



**THIRD SPACE
LEARNING**

Math Enrichment Activities

Place Value

3rd Grade

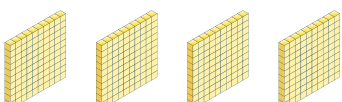
About this resource

These math enrichment activities have been designed to make your students think deeper about a given topic. The questions can be used when a student finishes a task or to add an extra challenge within a lesson. Additionally, the questions can be used in pairs, small groups or as a whole class. .

This resource is designed to be cut up and worked on throughout a topic. With this in mind, each question has been given a reference number matching those in the answer key. This means that you can prepare the math enrichment activities at the beginning of a topic and feel confident that you will share the right answer at the right time.

Each question has a title within a colored banner. The title tells the students what type of question they are working on. The different question categories are detailed in the 'Math Enrichment Activities: Question Categories' document.

What's the Question?



2PV3

Odd One Out

a) 42 tens + 4 ones

b)  

c) $300 + 120 + 4$

2PV10

Question 2PV3, for example, is titled 'What's the Question?'. The students have been given four hundred cubes as the answer, their task is to think of at least one question that has the answer of 4 hundreds.

Some of the questions could have multiple possible answers, for these questions, there is at least one example answer in the answer key.

Questions

Spot the Mistake

The place value chart shows 587.
Explain what is wrong and what
needs to be done to correct it.

H	T	O

3PV1

Picture This

Draw 3 different pictorial
representations of 2,859.
Can you show your representations
using different numbers of hundreds
and tens?

3PV2

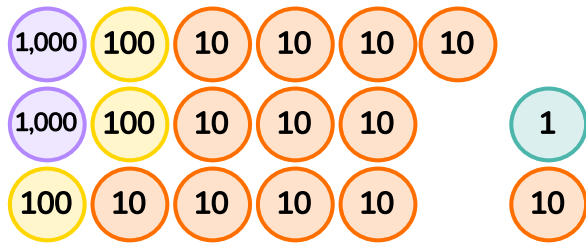
Always, Sometimes, Never

When rounding to the nearest ten,
there will only be a zero in the ones
place.

3PV3

Prove It

This represents 2,421



3PV4

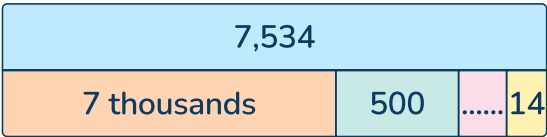
Word Problem

Write a word problem involving
finding 100 more than 6,921

3PV5

Prove It

Complete the bar model and prove
your answer is correct.



3PV6

Questions

Method

Explain how you find 1,000 more than 4,021.

3PV7

Odd One Out

How many different odd one out reasons can you give?

- a) 832 rounded to the nearest ten
- b) 435 rounded to the nearest hundred
- c) 567 rounded to the nearest ten

3PV8

What's the Question?

There are 80 tens.

3PV9

Always, Sometimes, Never

When rounding to the nearest hundred, your answer will be a 3-digit number.

3PV10

What's the Question?

The rounded number is 5,000.

3PV11

Prove It

Round each number to the nearest 10. Prove your answers are correct.

- a) $700 + 140 + 1$
- b) 645
- c) Three hundred sixty-three

3PV12

Questions

Always, Sometimes, Never

A number with a five in the ones column rounds up to the nearest hundred.

3PV13

Spot the Mistake

The digit 9 in this number 5,294 means that this number will round to 6,000 when rounding it to the nearest 1,000.

3PV14

True or False

658 rounded to the nearest 100 is 600.

3PV15

True or False

$$\begin{array}{r} 2,000 + 400 \\ + 70 + 8 \end{array}$$

>

20 hundreds +
47 tens + 7 ones

3PV16

True or False

2,461 can only be partitioned in one way:

$$2,000 + 400 + 60 + 1 = 2,461$$

Prove your answer.

3PV17

True or False

When 1,000 is added to 4,275, only 1 digit changes.

3PV18

Questions

Spot the Mistake

The number 572 when rounded to the nearest hundred is 570.

3PV19

Spot the Mistake

The number 1,999 when rounded to the nearest ten is 1,000.

3PV20

Answers

Question Reference	Question	Answer
3PV1	Spot the Mistake The place value chart shows 587. Explain what is wrong and what needs to be done to correct it. (Place value chart showing 8 hundreds, 5 tens, and 7 ones)	The digits have been put in the wrong order. There are eight hundreds, five tens and seven ones so the answer is 857. To correct it, 3 hundreds needs to be removed and 3 tens need to be added.
3PV2	Picture This Draw 3 different pictorial representations of 2,859. Can you show your representations using different numbers of hundreds and tens?	Various answers. Students' pictorial representation should represent 2,859 - including representations partitioned in different ways.
3PV3	Always, Sometimes, Never When rounding to the nearest ten, there will only be a zero in the ones place.	Sometimes. When rounding 345 to the nearest ten, your answer will be 350, with only a zero in the ones place. When rounding 495 to the nearest ten, your answer will be 500 which has a zero in the tens and ones place.
3PV4	Prove It This represents 2,421 (Counters showing 2 thousands, 3 hundreds, 12 tens, and 1 one)	Answers will vary. Students should identify that there are 2 thousands, 3 hundreds, 12 tens and 1 one. Ten tens is the same as one hundred therefore the counters represent 2,421.
3PV5	Word Problem Write a word problem involving finding 100 more than 6,921	Answers will vary. Example answer: A factory has made 6,921 cookies so far. They make 100 more. How many cookies have they made in total?

Question Reference	Question	Answer
3PV6	Prove It Complete the bar model and prove your answer is correct.	20 is missing, 34 has been partitioned into $20 + 14$ Methods to prove 20 is correct will vary but students should identify that 34 has been partitioned in a non-standard way.
3PV7	Method Explain how you find 1,000 more than 4,021	Answers will vary. Students may use/draw counters to show only thousands increase.
3PV8	Odd One Out How many different odd one out reasons can you give? a) 832 rounded to the nearest ten b) 435 rounded to the nearest hundred c) 567 rounded to the nearest ten	Various answers B is the odd one because it rounds to the nearest hundred instead of ten C is the odd one because it is the only number that rounds up.
3PV9	What's the Question? "There are 80 tens."	Various answers. How many tens are the same as 8 hundreds? How many tens are in 805?
3PV10	Always, Sometimes, Never When rounding to the nearest hundred, your answer will be a 3-digit number.	Sometimes. When rounding 348 to the nearest hundred, your answer will be 300, which is a 3-digit number. When rounding 956 to the nearest hundred, your answer will be 1,000, which is a 4-digit number.
3PV11	What's the Question? The rounded number is 5,000.	Various answers: What is 5,425 rounded to the nearest thousand? What is 4,956 rounded to the nearest hundred?

Question Reference	Question	Answer
3PV12	Prove It Round each number to the nearest 10. Prove your answers are correct. a) $700 + 140 + 1$ b) 645 c) Three hundred sixty-three	a) 841 rounded to the nearest 10 is 840. b) 645 rounded to the nearest 10 is 650. c) Three hundred sixty-three rounded to the nearest 10 is 360. Proof will vary. Students may use number lines to prove their answers.
3PV13	Always, Sometimes, Never A number with a five in the ones column rounds up to the nearest hundred	Sometimes. A number with a five in the ones column might have a 0 to 4 in the tens column - so do not round up. However, there could be a 5 to 9 in the tens column therefore they do round up.
3PV14	Spot the Mistake The digit 9 in this number 5,294 means that this number will round to 6,000 when rounding it to the nearest 1,000.	When rounding to the nearest 1,000, the digit in the hundreds column determines if the number is rounded to the previous or next multiple of 1,000. As the digit 9 is in the tens column, it does not indicate how to round the number. When rounded to the nearest 1,000, the answer would be 5,000.
3PV15	True or False 658 rounded to the nearest 100 is 600	False. 658 rounded to the nearest 100 is 700.
3PV16	True or False $2,000 + 400 + 70 + 8 > 20$ hundreds + 47 tens + 7 ones	True. $2,478 > 2477$

Question Reference	Question	Answer
3PV17	True or False 2,461 can only be partitioned in one way: $2,000 + 400 + 60 + 1 = 2,461$ Prove your answer.	False. Students can use non-standard partitioning. Examples include: $1,000 + 1,400 + 60 + 1 = 2,461$ $2,000 + 300 + 60 + 101 = 2,461$
3PV18	True or False When 1,000 is added to 4,275, only 1 digit changes.	True. Only the thousand digit (4) will need to change.
3PV19	Spot the Mistake The number 572 when rounded to the nearest hundred is 570.	When rounding to the nearest hundred, the digit in the tens place determines if the number is rounded to the previous or next multiple of 100. When rounded to the nearest 100, the answer would be 600. Here, it looks like the number was instead rounded to the nearest ten.
3PV20	Spot the Mistake The number 1,999 when rounded to the nearest ten is 1,000.	When rounding to the nearest ten, the digit in the ones place determines if the number is rounded to the previous or next multiple of 10. This number, having the digit 9 in the ones, tens, and hundreds, the ones place rounds the 9 in the tens place up, which rounds the 9 in the hundreds place up, which then rounds the thousands place up. When rounded to the nearest 10, the answer would be 2,000.

Do you have a group of students who need a boost in math?

Each student could receive personalized lessons every week from our specialist one-on-one math tutors.

-  Differentiated instruction for each student
-  Aligned to your state's standards
-  Scaffolded learning to close gaps

“We just had our first session and it went great! The kids really liked it and felt like they were learning! One even said he finally felt like math was making sense.”



Michelle Craig, Instructional Coach,
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