits. How many more fruits fit? (2 points)

ANSWER

2 more fruits

SOLUTION

First add: 8 + 5. Make ten: 8 + 2 + 3 = 10 + 3 = 13. There are 13 fruits in the basket.

Then find the missing part: 13 + ☐ = 15. So ☐ = 2. 2 more fruits fit.

SCORING

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1 point for 13 fruits in the basket; 1 point for 2 more fruits.

7. A farm has 3 hens and 4 goats. A hen has 2 legs. A goat has 4 legs. How many legs are there in all? (2 points)

ANSWER

22 legs

SOLUTION

Count the hen legs by twos: 2, 4, 6. That is 6 legs so far.

Keep going by fours, one count for each goat: 10, 14, 18, 22. There are 22 legs in all.

Another way: the goats first, 4, 8, 12, 16, then the hens by twos, 18, 20, 22.

SCORING

1 point for 6 hen legs (or 16 goat legs); 1 point for 22 legs.

8. Ben pairs up 19 buttons. He makes 9 pairs. He says 19 is even.

What did Ben forget? Is 19 even or odd? (2 points)

ANSWER

One button is left over, since 9 pairs is only 18. So 19 is odd.

SOLUTION

9 pairs is 9 + 9 = 18 buttons. But Ben has 19, so 1 button has no partner.

A number with one left over is odd. So 19 is odd, not even.

SCORING

1 point for saying one button is left over (9 pairs is 18); 1 point for 19 is odd.

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