

Varied Fluency

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:

Developing Questions to support exploring how numbers can be partitioned. Using 4-digit numbers and a variety of pictorial representations where each number has been partitioned once. Some use of unconventional partitioning.

Expected Questions to support exploring how numbers can be partitioned. Using 4-digit numbers and a variety of pictorial representations with some instances of multiple examples of unconventional partitioning within a number.

Greater Depth Questions to support exploring how numbers can be partitioned. Using 4-digit numbers and some pictorial representations including multiple examples of unconventional partitioning within a number where the parts are not given in place value order.

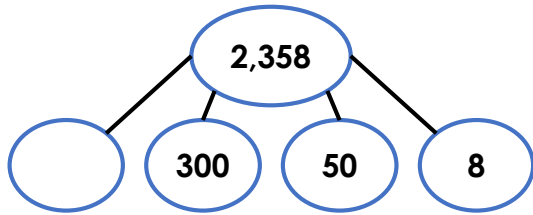
More [Year 4 Place Value](#) resources.

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

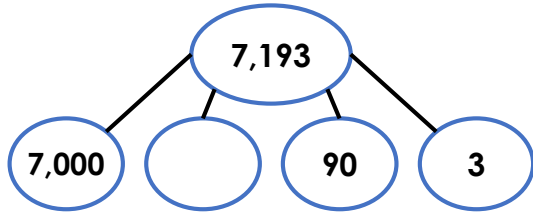
Partitioning

1a. What are the missing values?

i)



ii)

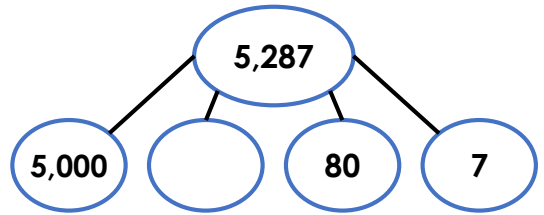


VF

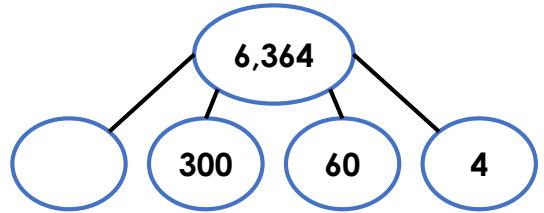
Partitioning

1b. What are the missing values?

i)

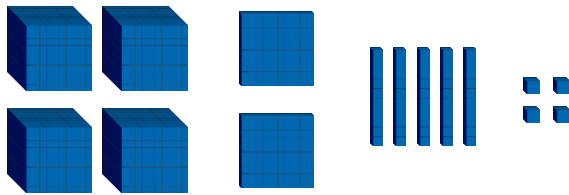


ii)



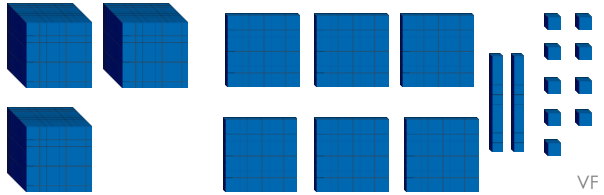
VF

2a. True or false? The Base 10 shows the number 4,254.



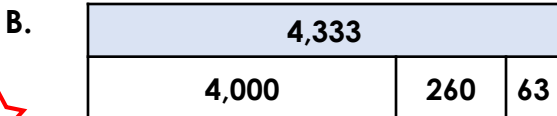
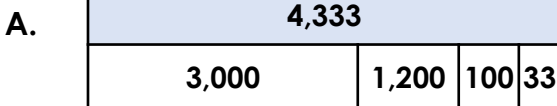
VF

2b. True or false? The Base 10 shows the number 3,619.



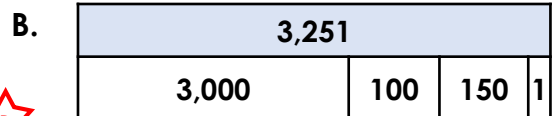
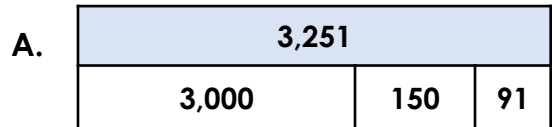
VF

3a. Which bar model shows 4,333 correctly partitioned?



VF

3b. Which bar model shows 3,251 correctly partitioned?

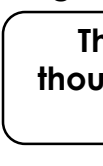


VF

4a. Hugo and Shania are describing different 4-digit numbers.



This number has 6 thousands, one hundred and 21 ones.



This number has 6 thousands, 12 tens and 2 ones.

Shania

Who is describing 6,121?

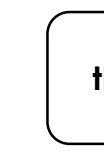


VF

4b. Ben and Felicity are describing different 4-digit numbers.



This number has 1 thousand, 3 hundreds and 29 ones.



This number has 1 thousand, 3 hundreds and 92 ones.

Ben

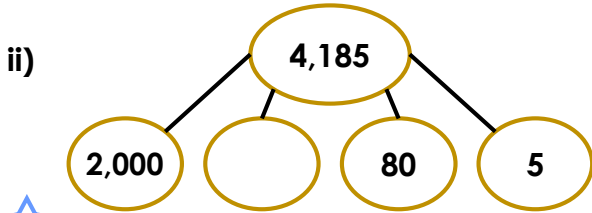
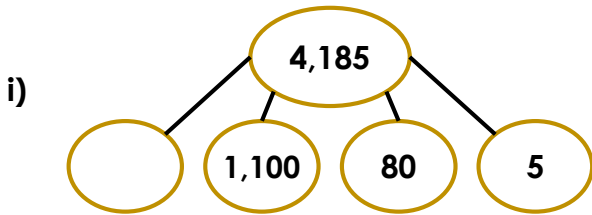
Who is describing 1,392?



VF

Partitioning

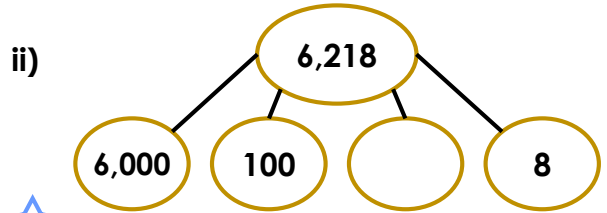
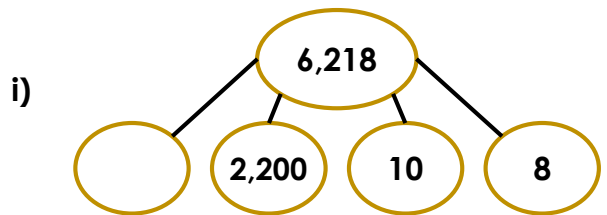
5a. What are the missing values?



VF

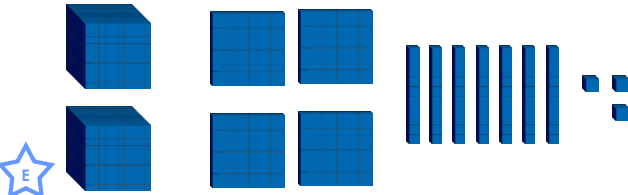
Partitioning

5b. What are the missing values?



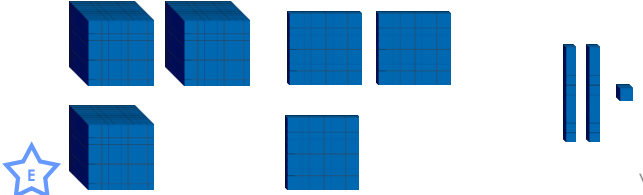
VF

6a. True or false? The Base 10 shows the number 4,273.



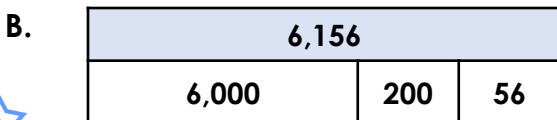
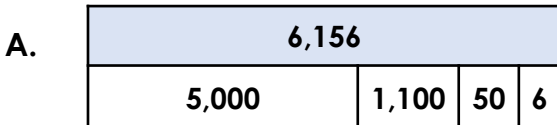
VF

6b. True or false? The Base 10 shows the number 3,321.



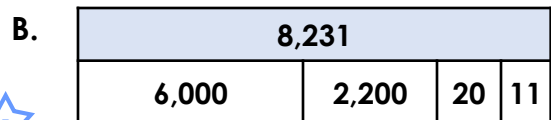
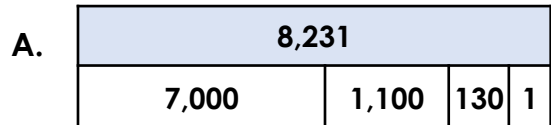
VF

7a. Which bar model shows 6,156 correctly partitioned?



VF

7b. Which bar model shows 8,231 correctly partitioned?



VF

8a. Bettie and Jordan are describing different 4-digit numbers.



Bettie

This number has 3 thousands and 15 tens.

This number has 35 hundreds and 5 ones.



Jordan

Who is describing 3,505?



VF

8b. Tallulah and Anton are describing different 4-digit numbers.



Tallulah

This number has 59 hundreds and 85 ones.

This number has 595 tens and 5 ones.



Anton

Who is describing 5,985?

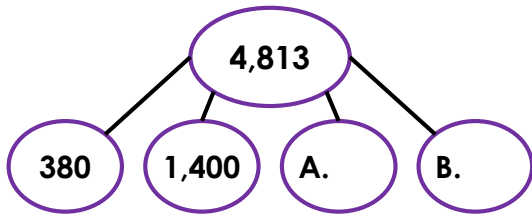


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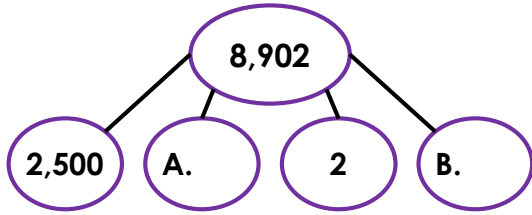
Partitioning

9a. What are the missing values?

i)



ii)

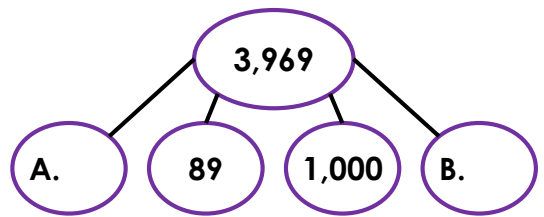


VF

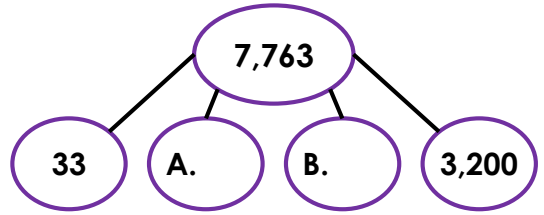
Partitioning

9b. What are the missing values?

i)

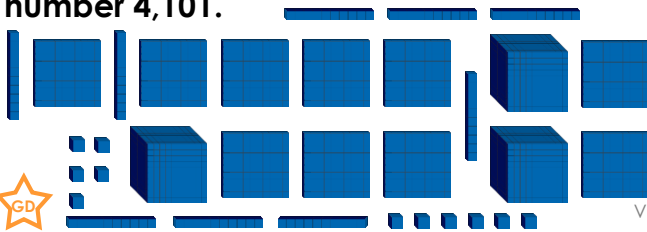


ii)



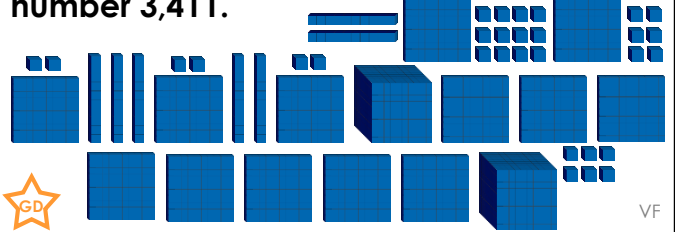
VF

10a. True or false? The Base 10 shows the number 4,101.



VF

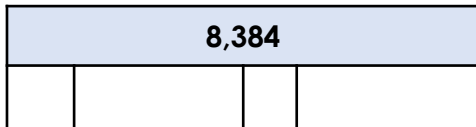
10b. True or false? The Base 10 shows the number 3,411.



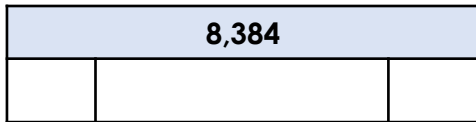
VF

11a. Complete the bar models to show two different ways of partitioning 8,384.

A.



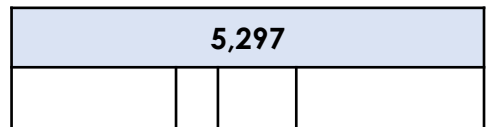
B.



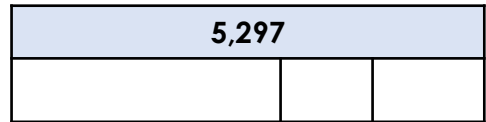
VF

11b. Complete the bar models to show two different ways of partitioning 5,297.

A.



B.



VF

12a. Lottie and David are describing the same 4-digit number.



Lottie

My number has 25 tens and two thousands.



David

This number has 22 hundreds and five tens.

Which number are they describing?



VF

12b. Eliza and Jude are describing the same 4-digit number.



Eliza

This number has 94 ones and 78 hundreds.



Jude

This number has 94 ones, 80 tens and 7 thousands.

Which number are they describing?



VF

Varied Fluency Partitioning

Developing

- 1a. i) 2,000 ii) 100
2a. True
3a. A
4a. Hugo

Expected

- 5a. i) 3,000 and ii) 2,100
6a. False; it shows 2,473.
7a. A
8a. Jordan

Greater Depth

- 9a. i) Various answers, for example:
A = 3,000 and B = 33;
A = 2,900 and B = 133
ii) Various answers, for example:
A = 1,400 and B = 5,000;
A = 400 and B = 6,000
10a. True
11a. Various answers, for example:

8,384			
260	4,000	24	4,100

8,384		
94	8,200	90

- 12a. 2,250

Varied Fluency Partitioning

Developing

- 1b. i) 200 and ii) 6,000
2b. False; it shows 3,629.
3b. B
4b. Ben

Expected

- 5b. i) 4,000 and ii) 110
6b. True
7b. A and B are both correct.
8b. Tallulah

Greater Depth

- 9b. i) Various answers, for example:
A = 2,600 and B = 280;
A = 2,000 and B = 880
ii) Various answers, for example:
A = 530 and B = 4,000;
A = 1,530 and B = 3,000
10b. False; it shows 3,350
11b. Various answers, for example:

5,297			
2,100	17	180	3,000

5,297		
4,000	107	1,190

- 12b. 7,894