








triumphlearning™
**Common
Core Coach**
Mathematics **2**



First Edition | triumphlearning™

Contents

Common Core
State Standards

Domain 1	Operations and Algebraic Thinking	5	
Lesson 1	 Problem Solving: Addition	6	2.OA.1
Lesson 2	 Problem Solving: Subtraction	14	2.OA.1
Lesson 3	 Sums to 20	23	2.OA.2
Lesson 4	Odd and Even Numbers.	31	2.OA.3
Lesson 5	Arrays	38	2.OA.4
	Domain 1 Review/Performance Task	44	
.....			
Domain 2	Number and Operations in Base Ten	53	
Lesson 6	Hundreds, Tens, and Ones	54	2.NBT.1.a, 2.NBT.1.b
Lesson 7	Skip-Counting	62	2.NBT.2
Lesson 8	Reading and Writing Numbers to 1000	68	2.NBT.3
Lesson 9	Comparing Numbers	74	2.NBT.4
Lesson 10	 Adding Two-Digit Numbers	80	2.NBT.5, 2.NBT.9
Lesson 11	 Subtracting Two-Digit Numbers	86	2.NBT.5, 2.NBT.9
Lesson 12	Adding More than Two Numbers.	94	2.NBT.6
Lesson 13	Adding Three-Digit Numbers	100	2.NBT.7, 2.NBT.9
Lesson 14	Subtracting Three-Digit Numbers.	107	2.NBT.7, 2.NBT.9
Lesson 15	Mental Math with 10 and 100	114	2.NBT.8
	Domain 2 Review/Performance Task	120	





Problem Solving



Fluency Lesson







Performance Task

Domain 3	Measurement and Data	129	
Lesson 16	Measuring Length: Inches and Feet	130	2.MD.1
Lesson 17	Measuring Length: Centimeters and Meters	136	2.MD.1
Lesson 18	Measuring with Different Units	141	2.MD.2
Lesson 19	Estimating Lengths	146	2.MD.3
Lesson 20	Finding the Difference between Lengths	151	2.MD.4
Lesson 21	Adding and Subtracting Lengths	156	2.MD.5
Lesson 22	Number Lines	162	2.MD.6
Lesson 23	Telling Time	168	2.MD.7
Lesson 24	Money	175	2.MD.8
Lesson 25	Line Plots.	180	2.MD.9
Lesson 26	Picture Graphs.	186	2.MD.10
Lesson 27	Bar Graphs	192	2.MD.10
	Domain 3 Review/Performance Task	198	
.....			
Domain 4	Geometry	207	
Lesson 28	Flat and Solid Shapes	208	2.G.1
Lesson 29	Making Same-Size Squares in Rectangles	215	2.G.2
Lesson 30	Making Equal Shares	221	2.G.3
	Domain 4 Review/Performance Task	226	
Glossary	230	
Math Tools	243	

Domain I

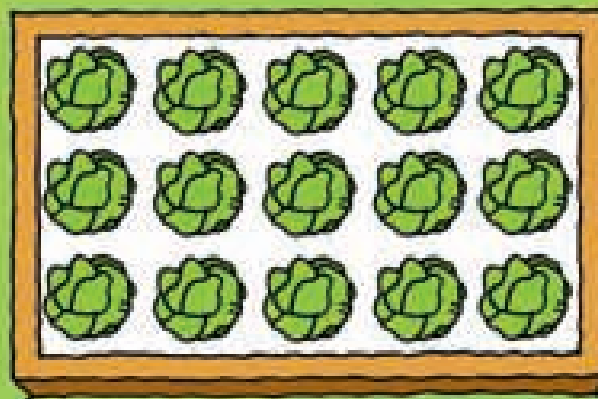
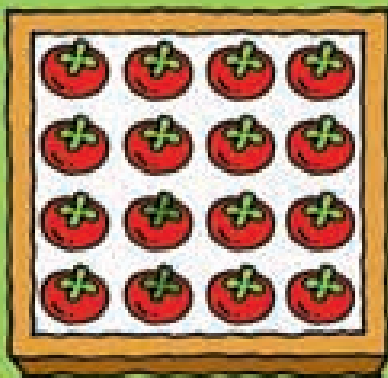
Operations and Algebraic Thinking

Lesson 1	 Problem Solving: Addition	6
Lesson 2	 Problem Solving: Subtraction	14
Lesson 3	 Sums to 20	23
Lesson 4	Odd and Even Numbers	31
Lesson 5	Arrays	38
	Domain I Review/Performance Task	44

Domain I

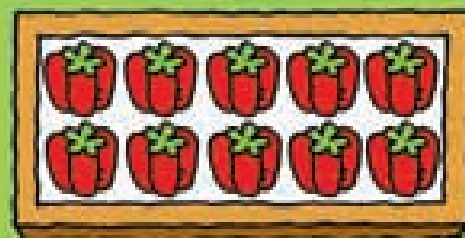
Operations and Algebraic Thinking

Tomatoes

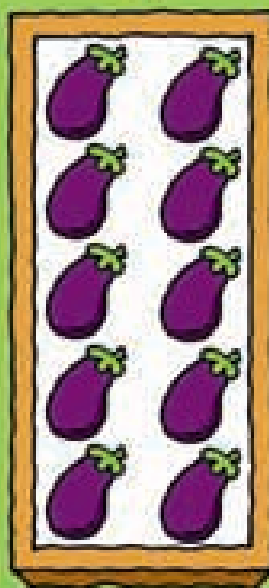


Cabbage

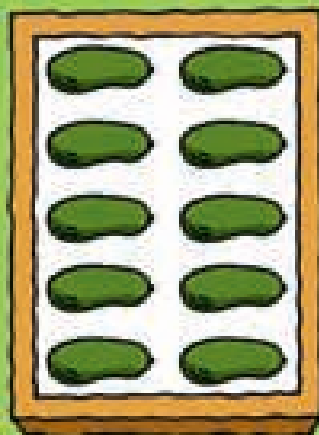
Peppers



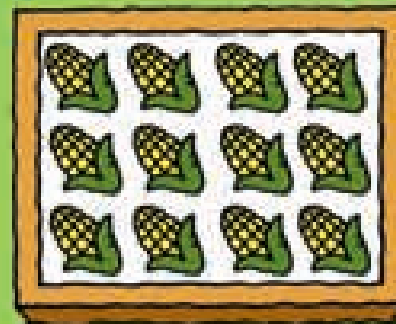
Eggplant



Zucchini



Corn



How many more tomatoes than peppers are in the garden?

Lesson 1 Problem Solving: Addition

★ You can **add** to solve word problems.
The numbers you add are **addends**.
The answer is the **sum**.

Draw groups and put them together to find how many in all.

Example 1

Melanie has 7 marbles.

Diego has 12 marbles.

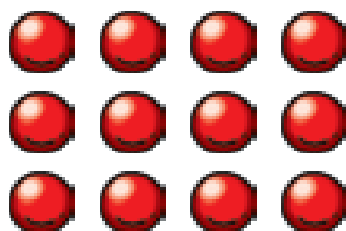
How many marbles do Melanie and Diego have in all?

$$7 + 12 = \square$$



Melanie's marbles

7

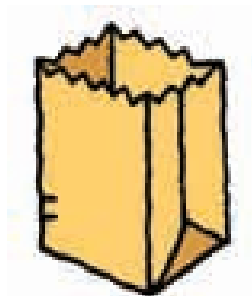


Diego's marbles

+

12

=



marbles in all

19

▶ Melanie and Diego have _____ marbles in all.

★ Write an **equation** to solve an addition word problem. Use a symbol, such as \square or \triangle , to stand for a missing number.

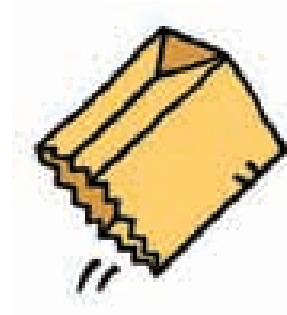
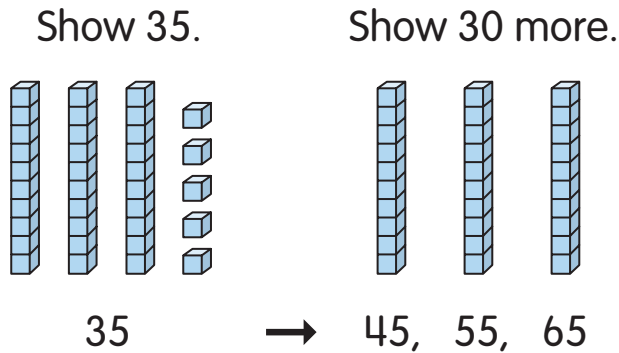
Example 2

Yuri has 35 buttons.

Ann gives him a bag with 30 more buttons.

How many buttons does Yuri have now?

$$35 + 30 = \square$$



$$35 + 30 = \boxed{65}$$

► Yuri now has _____ buttons.

Example 3

Zoey and Kevin collect coins.

Zoey has 40 more coins than Kevin has.

Kevin has 38 coins.

How many coins does Zoey have?

Zoey has **40 more** coins than Kevin.

So **add 40** to Kevin's number to find Zoey's number.

Write and solve an equation.

Kevin's number	plus	40	equals	Zoey's number
↓	↓	↓	↓	↓
38	+	40	=	■

$$40 = 10 + 10 + 10 + 10$$

Add 10 to make 40.

$$38 + 10 = 48$$

$$48 + 10 = 58$$

$$58 + 10 = 68$$

$$68 + 10 = 78$$

So $38 + 40 = \boxed{78}$.

► Zoey has _____ coins.

★ Use a drawing to show that two addends are joined together to make the sum.

Example 4

Kayla has some stamps.

Liam has 63 stamps.

Kayla and Liam have 83 stamps in all.

How many stamps does Kayla have?

■ + 63 = 83




Start with the addend you know: Liam's 63 stamps

Add 10. $63 + 10 = 73$

Add 10 more. $73 + 10 = 83$

So $63 + 20 = 83$.

 + 63 = 83

► Kayla has _____ stamps.

★ Sometimes word problems have more than one step.

Example 5



Austin had 12 blue blocks and 3 red blocks.

His dad gave him some more blocks.

Now Austin has 45 blocks.

How many blocks did Austin's dad give him?

1

Find how many blocks Austin had at the start.

$$12 + 3 = \blacksquare$$

Count on 3: 12 → 13, 14, 15

$$\text{So } 12 + 3 = \boxed{15}.$$

Austin had 15 blocks at the start.



2

Find how many blocks Austin's dad gave him.

$$15 + \blacktriangle = 45$$

$$\text{Add 10.} \quad 15 + 10 = 25$$

$$\text{Add 10 more.} \quad 25 + 10 = 35$$

$$\text{Add 10 more.} \quad 35 + 10 = 45$$

$$\text{So } 15 + \triangle = 45$$

► Austin's dad gave him _____ blocks.

Maya has 27 puzzle pieces.

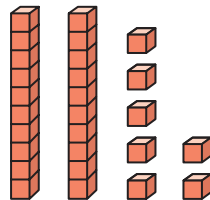
Jason has 50 more puzzle pieces than Maya.

How many puzzle pieces does Jason have?

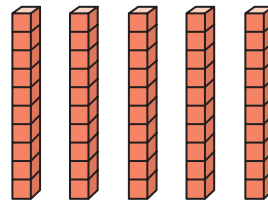
$$27 + 50 = \square$$

Use models to show the puzzle pieces.

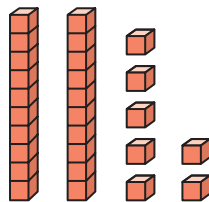
Maya's 27 pieces



50 more



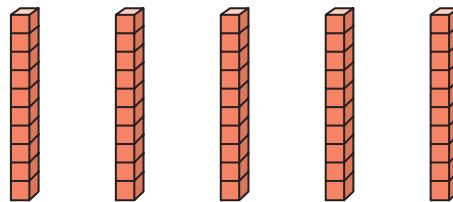
Count on to add.



27



50 more



37

$$27 + 50 = \square$$

▶ Jason has _____ puzzle pieces.

Practice

- 1** Ruby had some toys. She got 20 more toys. Now she has 54 toys in all. How many toys did Ruby have to start?

$$\square + 20 = 54$$

-
- 2** Kent plays the organ for 45 minutes. He has lunch and plays for 30 more minutes. How long does Kent play the organ?

$$45 + 30 = \square$$

-
- 3** Lily collected 39 seashells. Sue collected some seashells, too. In all, they collected 89 seashells. How many seashells did Sue collect?

$$39 + \square = 89$$

- 4 Serge had 24 model cars and 8 model trucks. His uncle gives him 20 more model cars and trucks. How many model cars and trucks in all does Serge have now?

$$24 + 8 = \square$$

$$\square + 20 = \triangle$$

- 5 **SOLVE** Lauren had 22 stamps. She bought 30 more stamps. Then her friend gave her 6 stamps. How many stamps does Lauren have in all?

Write equations and solve the problem.
Show your work.