

Reasoning and Problem Solving

Step 3: Represent Numbers to 50

National Curriculum Objectives:

Mathematics Year 1: (1N2a) [Count, read and write numbers to 100 in numerals](#)

Mathematics Year 1: (1N4) [Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than \(fewer\), most, least](#)

Mathematics Year 1: (1N2c) [Read and write numbers from 1 to 20 in numerals and words](#)

Differentiation:

Questions 1, 4 and 7 (Reasoning)

Developing Identify the odd one out. Using bead strings and number pieces to represent numbers to 50.

Expected Identify the odd one out. Using Base 10, straws and number pieces to represent numbers to 50, with numbers written as numerals and words.

Greater Depth Identify the odd one out. Using Base 10, place value counters presented in mixed arrangements and partitioned numbers to represent numbers to 50, with numbers written as numerals and words.

Questions 2, 5 and 8 (Problem Solving)

Developing Identify the number that has been represented in two different ways. Using ten frames and number pieces to represent numbers to 50.

Expected Identify the number that has been represented in two different ways. Using Base 10, straws and number pieces to represent numbers to 50.

Greater Depth Identify the 2 possible numbers that have been represented in two different ways. Using Base 10 and place value counters presented in mixed arrangements to represent numbers to 50.

Questions 3, 6 and 9 (Reasoning)

Developing Explain if a given statement is correct. Using ten frames and bead strings to represent numbers to 50.

Expected Explain if a given statement is correct. Using Base 10, straws and number pieces to represent numbers to 50, with numbers written as numerals and words.

Greater Depth Explain if a given statement is correct. Using part-whole models and partitioned numbers to represent numbers to 50, with numbers written as numerals and words.

More [Year 1 Place Value](#) resources.

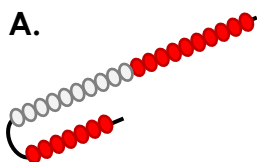
Did you like this resource? Don't forget to [review](#) it on our website.

Represent Numbers to 50

Represent Numbers to 50

1a. Which is the odd one out?

A.



B.



C.

36

D.

27

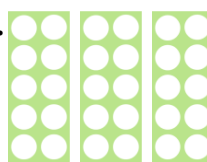
Explain why.



R

1b. Which is the odd one out?

A.



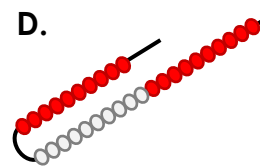
B.

45

C.

30

D.

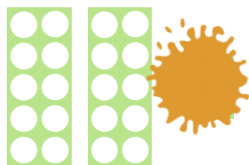
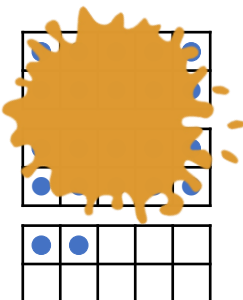


Explain why.



R

2a. Kat is representing the same number in different ways.

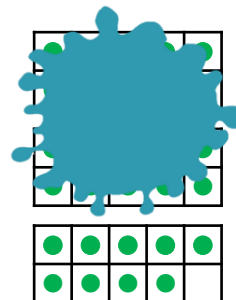
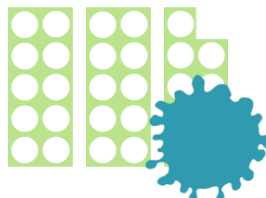


What number has Kat made?



PS

2b. Tim is representing the same number in different ways.

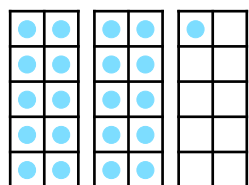
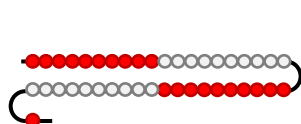


What number has Tim made?



PS

3a. Lara is representing a 2-digit number



She says,



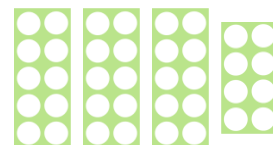
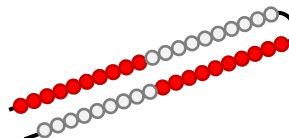
I have made the number 41 in 2 different ways.

Do you agree? Explain your answer.



R

3b. Rex is representing a 2-digit number.



He says,



I have made the number 39 in 2 different ways.

Do you agree? Explain your answer.

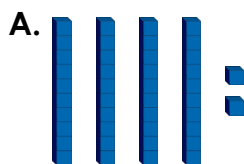


R

Represent Numbers to 50

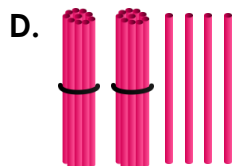
Represent Numbers to 50

4a. Which is the odd one out?



B. 42

C. forty-two

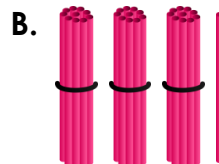


Explain why.



R

4b. Which is the odd one out?



C. 31

D. thirty-one

Explain why.



R

5a. Lily is representing the same number in different ways.

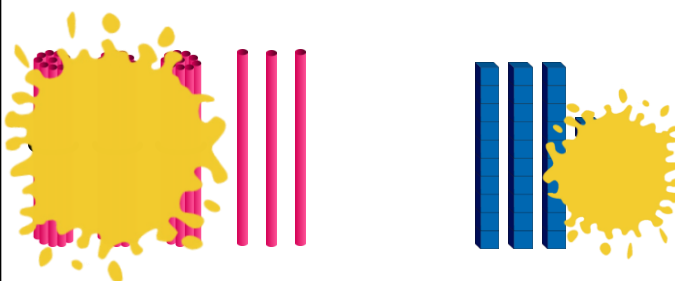


What number has Lily made?



PS

5b. Joe is representing the same number in different ways.



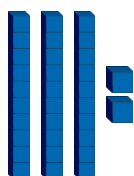
What number has Joe made?



PS

6a. Tom is representing a 2-digit number.

forty-two



He says,



I have made the number 42 in two different ways.

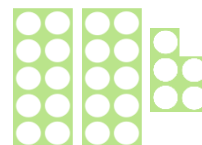
Do you agree? Explain your answer.



R

6b. Mia is representing a 2-digit number.

twenty-six



She says,



I have made the number 26 in two different ways.

Do you agree? Explain your answer.



R

Represent Numbers to 50

Represent Numbers to 50

7a. Which is the odd one out?

A.

thirty-six

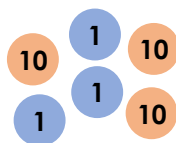
B.

three tens
six ones

C.

$$30 + 6$$

D.



Explain why.



R

7b. Which is the odd one out?

A.

$$40 + 2$$

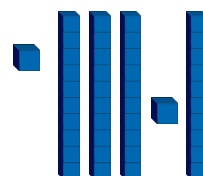
B.

forty-two

C.

two tens
four ones

D.

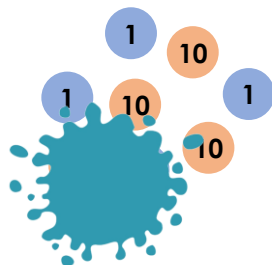
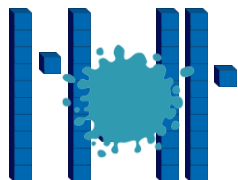


Explain why.



R

8a. Imran is representing the same number in different ways.

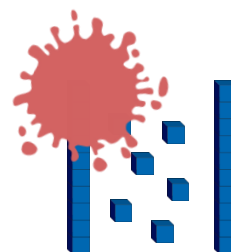
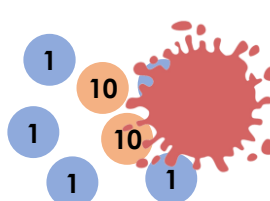


What number has Imran made? Give 2 possible answers.



PS

8b. Rosie is representing the same number in different ways.



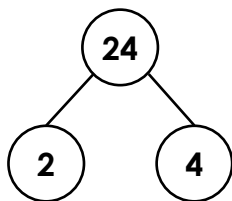
What number has Rosie made? Give 2 possible answers.



PS

9a. Lola is representing a 2-digit number.

twenty-four



She says,



I have made the number 24 in two different ways.

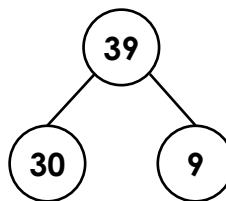
Do you agree? Explain your answer.



R

9b. Leo is representing a 2-digit number.

three tens
eight ones



He says,



I have made the number 39 in two different ways.

Do you agree? Explain your answer.



R

Reasoning and Problem Solving Represent Numbers to 50

Developing

1a. C because it represents 36. A, B and D all represent 27.

2a. 22

3a. Lara is incorrect because the ten frames only show has 2 tens. This represents 21, not 41.

Expected

4a. D because it represents 24. A, B and C represent 42.

5a. 27

6a. Tom is incorrect because the Base 10 only shows 3 tens. This represents 32, not 42.

Greater Depth

7a. D because it represents 33. A, B and C all represent 36.

8a. 43 or 44

9a. Lola is incorrect because the part-whole model is not partitioned correctly. It represents $2 + 4$, instead of $20 + 4$.

Reasoning and Problem Solving Represent Numbers to 50

Developing

1b. B because it represents 45. A, C and D all represent 30.

2b. 29

3b. Rex is incorrect because there are only 3 tens and an 8 number piece. This represents 38, not 39.

Expected

4b. A because it represents 21. B, C and D represent 31.

5b. 33

6b. Mia is incorrect because there are only 2 tens and a 5 number piece. This represents 25, not 26.

Greater Depth

7b. C because it represents 24. A, B and D all represent 42.

8b. 25 or 26

9b. Leo is incorrect because he has written three tens and eight ones. This represents 38, not 39.