



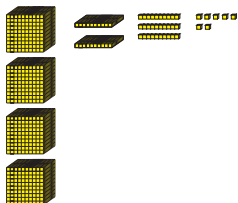
Rhonda and Joe work for the TIMS Candy Company.

1. Rhonda has 3 flats, 1 skinny, and 5 bits. How many pieces of candy is that?



Write a number sentence to match the pieces.

2. Joe has 4 packs, 2 flats, 3 skinnies, and 7 bits. How many pieces of candy is that?



Write a number sentence to match the pieces.

3. Rhonda has 15 bits, 3 flats, and 3 skinnies. She says this is 345 pieces of candy. Is she correct? If not, how many pieces of candy does she really have?



Write a number sentence to match the pieces.

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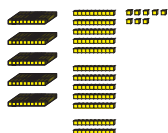
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Questions 1–20 (SG pp. 109–114)

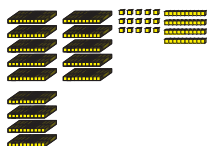
1. 315 pieces; $300 + 10 + 5 = 315$
2. 4237 pieces; $4000 + 200 + 30 + 7 = 4237$
3. Rhonda is correct; $300 + 30 + 15 = 345$
4. Joe is incorrect. He has 628 pieces of candy.
 $500 + 120 + 8 = 628$
5. Joe is correct. $1400 + 40 + 15 = 1455$
6. Rhonda is incorrect. She has 2453 pieces of candy.
 $2000 + 400 + 50 + 3 = 2453$
7. **A.** Both have 355 pieces of candy.
Joe: $300 + 30 + 25 = 355$
Rhonda: $200 + 140 + 15 = 355$
- B.** Yes, because both sides of the equal sign add up to 355.
8. **A.** Both have 282 pieces of candy.
Rhonda: $100 + 170 + 12 = 282$
Joe: $200 + 80 + 2 = 282$
- B.** $100 + 170 + 12 = 200 + 80 + 2$
- C.** Yes, because both sides of the equal sign add up to 282.

4. Joe has 5 flats, 12 skinnies, and 8 bits. He says this is 528 pieces of candy. Is he correct? If not, how many pieces of candy does he really have?



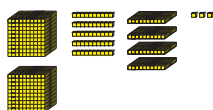
Write a number sentence to match Joe's pieces.

5. Joe has 14 flats, 15 bits, and 4 skinnies. He says this is 1455 pieces of candy. Is he correct? If not, how many pieces of candy does he really have?



Write a number sentence to match Joe's pieces.

6. Rhonda has 2 packs, 5 skinnies, 4 flats, and 3 bits. She says this is 2543 pieces of candy. Is she correct? If not, how many pieces of candy does she really have?



Write a number sentence to match Rhonda's pieces.

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7. **A.** Joe has 3 flats, 3 skinnies, and 25 bits. Rhonda has 2 flats, 14 skinnies, and 15 bits. How much candy does Joe have? How much candy does Rhonda have? Write number sentences to match each set of base-ten pieces.



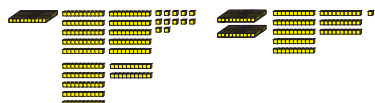
- B.** Joe and Rhonda agree that they both have the same amount, 355 candies. They write a new number sentence that combines the two number sentences into one.

$$\text{Joe} \quad \text{Rhonda}$$

$$300 + 30 + 25 = 200 + 140 + 15$$

Is this a true number sentence? Why or why not?

8. **A.** Rhonda has 1 flat, 17 skinnies, and 12 bits. Joe has 2 flats, 8 skinnies, and 2 bits. How much candy does Rhonda have? How much candy does Joe have? Write number sentences to match each set of base-ten pieces.



- B.** If Rhonda and Joe have the same amount, write a new number sentence that combines their two number sentences into one.

- C.** Is the number sentence you wrote in Question 8B a true sentence? Why or why not?

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



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The Fewest Pieces Rule

The TIMS Candy Company decided that the best way to record the amount of candy it makes is to use the smallest possible number of base-ten pieces. The company calls this the **Fewest Pieces Rule**. For example, the best way to record 32 candies is to use 3 skinnies and 2 bits.

Base-Ten Recording Sheet

			
		3	2

30 + 2 = 32

The best way to record 457 candies is to use 4 flats, 5 skinnies, and 7 bits.

Writing a number showing partitions using the Fewest Pieces Rule is using **expanded form**. Expanded form for 457 is $400 + 50 + 7$. **Standard form** is 457. So we write $457 = 400 + 50 + 7$.

13. Show each number using base-ten shorthand. Make sure your answer uses the Fewest Pieces Rule. Write a number sentence with expanded form on one side of the equal sign and standard form on the other like the example above.

- A. 236 B. 507 C. 5235 D. 6048

In Questions 14–20:

- A. Write a number sentence and tell how many Chocos were made.
 B. Then, check if the Fewest Pieces Rule is followed. If it is not, use base-ten shorthand to show the candy using the fewest pieces possible. Write a new number sentence to match.

Ex. 

- A. $400 + 60 + 12 = 472$
 B. No, the Fewest Pieces Rule is not being used.



$400 + 70 + 2 = 472$

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14. 

15. 

16. 

17. 

18. 

19. 

20. 

Practice representing numbers using base-ten shorthand with the *More Base-Ten Shorthand* pages in your *Student Activity Book*.

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13. A. 

$200 + 30 + 6 = 236$

B. 

$500 + 7 = 507$

C. 

$5000 + 200 + 30 + 5 = 5235$

D. 

$6000 + 40 + 8 = 6048$

14. A. 240; $200 + 30 + 10 = 240$

B. No 

$200 + 40 = 240$

15. A. 1050; $1000 + 50 = 1050$

B. Yes

16. A. 4220; $4000 + 100 + 120 = 4220$

B. No 

$4000 + 200 + 20 = 4220$

17. A. 4240; $3000 + 1200 + 30 + 10 = 4240$

B. No 

$4000 + 200 + 40 = 4240$

18. A. 1133; $13 + 120 + 1000 = 1133$

B. No 

19. A. 1268; $1100 + 18 + 150 = 1268$

B. No 

20. A. 2039; $2000 + 30 + 9 = 2039$

B. Yes

Homework (SG p. 115)

Questions 1–6

1. 37; $30 + 7 = 37$
2. 114; $100 + 10 + 4 = 114$
3. 2022; $2000 + 20 + 2 = 2022$
4. 1100; $1000 + 100 = 1100$
5. 1090; $1000 + 90 = 1090$
6. 2001; $2000 + 1 = 2001$

Dear Family Member:

Your child is reviewing place value—the idea that the value of a digit in a number depends upon where it is placed. For example, the 2 in 329 stands for 2 tens but the 2 in 7293 is 2 hundreds. In class your child uses base-ten pieces to represent numbers. When the pieces are not available, students are encouraged to draw pictures of the base-ten pieces. We call these drawings of the base-ten pieces **base-ten shorthand**.

• = Bit	= Skinny	= Flat	= Pack
one	ten	hundred	thousand

The sketches below show the number of Chocos made by workers at the TIMS Candy Company. Write the amount of candy using numbers. Write a number sentence to match the base-ten shorthand.

1.
2. |
3. // ..
- 4.
5. // // // // //
6. •

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