Addition: Reinforcing the count-on strategy

In this lesson, coins are used as concrete materials to reinforce the count-on addition strategy.

Step 1 Preparing the lesson

You will need:
- wallet or coin purse
- play pennies (or use coins from Blackline Master 2.15)
- resources such as connecting cubes, counters, ten-frames, DecaCards (use Blackline Masters 2.12 and 2.13) play coins, paper and pencils, small toys, and buttons located in a central part of the room for the students to access

Each student will need:
- Student Journal 2.4

Step 2 Starting the lesson

Have the students count from one to 50. Say, *We are going to play a listening game with the numbers we know. We need to clap when we say the numbers ten, twenty, thirty, forty, and fifty.* Ask the students to count from one to 50 again, clapping for each multiple of ten. Repeat the activity clapping for the numbers that have a five (for example, five, fifteen, twenty-five). Select students to give number suggestions, and repeat as time allows. (**SMP8**)

Step 3 Teaching the lesson

Invite two students to stand at the front to model a problem involving money. Have one student hold the wallet, put some pennies inside, and then tell the class how many pennies are in the wallet. Ask the other student to pick up one or two pennies and show the class. Say, *(Kay) has (5) pennies in the wallet. (Richard) is going to give her (2) more pennies.* Ask, *How many pennies will (Kay) have then?* Discuss the points below:

What is the problem we have to solve?

How could we solve that problem?

Which amount should we start with to figure out the total?

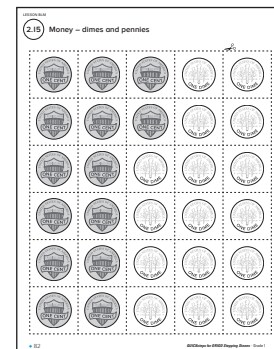*Who can show us how to count the pennies?*

What strategy did (Deana) use to find the total?
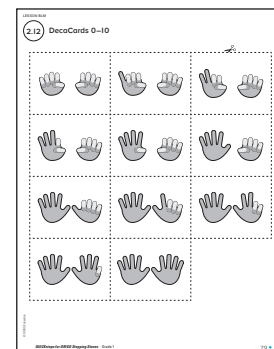
What addition fact could we write to match?

Is there a better way to do it?

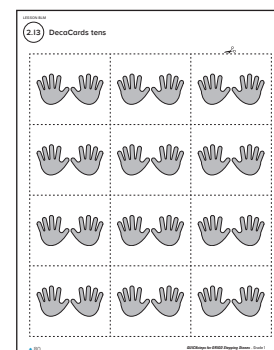Repeat with other students, modeling one or two different count-on problems. (**SMP1**)

Blackline Master 2.15

Blackline Master 2.12

Blackline Master 2.13

1.OA.A.1 Solve addition word problems
1.OA.C.6 Use a strategy (count-on) to add one-digit numbers
1.OA.D.8 Calculate the unknown amount in addition equations
1.NBT.A.1 Rote count forward up to 50

Major clusters
Add and subtract within 20.
Represent and solve problems involving addition and subtraction.
Work with addition and subtraction equations.
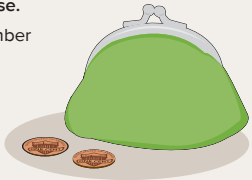Extend the counting sequence.

Student Journal 2.4, pp. 52–53

2.4 Addition: Reinforcing the count-on strategy

Step In There are 6 pennies in this purse and some outside the purse.

How could you figure out the total number of pennies?

What addition fact could you write?

$6 + 2 = 8$

Step Up 1. Count on 1 or 2 pennies. Then write the addition fact.

a. 4
$4 + 2 = 6$

b. 3
$3 + 1 = 4$

c. 5
$5 + 1 = 6$

d. 7
$7 + 2 = 9$

2. Write an equation to solve each problem.

a. 5 books are on a desk. 2 more books are put on the desk. How many are on the desk now?

$5 + 2 = 7$

b. 4 friends are swimming. One more friend jumps in. How many friends are swimming now?

$4 + 1 = 5$

c. There are 6 toys on a table and 3 toys on the floor. How many toys are there in total?

$6 + 3 = 9$

d. 9 birds are sitting in a tree. 2 more birds fly to the tree. How many birds are sitting in the tree now?

$9 + 2 = 11$

3. Write the totals.
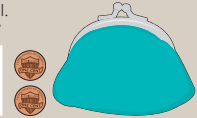
a. $3 + 2 = 5$
b. $7 + 1 = 8$
c. $8 + 2 = 10$
d. $9 + 0 = 9$
e. $4 + 3 = 7$
f. $3 + 1 = 4$

Step Ahead There are 13 pennies in total. How many are in the purse?

11 pennies

Work through the Step In discussion (Student Journal 2.4) with the whole class. Read the Step Up and Step Ahead instructions with the students. Make sure they know what to do, then have them work independently to complete the tasks (**SMP1**). If students experience difficulty solving the problems in Question 2, organize them into pairs and encourage them to discuss each problem and decide on the steps they will follow. If they are stumped, remind them that they can use materials from the resources center to act out the problem (**SMP5**).

Step 4 Reflecting on the work

Discuss the students' answers to Student Journal 2.4. Ask questions such ask, *What two numbers did you add? How did you add them? Did you need to count all the pennies? Why not?* Ask for volunteers to share their solutions for Step Ahead and explain how they solved the problem. Some students may have acted out the situation, while others may have drawn a picture to model the problem.

ELL

Provide the students with their own pennies to scaffold the language and concept during the activity. Invite the students to reference the count-on strategy anchor chart when talking about the strategy.

Maintaining concepts and skills

This lesson provides a rigorous thinking problem and an activity that develops and practices academic vocabulary. It also provides ongoing practice that revisits content from any previous module and earlier in this module, and a prerequisite skill for Module 3.

Student Journal 2.4, pp. 54–55

2.4 Maintaining concepts and skills

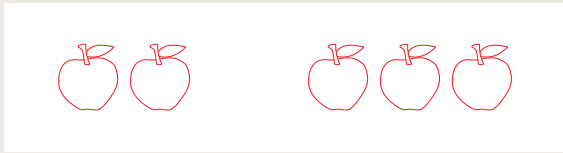**Think and Solve** THINK TANK — Write a number to make each balance picture true.
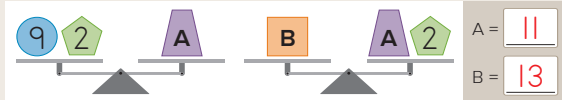
9 2 | A | B | A 2

A = 11
B = 13

Words at Work

a. Write an addition story. You can use words from the list to help you.

I have 2 apples. My friend has 3 apples. That makes 5 apples in total.

| add |
| equals |
| makes |
| join |
| and |
| total |
| group |

b. Draw a picture to match your story.

c. Write an equation to match. $2 + 3 = 5$

◆ 54   ✱ Answers will vary. This is one example.   *ORIGO Stepping Stones* · Grade 1 · 2.4

Ongoing Practice   1.   Write the numeral to match each picture.
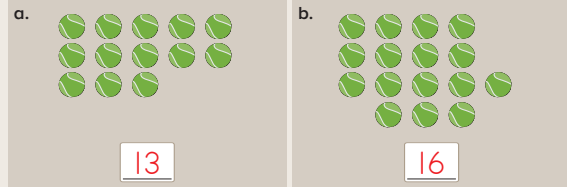
a.   13

b.   16

2. Write the addition fact to match each card.

a. 7 ·· → $7 + 2 = 9$

b. 6 · → $6 + 1 = 7$

c. 4 ·· → $4 + 2 = 6$

Preparing for Module 3   Write the number of tens and ones.

a.   1 ten and 4 ones
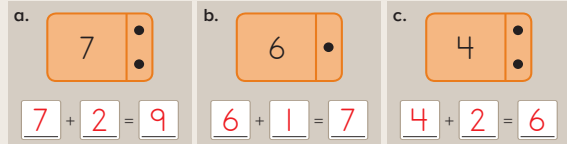
b.   1 ten and 8 ones
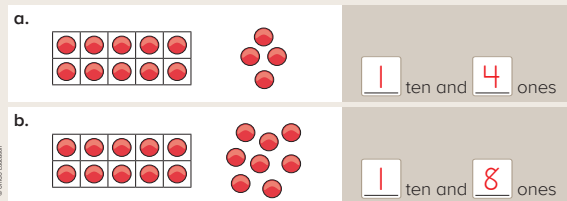
ORIGO Stepping Stones · Grade 1 · 2.4   55 ◆

Small group differentiation

Extra help

Each pair of students will need:
- 30 connecting cubes in a container
- 1 standard number cube

Organize students into pairs and have them build trains of one to six connecting cubes of one color. After, one student rolls the cube and selects the train that matches the number rolled. They then add one more cube to the train and identify the new total. Encourage language such as, "I have a train of five. I add one more. Now I have a train of six." Roles are alternated and the activity repeated.

Extra practice

Each pair of students will need:
- 1 set of wallets from Blackline Master 2.16
- play pennies (or use coins from Blackline Master 2.15)

Organize students into pairs and distribute the resources. Have the students turn the wallets facedown on a table and mix them. One student turns over a wallet and places one or two pennies beside it. The other student writes a matching addition fact to find the total. The wallet is turned back over and mixed around. Roles are alternated and the activity repeated until each student has written six different count-on facts.

Extra challenge

Each pair of students will need:
- 1 set of dominoes from Blackline Master 2.17 in a container

Organize students into pairs and distribute the resources. They take turns to select a domino, say the total as quickly as they can, then write the matching addition fact.

Blackline Master 2.16
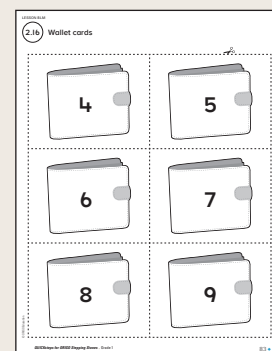
Blackline Master 2.15
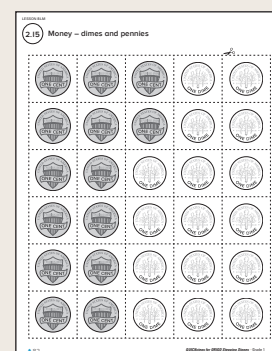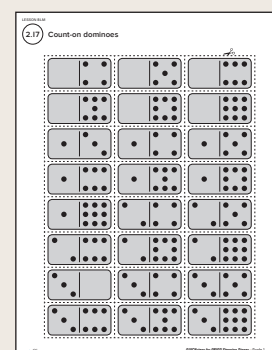
Blackline Master 2.17

Step In

There are **6** pennies in this purse and some outside the purse.

How could you figure out the total number of pennies?

What addition fact could you write?

☐ + ☐ = ☐

Step Up

I. Count on 1 or 2 pennies.
Then write the addition fact.

a.

4

4 + ☐ = ☐

b.

3

☐ + ☐ = ☐

c.

5

☐ + ☐ = ☐

d.

7

☐ + ☐ = ☐

Step In

There are **6** pennies in this purse and some outside the purse.

How could you figure out the total number of pennies?

What addition fact could you write?

$$6 + 2 = 8$$

Step Up

1. Count on 1 or 2 pennies. Then write the addition fact.

a.

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$$4 + 2 = 6$$

b.

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$$3 + 1 = 4$$

c.

5

$$5 + 1 = 6$$

d.

7

$$7 + 2 = 9$$

2. Write an equation to solve each problem.

a. 5 books are on a desk. 2 more books are put on the desk. How many are on the desk now?

b. 4 friends are swimming. One more friend jumps in. How many friends are swimming now?

c. There are 6 toys on a table and 3 toys on the floor. How many toys are there in total?

d. 9 birds are sitting in a tree. 2 more birds fly to the tree. How many birds are sitting in the tree now?

3. Write the totals.

a. $3 + 2 = $ ☐

b. $7 + 1 = $ ☐

c. $8 + 2 = $ ☐

d. $9 + 0 = $ ☐

e. $4 + 3 = $ ☐

f. $3 + 1 = $ ☐

Step Ahead   There are 13 pennies in total. How many are in the purse?

☐ pennies

2. Write an equation to solve each problem.

a. 5 books are on a desk.
2 more books are put on
the desk. How many are
on the desk now?

$$5 + 2 = 7$$

b. 4 friends are swimming.
One more friend jumps in.
How many friends are
swimming now?

$$4 + 1 = 5$$

c. There are 6 toys on a table
and 3 toys on the floor.
How many toys are there
in total?

$$6 + 3 = 9$$

d. 9 birds are sitting in a tree.
2 more birds fly to the tree.
How many birds are sitting
in the tree now?

$$9 + 2 = 11$$

3. Write the totals.

a. $3 + 2 = 5$

b. $7 + 1 = 8$

c. $8 + 2 = 10$

d. $9 + 0 = 9$

e. $4 + 3 = 7$

f. $3 + 1 = 4$

Step Ahead There are 13 pennies in total.
How many are in the purse?

11 pennies

Think and Solve *the* **THINK TANK**

Write a number to make each balance picture true.

9 2   A   B   A 2

A = [ ]

B = [ ]

Words at Work

a. Write an addition story. You can use words from the list to help you.

add
equals
makes
join
and
total
group

b. Draw a picture to match your story.

c. Write an equation to match. [ ] + [ ] = [ ]

Think and Solve — *the* **THINK TANK** — Write a number to make each balance picture true.

9 2   A   B   A 2

A = **11**

B = **13**

Words at Work

a. Write an addition story. You can use words from the list to help you.

> I have 2 apples. My friend has 3 apples. That makes 5 apples in total.

add
equals
makes
join
and
total
group

b. Draw a picture to match your story.

c. Write an equation to match.   **2** + **3** = **5**

✳ **Answers will vary. This is one example.**
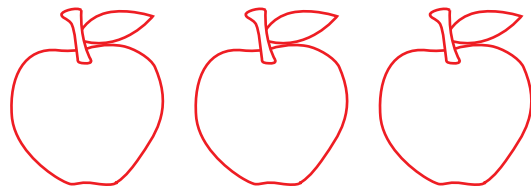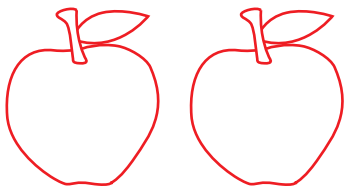
Ongoing Practice

1. Write the numeral to match each picture.

a.
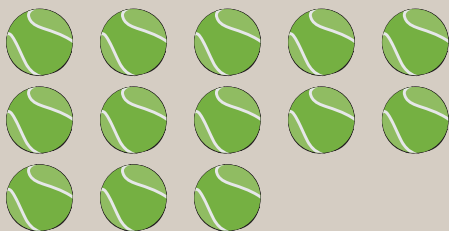
b.

2. Write the addition fact to match each card.

a.

7

☐ + ☐ = ☐

b.

6

☐ + ☐ = ☐

c.

4

☐ + ☐ = ☐
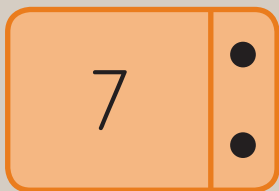
Preparing for Module 3 Write the number of tens and ones.

a.
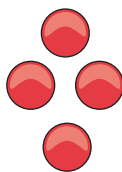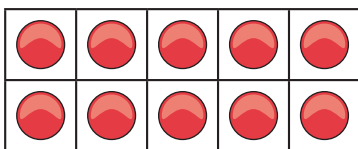
☐ ten and ☐ ones

b.
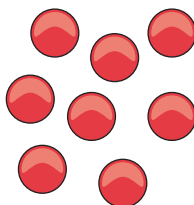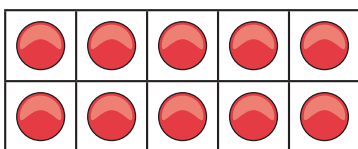
☐ ten and ☐ ones

Ongoing Practice
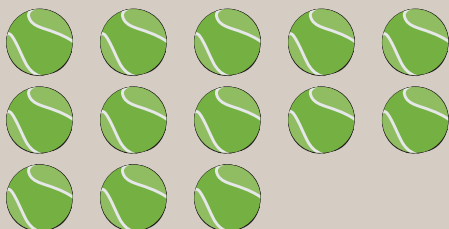
1. Write the numeral to match each picture.

a.

13

b.

16

2. Write the addition fact to match each card.

a.

7

$7 + 2 = 9$

b.

6

$6 + 1 = 7$

c.

4

$4 + 2 = 6$

Preparing for Module 3 Write the number of tens and ones.

a.
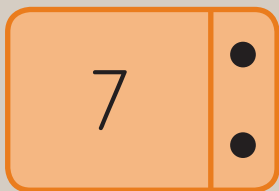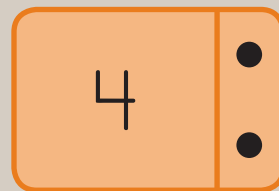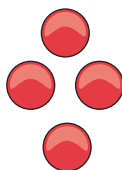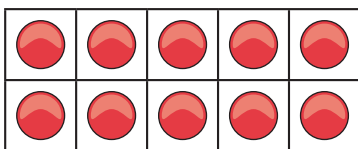
1 ten and 4 ones

b.
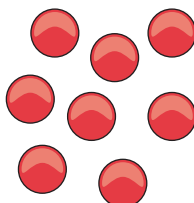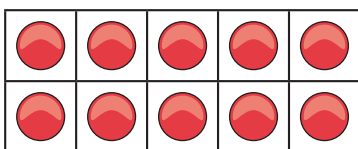
1 ten and 8 ones
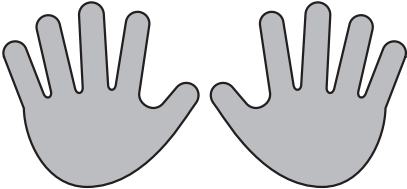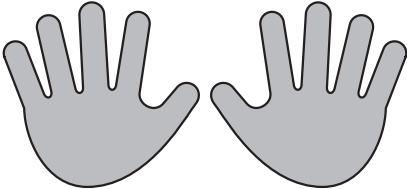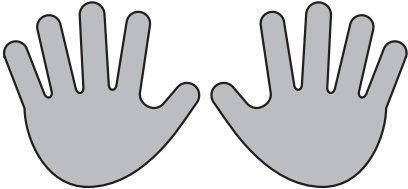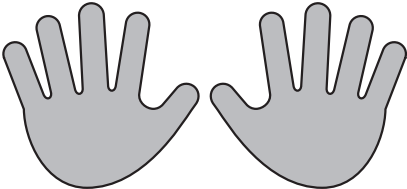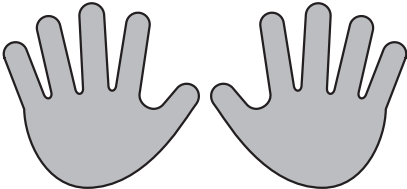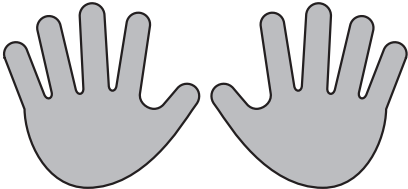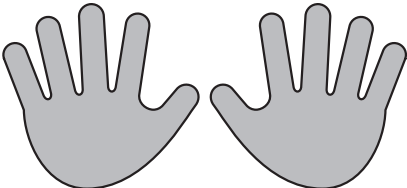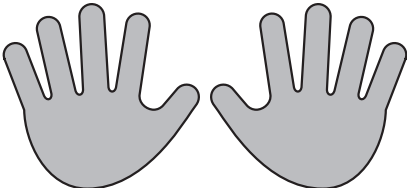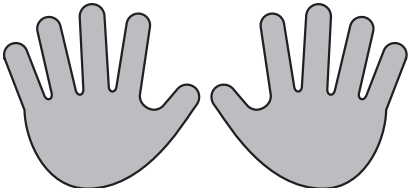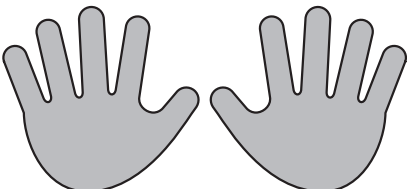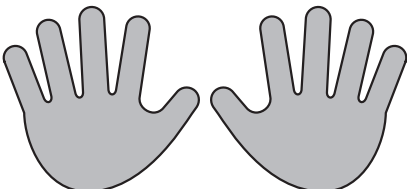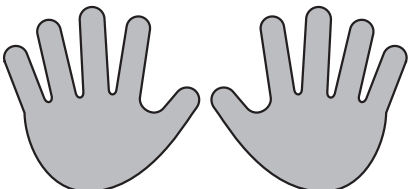
2.12 DecaCards 0–10

2.13 DecaCards tens

2.15 Money – dimes and pennies

(2.16) **Wallet cards**

4

5

6

7

8

9

2.17 Count-on dominoes

Conoce

Hay 6 *pennies* dentro del monedero y algunos afuera.

¿Cómo calcularías el número total de *pennies*?

¿Qué operación de suma podrías escribir?

☐ + ☐ = ☐

Intensifica

1. Cuenta 1 o 2 *pennies* hacia delante.
Luego escribe la operación básica de suma.
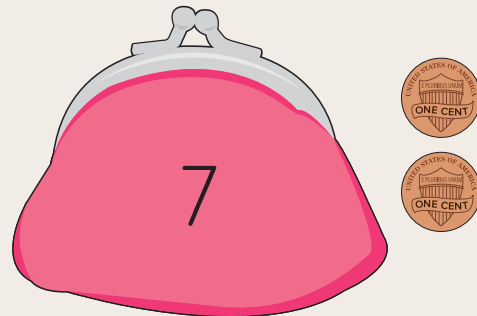
a.

4

4 + ☐ = ☐

b.

3

☐ + ☐ = ☐

c.

5

☐ + ☐ = ☐

d.

7

☐ + ☐ = ☐

Conoce

Hay 6 *pennies* dentro del monedero y algunos afuera.
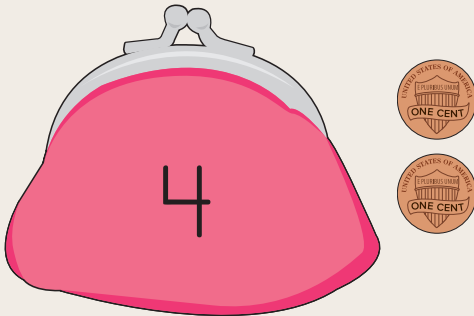
¿Cómo calcularías el número total de *pennies*?
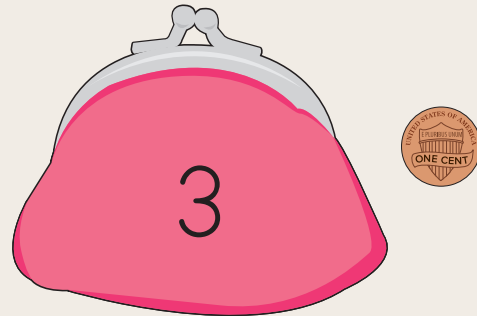
¿Qué operación de suma podrías escribir?

$$6 + 2 = 8$$

Intensifica

I. Cuenta 1 o 2 *pennies* hacia delante.
Luego escribe la operación básica de suma.

a.
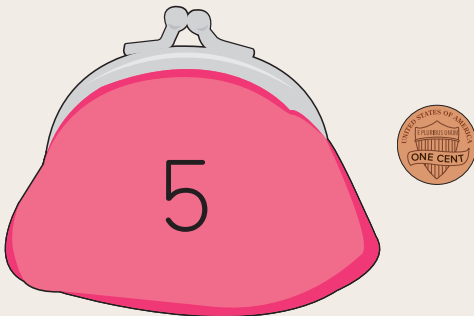
4

$$4 + 2 = 6$$

b.

3
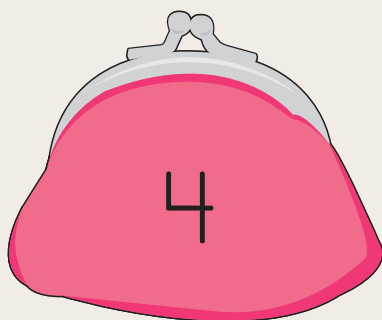
$$3 + 1 = 4$$

c.

5

$$5 + 1 = 6$$

d.

7

$$7 + 2 = 9$$

2. Escribe una ecuación para resolver cada problema.

a. Hay 5 libros en un escritorio. Se colocan 2 libros más en él. ¿Cuántos libros hay en el escritorio ahora?

b. 4 amigos están nadando. Un amigo más se les une. ¿Cuántos amigos están nadando ahora?

c. Hay 6 juguetes en una mesa y 3 juguetes en el piso. ¿Cuántos juguetes hay en total?

d. Hay 9 pájaros en un árbol. 2 pájaros más vuelan al árbol. ¿Cuántos pájaros hay en el árbol ahora?

3. Escribe los totales.

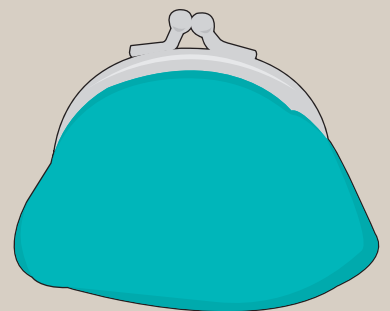**a.** $3 + 2 =$ ☐

$7 + 1 =$ ☐

c. $8 + 2 =$ ☐

d. $9 + 0 =$ ☐

e. $4 + 3 =$ ☐

f. $3 + 1 =$ ☐

Avanza

Hay 13 *pennies* en total. ¿Cuántos hay en el monedero?

☐ *pennies*

2. Escribe una ecuación para resolver cada problema.

a. Hay 5 libros en un escritorio. Se colocan 2 libros más en él. ¿Cuántos libros hay en el escritorio ahora?

$$5 + 2 = 7$$

b. 4 amigos están nadando. Un amigo más se les une. ¿Cuántos amigos están nadando ahora?

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$$6 + 3 = 9$$

d. Hay 9 pájaros en un árbol. 2 pájaros más vuelan al árbol. ¿Cuántos pájaros hay en el árbol ahora?

$$9 + 2 = 11$$

3. Escribe los totales.
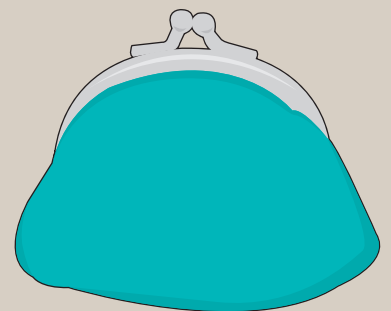
a. $3 + 2 = 5$

$7 + 1 = 8$

c. $8 + 2 = 10$

d. $9 + 0 = 9$

e. $4 + 3 = 7$

f. $3 + 1 = 4$

Avanza Hay 13 *pennies* en total. ¿Cuántos hay en el monedero?

11 *pennies*

Piensa y resuelve THINK TANK

Escribe un número para hacer cada balanza verdadera.

9 2	A	B	A 2	A =
				B =

Palabras en acción

a. Escribe una historia de suma. Puedes utilizar palabras de la lista como ayuda.

| suma |
| igual |
| hace |
| une |
| y |
| total |
| grupo |

b. Dibuja una imagen que corresponda a tu historia.

c. Escribe una ecuación que corresponda a la imagen.

☐ + ☐ = ☐

Piensa y resuelve THINK TANK

Escribe un número para hacer cada balanza verdadera.

9 2 | A | B | A 2

A = 11

B = 13

⊛ **Palabras en acción**

a. Escribe una historia de suma. Puedes utilizar palabras de la lista como ayuda.

suma
igual
hace
une
y
total
grupo

Tengo 2 manzanas. Mi amigo tiene 3 manzanas. Eso hace 5 manzanas en total.
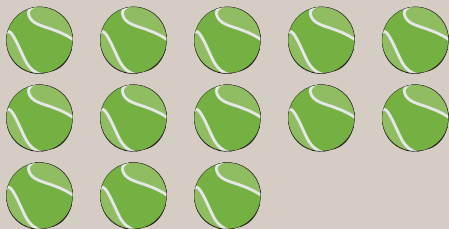
b. Dibuja una imagen que corresponda a tu historia.
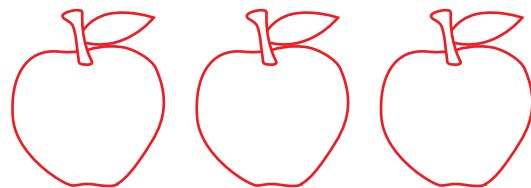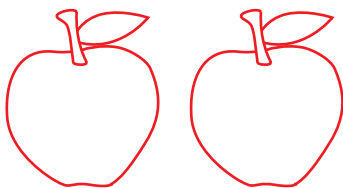
c. Escribe una ecuación que corresponda a la imagen.

2 + 3 = 5

Práctica continua

1. Escribe el numeral que corresponda a la imagen.

a.

b.
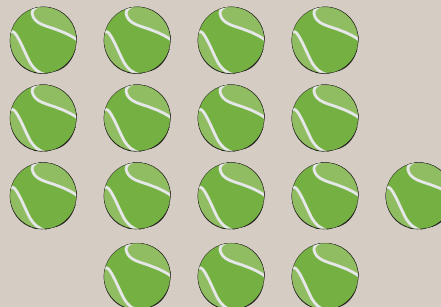
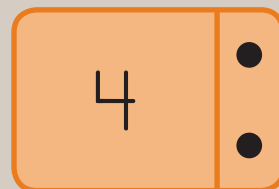**2.** Escribe la operación básica de suma que corresponda a cada tarjeta.

a.

7 | ••

☐ + ☐ = ☐

b.

6 | •

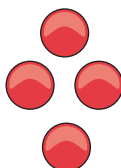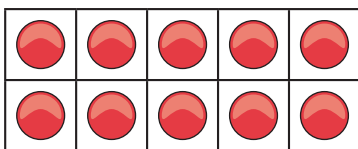☐ + ☐ = ☐

c.

4 | ••

☐ + ☐ = ☐
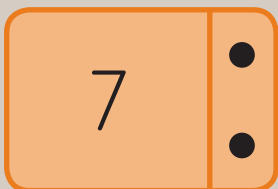
Prepárate para el módulo 3

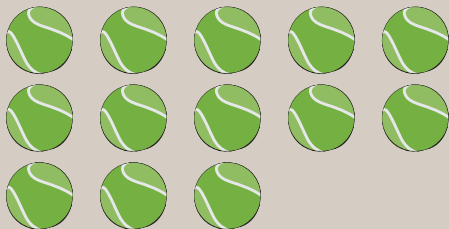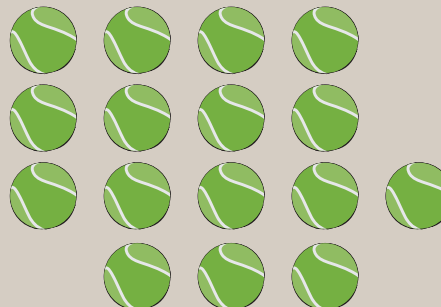Escribe el número de decenas y unidades.

a.

☐ decena y ☐ unidades

b.
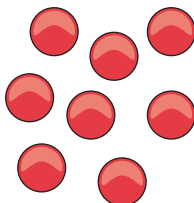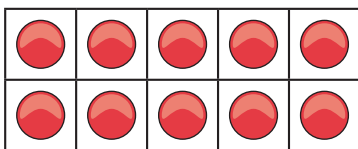
☐ decena y ☐ unidades

Práctica continua

1. Escribe el numeral que corresponda a la imagen.

a.

13

b.

16

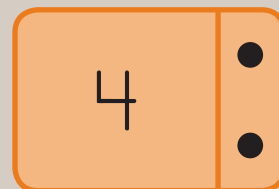**2.** Escribe la operación básica de suma que corresponda a cada tarjeta.

a.

7

7 + **2** = **9**

b.

6
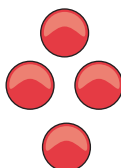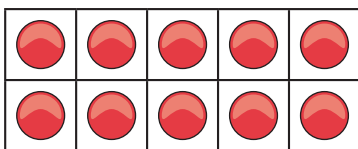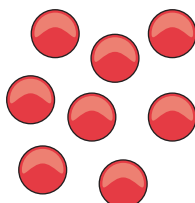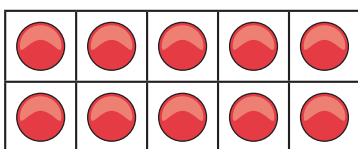
6 + **1** = **7**

c.

4
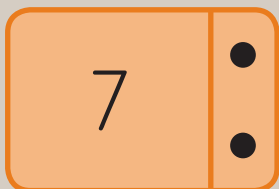
4 + **2** = **6**

Prepárate para el módulo 3

Escribe el número de decenas y unidades.

a.

1 decena y **4** unidades

b.

1 decena y **8** unidades