Homework/Extension
Step 6: Partitioning

National Curriculum Objectives:

Mathematics Year 4: (4N4a) Identify, represent and estimate numbers using different representations
Mathematics Year 4: (4N6) Solve number and practical problems that involve 4N1 - 4N5 and with increasingly large positive numbers

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Identify which representation shows incorrect partitioning of a 4-digit number. Includes a variety of pictorial representations where each number has been partitioned once. Some use of unconventional partitioning. Pictorial representations are grouped together in place value order.
Expected Identify which representation shows incorrect partitioning of a 4-digit number. Includes a variety of pictorial representations with some instances of multiple examples of unconventional partitioning within a number.
Greater Depth Identify which representation shows incorrect partitioning of a 4-digit number. Uses some pictorial representations including multiple examples of unconventional partitioning within a number where the parts are not given in place value order.

Questions 2, 5 and 8 (Varied Fluency)
Developing Match the representations to the corresponding 4-digit numbers to find the odd one out. Includes a variety of pictorial representations where each number has been partitioned once. Some use of unconventional partitioning.
Expected Match the representations to the corresponding 4-digit numbers to find the odd one out. Includes a variety of pictorial representations with some instances of multiple examples of unconventional partitioning within a number.
Greater Depth Match the representations to the corresponding 4-digit numbers to find the odd one out. Some pictorial representations used. Multiple examples of unconventional partitioning within a number where the parts are not given in place value order.

Questions 3, 6 and 9 (Reasoning)
Developing Explain whether a statement is true or false by partitioning 4-digit numbers. Includes pictorial representations where each number has been partitioned once. Some use of unconventional partitioning.
Expected Explain whether a statement is true or false by partitioning 4-digit numbers. Includes written representations with examples of unconventional partitioning within a number.
Greater Depth Explain whether a statement is true or false by partitioning 4-digit numbers. Multiple examples of unconventional partitioning used within a number where the parts are not given in place value order.

More Year 4 Place Value resources.

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

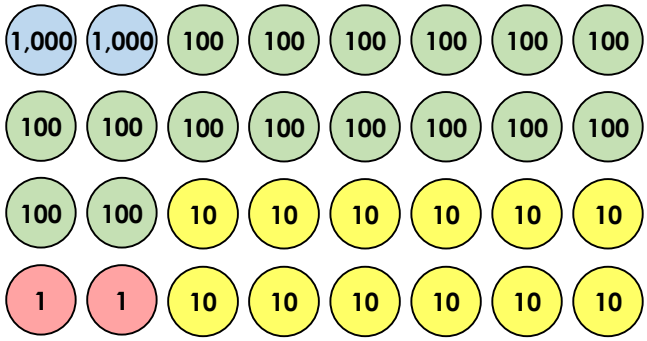
Partitioning

1. These diagrams should all show the same number. Tick the incorrect representation.

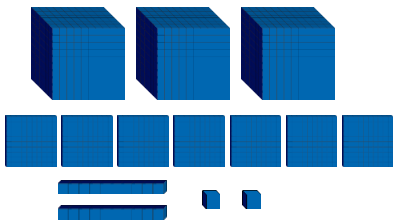
A.

3,722		
2 thousands	72 tens	2 ones

B.



C.

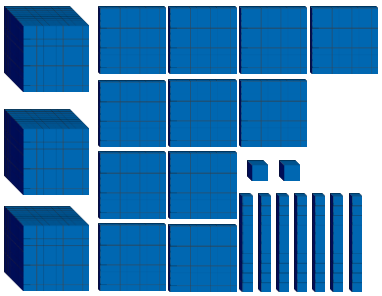


D

VF
HW/Ext

2. Match the representations to the numbers to find the odd one out.

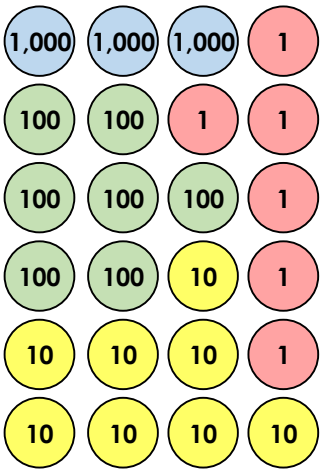
1.



2.

Th	H	T	O
○○○○○	○○○○		○○○○ ○○○○ ○○○○ ○○○

3.



D

A. 3,786 **B. 4,172** **C. 4,712** **D. 5,719**

VF
HW/Ext

3. Roger is partitioning the number 1,662. He says,

I can partition this number, using a bar model, in these two ways.

A.

1,662			
0 thousands	16 hundreds	6 tens	6 ones

B.

1,662		
1,000	600	62

Do you agree? Explain how you know.

D

RPS
HW/Ext

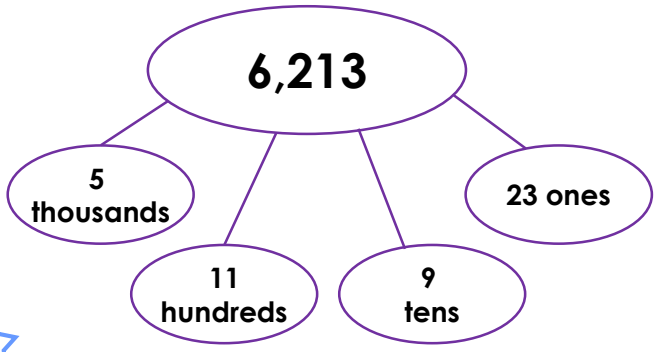
Partitioning

4. These diagrams should all show the same number. Tick the incorrect representation.

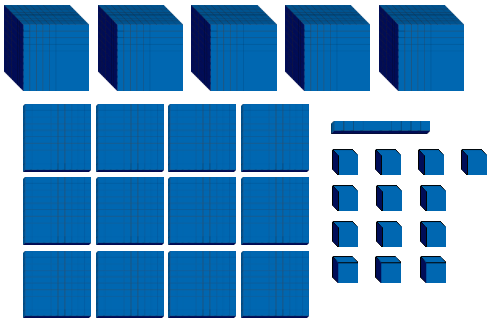
A.

6,213			
6 thousands	2 hundreds	1 ten	3 ones

B.



C.

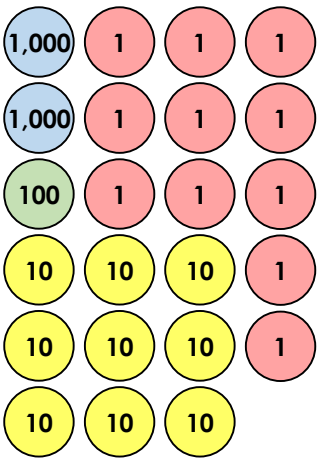


E

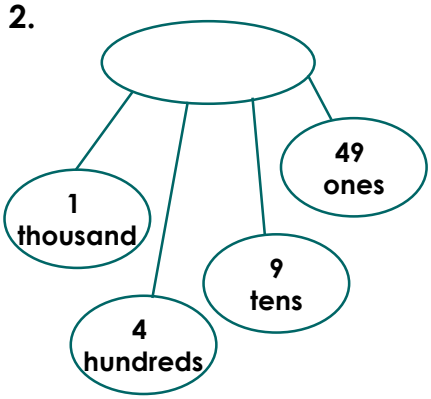
VF
HW/Ext

5. Match the representations to the numbers to find the odd one out.

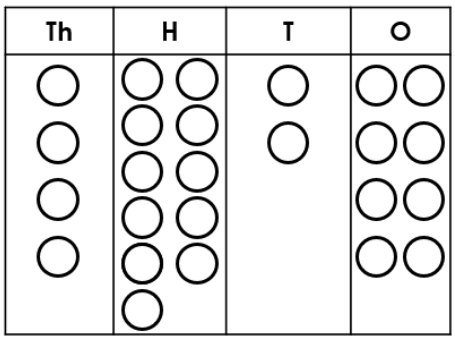
1.



2.



3.



E

A. 3,421 **B. 5,128** **C. 2,201** **D. 1,539**

VF
HW/Ext

6. Genevieve is partitioning the number 2,073. She says,

> **I can partition this number as either two thousands and seventy-three hundreds or twenty hundreds and seventy-three ones.**

Do you agree? Explain how you know.

E

RPS
HW/Ext

Partitioning

7. These diagrams should all show the same number. Tick the incorrect representation.

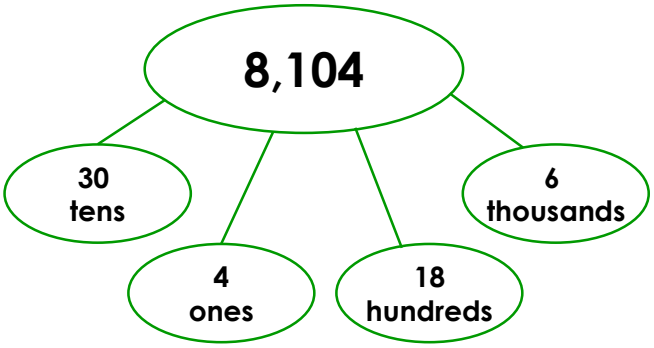
A.

8,104			
18 tens	19 hundreds	6 thousands	24 ones

B.

Th	H	T	O
7	9	9	14

C.

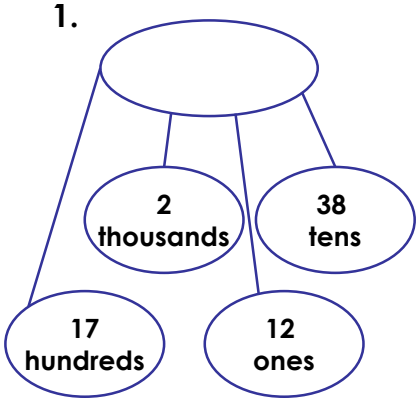


GD

VF
HW/Ext

8. Match the representations to the numbers to find the odd one out.

1.



2.

Th	H	T	O
○ ○	○○○ ○○○ ○○○ ○○○ ○○○ ○○○ ○○	○ ○ ○ ○	○○○ ○○○ ○○○ ○○○ ○○○ ○

3.

2 thousands	12 ones	forty tens	20 hundreds

GD

A. 4,412 **B. 4,092** **C. 3,892** **D. 4,056**

VF
HW/Ext

9. Gary is partitioning the number 5,104. He says,

I can partition this number in the following ways:

A. one hundred and four ones, three thousands, ninety tens and eleven hundreds

B. two thousands, twenty-four hundreds, sixty-seven tens and thirty-four ones

C. 6 tens, 80 ones and 50 hundreds

Do you agree? Explain how you know.

GD

RPS
HW/Ext

Homework/Extension
Partitioning

Developing

1. Diagram A is incorrect, it shows 2722.
2. C is the odd one out.
3. Roger is incorrect because bar model A shows 1,666 which does not equal 1,662. Bar model B however shows 1,662 accurately.

Expected

4. Diagram C is incorrect, it shows 6,223.
5. A is the odd one out.
6. Genevieve is incorrect because 2,073 cannot be partitioned as two thousands and seventy-three hundreds as that makes 9,300. Genevieve is correct however in saying that 2,073 can be partitioned as twenty hundreds and seventy-three ones.

Greater Depth

7. Diagram B is incorrect, it shows 8,004.
8. C is the odd one out.
9. Gary is incorrect because on statement C, 5,000 + 60 + 80 = 5,140 which does not equal 5,104. Statements A and B however are both correct.