Name _____

1.1 Numbers Through Thousands

TEKS Number and Operations—3.2.A
Also 3.2.B
MATHEMATICAL PROCESSES
3.1.A, 3.1.E, 3.1.F

Essential Question How can you represent 4-digit numbers in different ways?

Unlock the Problem

Real World

The ABC Blocks factory uses boxes of 100 blocks to pack a crate of 1,000 blocks. How many boxes of 100 blocks are in each crate of 1,000?

- Underline what the problem is asking you to find.
- Circle the number you will count by to find the answer.

Count by hundreds to find the total number of boxes of 100 blocks that will go into each crate. Then count the crates.

100 200 _____ _____ _____ _____ _____ _____ _____ _____

1	2								

So, there are _____ boxes of 100 blocks in each crate of 1,000.

Example

ABC Blocks has 2,600 blocks to pack. Suppose the factory has no crates. How many boxes of 100 will it pack?

You know there are 10 boxes of 100 in 1,000,

so there are _____ boxes of 100 in 2,000.

There are _____ boxes of 100 in 600.

Add the boxes. $20 + 6 =$ _____

So, the factory will pack _____ boxes of 100.

Math Idea

1 crate = 1,000 blocks
1 box = 100 blocks
1 stack = 10 blocks

Math Talk
Mathematical Processes

What if the factory had crates of 1,000 and stacks of 10, but no boxes of 100? **Explain** how it could pack the blocks.

Share and Show

MATH BOARD

Math Talk
Mathematical Processes
Why will there be no boxes for packing 5,084 blocks?

1. When George packs blocks at ABC Blocks, he likes to use the fewest packages possible. The blocks George packs are shown below. Complete the chart.

Number of Blocks Packed	Crates (Thousands)	Boxes (Hundreds)	Stacks (Tens)	Single Blocks (Ones)
1,479		4		9
5,084	5			4

2. George is packing 1,479 blocks. The factory has no crates or stacks. How can George pack the blocks?

_____

3. Model with base-ten blocks how George can pack 1,479 blocks using the fewest packages. Draw a quick picture to show your model. Then complete the information about the blocks.

_____ thousand _____ hundreds 7 tens 9 ones

1,000 + 400 + _____ + _____

Problem Solving

Real World

4. The block factory is packing 2,140 blocks. How can it pack the blocks using the fewest packages?

_____

Remember
1 crate = 1,000 blocks
1 box = 100 blocks
1 stack = 10 blocks

5. H.O.T. Suppose the block factory has only boxes and stacks. How can it pack 2,140 blocks?

_____

6. **Apply** Suppose the block factory has only crates and stacks. How can it pack 2,140 blocks?

_____

Name _____

Unlock the Problem

Real World

7. **Multi-Step** Janie packs blocks at the ABC Blocks factory. She packs 2 crates, 5 boxes, and 9 stacks. How many blocks did she pack?

Ⓐ 259 Ⓒ 2,590

Ⓑ 2,509 Ⓓ 2,059

Think: 1 crate = 1,000 blocks
1 box = 100 blocks
1 stack = 10 blocks

a. What do you need to find?

_____

b. What information are you given? _____

_____

c. Draw a quick picture to show the number of thousands, hundreds, and tens. Use T for thousands, □ for hundreds, and | for tens.

d. Complete the sentences.

There are _____ blocks in 2 crates.

There are _____ blocks in 5 boxes.

There are _____ blocks in 9 stacks.

There are a total of _____ blocks in 2 crates, 5 boxes, and 9 stacks.

e. Fill in the bubble for the correct answer choice above.

8. H.O.T. Dan packs 1,500 blocks. He has no boxes. How can he pack the blocks? **Explain**.

_____

_____

_____

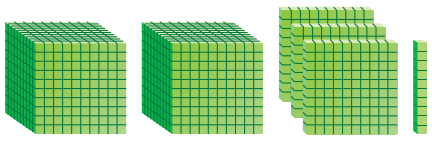
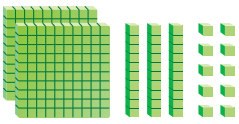
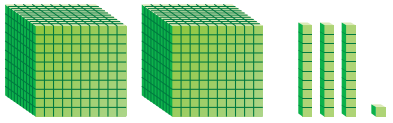
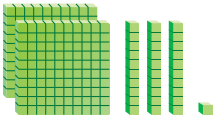
Daily Assessment Task

Fill in the bubble for the correct answer choice.

9. A factory manufactures 100 blocks per hour. How many hours will it take to manufacture 1,300 blocks?

Ⓐ 30 hours
Ⓒ 3 hours
Ⓑ 13 hours
Ⓓ 130 hours

10. **Use Tools** Use base-ten blocks to model 2,310. Which model shows the number?

Ⓐ 
Ⓒ 
Ⓑ 
Ⓓ 

11. **Multi-Step** Ada uses 1,000 beads to make a necklace. She uses 100 beads to make a hair clip. She uses 10 beads to make a ring. Ada used 3,450 beads in all. What could she have made?

Ⓐ 1 necklace, 34 hair clips, and 5 rings
Ⓑ 3 necklaces, 4 hair clips, and 5 rings
Ⓒ 34 necklaces, 5 hair clips, and 0 rings
Ⓓ 3 necklaces, 45 hair clips, and 0 rings

TEXAS Test Prep

12. Which is NOT a way to pack 1,460 blocks?

Ⓐ 1 crate, 4 boxes, and 6 stacks
Ⓑ 146 stacks
Ⓒ 14 boxes and 6 stacks
Ⓓ 1,460 stacks

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Name _____

1.1 Numbers Through Thousands

1. Shawna packs blocks at the ABC Blocks factory. She packs thousands in crates and tens in stacks. How can she pack an order for 1,250 blocks using just crates and stacks?

2. The block factory has boxes to pack groups of one hundred blocks. If Maks has an order for 2,340 blocks, how can he pack them using the fewest packages?

3. Jordy works at the block factory. He has an order to pack 3,280 blocks. How can he pack the blocks using the fewest packages?

4. Hakeem has an order for 4,180 blocks to pack, but he has run out of crates to pack the thousands. How can Hakeem pack the blocks?

5. Suppose the block factory has only crates and stacks. How can it pack an order for 4,270 blocks?

6. Suppose the block factory has only boxes and stacks. How can it pack an order for 3,630 blocks?

Problem Solving Real World

7. Zack works at the block factory. He needs to pack an order for 1,060 blocks. He only has stacks left to pack with. How many stacks will Zach need?

8. Lauren packs an order of blocks in 2 crates and 7 stacks. How many blocks does Lauren pack?

Lesson Check

TEXAS Test Prep

Fill in the bubble completely to show your answer.

9. Charlene works at a button factory. She packs buttons in boxes of 100. How many boxes will Charlene need to pack 1,500 buttons?

Ⓐ 150

Ⓑ 15

Ⓒ 5

Ⓓ 1,500

10. A factory fills 10 cups of yogurt every second. How many seconds will it take for the factory to fill 1,800 cups of yogurt?

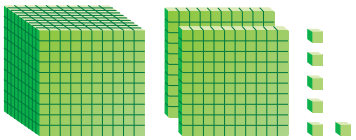
Ⓐ 18 seconds

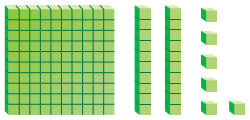
Ⓑ 8 seconds

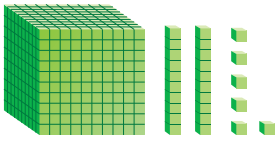
Ⓒ 180 seconds

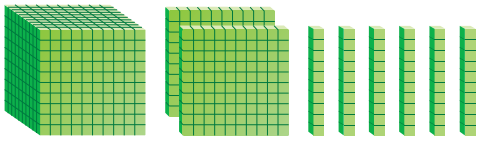
Ⓓ 1,800 seconds

11. Darius has 1,026 baseball cards. He wants to use blocks to show the number of thousands, hundreds, tens, and ones. Which shows what Darius can model?

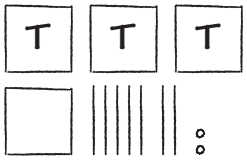
Ⓐ 

Ⓒ 

Ⓑ 

Ⓓ 

12. Soo-Lin draws this picture to show the number of pennies she has saved.



How many pennies does Soo-Lin have?

Ⓐ 317

Ⓑ 3,170

Ⓒ 3,017

Ⓓ 3,172

13. **Multi-Step** Dennis makes a tile table. He uses 2 boxes of 1,000 red tiles, some boxes of 100 blues tiles, and 8 boxes of 10 green tiles. He uses 3,380 tiles in all. How many boxes of blue tiles does Dennis use?

Ⓐ 13

Ⓑ 30

Ⓒ 130

Ⓓ 300