Reasoning and Problem Solving
Step 4: Odd and Even Numbers

National Curriculum Objectives:

Mathematics Year 2: (2C6) Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Identify the possible numbers from a set of given parameters, includes pictorial support.
Expected Identify four or five possible coins from a given set of parameters.
Greater Depth Identify the possible odd or even combinations when rolling three dice.

Questions 2, 5 and 8 (Problem Solving)
Developing Choose the correct odd and even numbers required to balance the scales. Includes pictorials and digits.
Expected Choose the correct odd and even numbers required to balance the scales. Includes mixed representations, numerals and words.
Greater Depth Choose the correct odd and even numbers required to balance the scales when adding three numbers. Includes numbers in context and written in words.

Questions 3, 6 and 9 (Reasoning)
Developing Explain which is the odd one out from a variety of pictorials and numerals.
Expected Explain which is the odd one out from mixed pictorials, numerals and words.
Greater Depth Explain which is the odd one out from numbers used in the context of money.

More Year 2 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

Odd and Even Numbers

1a. Haydn has some stamps.

He has more than 10 but fewer than 17. He can equally share his stamps into two groups.

How many stamps could he have?

D ⭐ PS

Odd and Even Numbers

1b. Emma has some sweets.

She has more than 8 but fewer than 15. She can equally share her sweets into two groups.
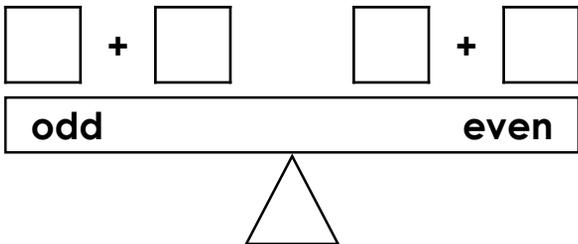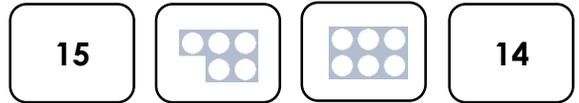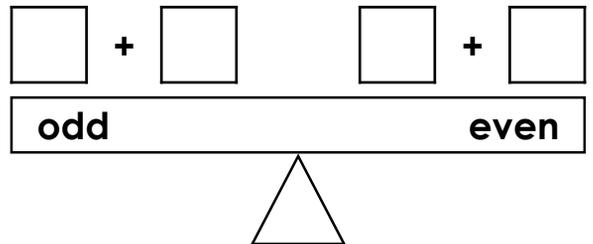
How many sweets could she have?

D ⭐ PS

2a. Choose the correct numbers to balance the scales.

☐ + ☐   ☐ + ☐

| odd | even |

13   18

D ⭐ PS

2b. Choose the correct numbers to balance the scales.

☐ + ☐   ☐ + ☐

| odd | even |

15   14

D ⭐ PS

3a. Find the odd one out.
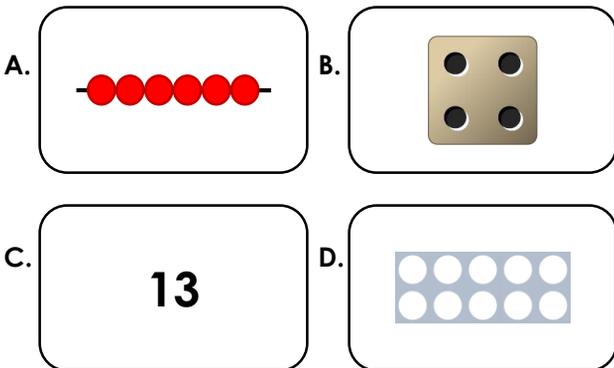
A.

B.

C. 13

D.

Explain your answer.

D ⭐ R

3b. Find the odd one out.

A.

B. 17

C.

D.

Explain your answer.

D ⭐ R

Reasoning and Problem Solving – Odd and Even Numbers – Year 2 Developing
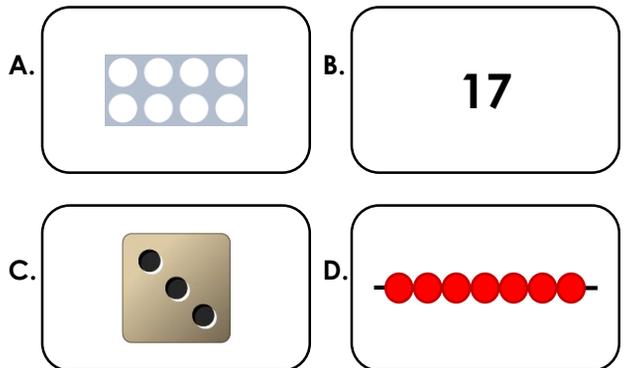
Odd and Even Numbers

4a. Lucy collects 4 coins.

The value of her coins is an odd number.

(?)(?)(?)(?)
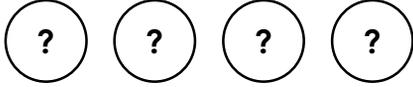
What coins could Lucy have collected?

⭐ E

PS

4b. Rayhan collects 5 coins.

The value of his coins is an even number.

(?)(?)(?)(?)(?)

What coins could Rayhan have collected?

⭐ E

PS

5a. Choose the correct numbers to balance the scales.

☐ + ☐   ☐ + ☐

| odd | even |
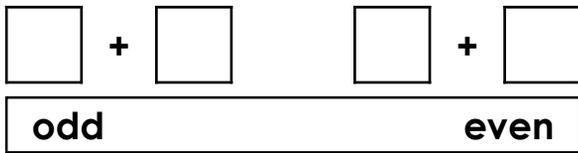
twenty-five | 10 1 | ||||| | 19

eight | 36

⭐ E

PS

5b. Choose the correct numbers to balance the scales.
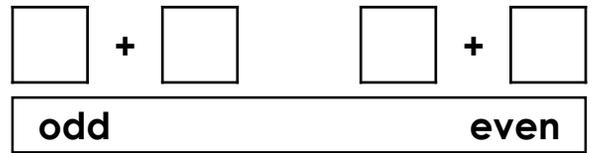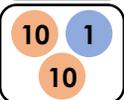
☐ + ☐   ☐ + ☐

| odd | even |

14 | nine | 8 | sixteen

10 1 10 | |||||

⭐ E

PS

6a. Find the odd one out.
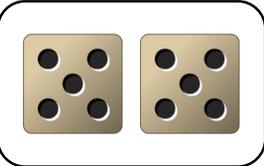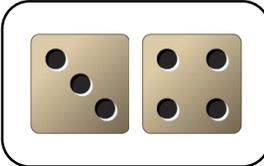
A. [dice]
B. thirty-five
C. 67
D. [5 coin]

Explain your answer.

⭐ E

R

6b. Find the odd one out.

A. [dice]
B. 53
C. forty-eight
D. [coin]

Explain your answer.

⭐ E

R

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Reasoning and Problem Solving – Odd and Even Numbers – Year 2 Expected

7a. Allie rolls three dice.

Her total is an even number between 9 and 13.

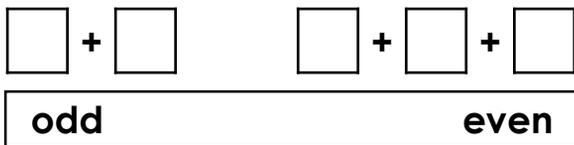What numbers could Allie have rolled?

PS

7b. Emmett rolls three dice.

His total is an odd number between 8 and 12.

What numbers could Emmett have rolled?

PS

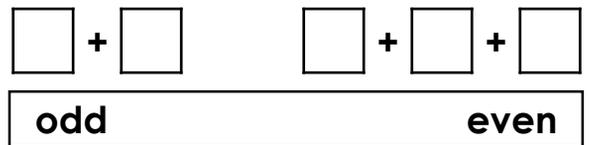**8a. Choose the correct numbers to balance the scales.**

☐ + ☐   ☐ + ☐ + ☐

| odd | even |

13   three   14

thirteen

PS

8b. Choose the correct numbers to balance the scales.

☐ + ☐   ☐ + ☐ + ☐

| odd | even |

twenty-one   28

13   four

PS

9a. Find the odd one out.

A.   B. **27p**

C.   D.

Explain your answer.

R

9b. Find the odd one out.

A.   B.

C. **45p**   D.

Explain your answer.

R

Reasoning and Problem Solving
Odd and Even Numbers

Developing
1a. 12, 14, 16
2a. 13 + 7 = 2 + 18
3a. C because 13 is an odd number; 6, 4 and 10 are even numbers.

Expected
4a. Various answers, for example: 1p, 2p, 2p, 2p; 5p, 5p, 5p, 10p; 2p, 2p, 2p, 5p
5a. 11 + 19 = 22 + 8
6a. A because 10 is an even number; 35, 67 and 5 are odd numbers.

Greater Depth
7a. Various answers, for example:
1 + 4 + 5 = 10, 2 + 4 + 4 = 10, 6 + 5 + 1 = 12
8a. 13 + 13 = 10 + 14 + 2
9a. D because 20p is an even number; 5p, 27p and 1p are all odd numbers.

Developing
1b. 10, 12, 14
2b. 15 + 5 = 6 + 14
3b. A because 8 is an even number; 17, 3 and 7 are odd numbers.

Expected
4b. Various answers, for example: 5p, 5p, 5p, 5p, 10p; 2p, 2p, 2p, 2p, 2p
5b. 9 + 21 = 14 + 16
6b. C because 48 is an even number; 7, 53 and 1 are odd numbers.

Greater Depth
7b. Various answers, for example:
1 + 4 + 4 = 9, 3 + 3 + 3 = 9, 2 + 3 + 4 = 9
8b. 21 + 13 = 28 + 2 + 4
9b. C because 45p is an odd number; 20p, 50p and 10p are all even numbers.