Here's a preview of next year. These lessons help you step up to Grade 1.

**STEP UP Lessons**

1. Introducing Addition Expressions and Equations  **1.OA.C.6** .......................... 851
2. Facts with 5 on a Ten-Frame **1.OA.C.6** .................................................. 855
3. Add in Any Order **1.OA.B.3** .................................................. 859
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10. 1 More, 1 Less; 10 More, 10 Less **1.NBT.B.3, 1.NBT.C.5** .......................... 887
Your bag has 2 different colors of connecting cubes. Take out a handful of cubes. Make sure to get some cubes of each color. How can you use numbers to show how many cubes you picked in all? Show how.
1. What can you see in all? Show me! What can you find out? Tell me.

2. Practice: Guided

Then write an equation.

Use the model. Write the parts.

The parts are 4 and 2.

6 in all. The sum of 4 and 2.

You can write an equation to show the parts and the whole.

You can add the parts to find the sum.

Then he picked 2 blue.

Kenny picked 4 red cubes.

3 + 3 = 6

___ + ___ = ___

___ + ___
Independent Practice

3. Use the model. Write the parts. Then write an equation.

   + 
   + = 

4. Use the model. Write the parts. Then write an equation.

   + 
   + = 

5. Use the model. Write the parts. Then write an equation.

   + 
   + = 

6. Higher Order Thinking

   Jim picked up 9 rocks. He picked up 4 of them on his way to school. He picked up the rest on his way home. How many rocks did Jim pick up on his way home? Draw a picture to solve. Then write an equation.

   + = __
6. **Higher Order Thinking** Draw a picture to show an addition story about red worms and brown worms. Write an equation to tell how many worms there are in all.

$$\boxed{\_\_\_ + \_\_\_ = \_\_\_\_}$$

7. **MP.2 Reasoning** Ben found 4 orange leaves. Then he found 3 yellow leaves. How many leaves did Ben find in all?

Draw a picture to show the story. Then write an equation.

8. **Assessment** Ava drew 9 apples. How many red apples did she draw?

Which equation matches this story?

A) $9 + 3 = 12$

B) $4 + 5 = 9$

C) $3 + 6 = 9$

D) $3 + 3 = 6$
Put some counters on the bottom row of the ten-frame. What addition equation can you write to match the counters?
1. \[ 10 = \_ + \_ \\
\_ + \_ = \_ + \_ \\
5 + 6 = \_ + \_ \\
6 = \_ + \_ \\
5 + 5 = \_ + \_ \\
5 + 10 = \_ + \_ \\
\]

2. \[ 2 = \_ + \_ \\
\_ + \_ = \_ + \_ \\
2 + 8 = \_ + \_ \\
8 = \_ + \_ \\
10 = \_ + \_ \\
\]

Then write an addition fact for 10.
Write an addition fact with 5.
Look at the ten-frames.

Then add 3 more.

Then write an addition fact with 5.
You have 8. Make 10.
The ten-frame shows 8. 8 plus 2 more is 10.
2 boxes are empty. Add 2.
The ten-frame shows another addition fact. There are 8 counters in the ten-frame.
5 and 3 more is 8.

Show me! How does a ten-frame help you add? Do you understand?
### Independent Practice

Look at the ten-frames. Write an addition fact with 5. Then write an addition fact for 10.

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<td>5 + ___ = ___</td>
<td>5 + ___ = ___</td>
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</table>

____ + ____ = 10  
____ + ____ = 10  
____ + ____ = 10

### Higher Order Thinking

Using 2 colors, draw counters in the ten-frames to match the addition equations. Then write the missing numbers.

6. Higher Order Thinking Using 2 colors, draw counters in the ten-frames to match the addition equations. Then write the missing numbers.

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<tr>
<td>9 + ___ = 10</td>
<td>7 + ___ = 10</td>
<td>5 + ___ = 10</td>
</tr>
</tbody>
</table>

Which number will make 10?
Football's Scott's coach brought some more. Scott's team now has 10 footballs. Scott's coach brings 5 footballs. Scott's team now has 15 footballs.

Which addition fact shows how many footballs Scott's coach brought?

10 + 5 = 15

Which addition fact shows how many footballs Scott's coach brought?

10 + 5 = 15

For your story:

Which model can you use to write a new story about adding to 10 in the ten-frame?

Which model can you use to write a new story about adding to 10 in the ten-frame?

Draw counters in the ten-frame. Which chart did the girls read in all?

Math Practices and Problem Solving
Write an addition equation for the green and yellow cubes in each cube tower. How are the addition equations the same? How are they different?

[Image of cube towers with equations to be written]
1. 3 + 2 = 5

2. 5 + 3 is the same as 3 + 5.

3. Use cubes to show that the order of the addends does not change the sum.

Then write the addition equations.

Guided Practice

You can write the equation: 2 + 4 = 6.

You can change the order of the addends. 4 + 2 equals 6.

How can you show me?
Write the sum. Then change the order of the addends. Write the new addition equation.

3. \[2 + 6 = \_\_] 
   \[\_\_ + \_\_ = \_\_\_\_\_\_\_\_\]

4. \[3 + 6 = \_\_\]
   \[\_\_ + \_\_ = \_\_\_\_\_\_\_\]

5. \[\_\_ = 1 + 7\]
   \[\_\_ = \_\_ + \_\_\]

6. \[4 + 3 = \_\_\]
   \[\_\_ + \_\_ = \_\_\_\_\_\_\_\]

7. \[4 + 5 = \_\_\]
   \[\_\_ + \_\_ = \_\_\_\_\_\_\_\]

8. \[4 + 2 = \_\_\]
   \[\_\_ + \_\_ = \_\_\_\_\_\_\_\]

Number Sense Use the numbers on the cards to write 2 addition equations.

9. \[1\ 6\ 5\]
   \[\_\_ + \_\_ = \_\_\_\]
   \[\_\_ + \_\_ = \_\_\_\_\_\_\_\]

10. \[7\ 9\ 2\]
    \[\_\_ = \_\_ + \_\_\]
    \[\_\_ = \_\_ + \_\_\_\_\]
2 and 8, both addition equations have a sum of 8.

\[ 2 + 2 = 4 \]
\[ 8 + \_ = 8 \]

Write 2 addition equations. Make the rest red. Make some blue. Draw a picture of 4 fish.

\[ \_ = \_ + \_] \]
\[ \_ = \_ + \_]
Alex has 5 connecting cubes on the table. He hides some cubes. How can you use numbers to show how many cubes are hidden?
Do You Understand?  
Show Me! The whole is 9. One of the parts is 3. How can you find the difference?

Guided Practice  
Then write an equation.

1.  
\[ \frac{6}{4} = 2 \]

2.  
8 minus 5 equals 3.

Alex has 8 cubes. He hides some cubes. You can describe the whole as 8 and one of the parts as 5. Find the hidden part by writing \(8 - 5\). You can subtract to find the difference. \(8 - 5 = 3\).

You can write an equation.

5 is the part you see. What is the hidden part?
Complete the model. Write the parts. Then write a subtraction sentence.

3. 

4. 

5. 

6. Higher Order Thinking  There are 7 kittens in all. 1 is inside a basket. The rest are outside. How many kittens are outside the basket? Draw a picture to show the story. Then write the missing part.

7 - ___ = 1
Choose the subtraction sentence that matches the story. How many marbles did Rob give to his friend? He has 2 marbles left. How many marbles did he give some marbles to a friend. He gave 9 marbles. Rob has 6 marbles. The model and a subtraction sentence about the model. Write a subtraction sentence. 5 – 2 = 3
6 – 4 = 2
7 – 2 = 5
7 – 3 = 4

How many flowers does Tony still have? He gives 4 flowers to his sister. Tony picks 7 flowers. The model. Solve each problem below.
Jenna has 6 beach balls. 4 of them blow to the other side of the pool. How many does she have left?

How can you use an addition fact to find the answer to $6 - 4 = ____$? Use counters to help you solve the problem.

____ + ____ = ____

So, ____ - ____ = ____.
Do You Understand?
Show Me! How can an addition fact help you solve $7 - 6$?

Guided Practice
Think addition to help you subtract. Draw the missing part. Then write the numbers.

1. $3 + \underline{?} = 4$
   - So, $4 - 3 = \underline{\ ?}$

2. $5 + \underline{?} = 8$
   - So, $8 - 5 = \underline{\ ?}$

You can use addition to help you subtract.

What can I add to 3 to make 7?
The missing part is 4.

Think of the addition fact to solve the subtraction equation.

Think addition to help you subtract.

So, $4 - 3 = 1$.
Think addition to help you subtract. Draw the missing part. Then write the numbers.

3. \[
\begin{array}{c}
6 + \_
\end{array}
\Rightarrow
9
\]
So, \(9 - 6 = \_
\)

4. \[
\begin{array}{c}
2 + \_
\end{array}
\Rightarrow
5
\]
So, \(5 - 2 = \_
\)

5. \[
\begin{array}{c}
3 + \_
\end{array}
\Rightarrow
7
\]
So, \(7 - 3 = \_
\)

6. Higher Order Thinking Draw the shape to complete the equation.

If \[
\begin{array}{c}
\text{triangle} + \text{star} = \text{rectangle}
\end{array}
\]
then \[
\begin{array}{c}
\text{rectangle} - \text{triangle} = \_
\end{array}
\]
Choose all that apply.

Which can help you solve the problem?

Which addition facts

9. @ Assessment

8. Higher Order Thinking

Erin has a box that holds 8 crayons. 2 crayons are missing. Is to find how many are missing. Erin uses addition.

10 crayons.

8 + 2 = 10

Explain.

Erin correctly.

How many tickets does Claire still need? You can use

She has 4 tickets. She needs some more tickets.

Which tool could help you solve the problem?

Which tool could help you solve the problem?

Which tool could help you solve the problem?

Equation to solve.

Write an equation and a subtraction.

Write an equation and a subtraction.

Tools to solve.

Which tools you could use.

Claire needs 9 tickets to get on a ride.

Claire needs 9 tickets to get on a ride.
Carlos made stacks of 6 books, 4 books, and 6 books. How can you use addition to find the number of books in all 3 stacks? Write 2 different equations to show how many books in all.
Do You Understand?

Show Me! Why can you pick any 2 numbers to add first when you add 3 numbers?

Guided Practice

☆ Add the circled numbers first. Write their sum in the box. Then write the sum of all 3 numbers.

1. $2 + 7 + 3 = 12$
   $2 + 7 + 3 = 12$

2. $6 + 5 + 4 = \text{__} = \text{__}$
   $6 + 5 + 4 = \text{__}$

You can add any 2 numbers first.
You can make a double.
You can add 3 numbers.
You can make 10.
Circle 2 numbers to add first. Write their sum in the box at the right. Then write the sum of all 3 numbers.

4. \[ \begin{array}{c}
5 \\
4 \\
+ 8 \\
\hline
\end{array} \]

5. \[ \begin{array}{c}
2 \\
7 \\
+ 4 \\
\hline
\end{array} \]

6. \[ \begin{array}{c}
6 \\
5 \\
+ 1 \\
\hline
\end{array} \]

7. \[ \begin{array}{c}
7 \\
5 \\
+ 3 \\
\hline
\end{array} \]

8. \[ \begin{array}{c}
4 \\
6 \\
+ 4 \\
\hline
\end{array} \]

9. **Number Sense**

Find the missing numbers. The numbers on each branch add up to 17.

Each branch has 3 numbers that add up to 17.
André and next year. Explain. He added 7 + 3 first. What should you know how many items he bought in? 5 markers, and 3 pens. He wants to buy 7 pencils. André buys 7 pencils.

12. Assessment: Explain how to add 9 + 6 + 1. Use pictures, numbers, or words.

13. Higher Order Thinking: Explain how to put on all three shelves!

- I book on the last shelf. How many books did Oscar put a shelf and 3 books on another shelf. Then he puts 9 books on another shelf.

Write an equation to solve each problem below.

Math Practices and Problem Solving
Marta put counters on some ten-frames. What is an easy way to count how many counters there are in all? Count how many and write the number.
Show Me! When might it be better to count by 10s instead of by 1s?

<table>
<thead>
<tr>
<th>1 ten</th>
<th>2 tens</th>
<th>3 tens</th>
<th>4 tens</th>
<th>5 tens</th>
<th>6 tens</th>
<th>7 tens</th>
<th>8 tens</th>
<th>9 tens</th>
<th>10 tens</th>
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<td>ten</td>
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<td>forty</td>
<td>fifty</td>
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<td>one hundred</td>
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<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>

Guided Practice

Count by 10s. Write the numbers and the number word.

1. thirty 30
2. ___ tens ___

11 tens is 110. One hundred ten.

12 tens is 120. One hundred twenty.
Independent Practice

Count by 10s. Write the numbers and the number word.

3. ______ tens
   ______

4. ______ tens
   ______

5. ______ tens
   ______

Write the missing numbers.

6. Higher Order Thinking
   Mike writes a pattern.
   He forgets to write some numbers.
   What numbers did Mike forget to write?
   10, 20, 30, _____, _____, 60, 70, _____, 90, _____, 110, 120

What is Mike’s pattern?
10. How many books does Marisol want to show how many books Marisol could have?

A 30
B 40
C 45
D 50

What numbers do both boys say?

10, 5, 50

Write the numbers Kobe counts.

Cory counts by 5s to 50. Kobe counts by 10s to 50. Write the numbers Cory says.

7. MP.2 Reasoning Leah has 4 boxes. 10 books are in each box. How many books does Leah have in all?

tens

8. MP.1 Make Sense Bo has 6 boxes. There are 10 books in each box. How many books does Bo have in all?

tens

9. Higher Order Thinking Cory counts by 5s to 50. Kobe counts by 10s to 50. Write the numbers Cory says.
Jada and Alex take turns counting by 1s. Jada counts from 98 up to 100. Now, it’s Alex’s turn to keep counting. Say the next 3 numbers Alex should count. Tell how you know you’re right.

98, 99, 100
1. How would you say and show 110 when you count by 1s. Write the numbers.

Guided Practice

1, 98, 99, 100, 101, 102

2. When you count higher, you start with the words. One hundred.

3. 112, 115, 118, 120

You say ever 5 ones. You say 105.

Counting by 1s, you keep the words.

The next number you say is one hundred one. Because you have one hundred one, you say one hundred and one.

This block shows 100.

Do you understand?

Show me! How would you say one hundred and one, 101.

Count forward by 1s. Write the numbers.

Practice

16, 17, 18, 19, 20

Eleven

Sixteen
Independent Practice
Count forward by 1s. Write the numbers.

4. 97, ____, ____, ____, 101
5. ____, 104, ____, ____, 107

6. ____, 117, ____, 119, ____
7. ____, 101, 102, ____, ____

8. ____, ____, 111, ____, 113
9. 111, ____, ____, 114, ____

Use the clues to find each mystery number.

10. **Number Sense**  Clue 1: The number comes after 112. Clue 2: The number comes before 116.
The mystery number might be:  
    ____, ____, ____

    Clue 3: The number has 4 ones. 
Circle the mystery number.

11. **Number Sense**  Clue 1: The number comes before 120. Clue 2: The number comes after 114.
The mystery number might be:  
    ____, ____, ____, ____

    Clue 3: The number has 7 ones. 
Circle the mystery number.
Choose all that apply.

Correct order for counting forward by 15?

16. Assessment Which shows the higher order thinking? Pick a number greater than 100 and less than 116.

15. Miles Many miles will she have hiked? Hiked 102 miles. After hiking on Friday, how many miles will she have hiked?


13. In this chart, Manual writes the numbers 105 to 111 in order. Then he spills 10, 11, 07. Then 117. What number does she say? She says the number that is one more. Marlo is counting to 120.

Solve each problem below.
Guess how many cubes are in your bag. Then empty the bag in the space below. Without counting each cube, guess how many cubes there are. Write each guess. Now count the cubes and write the total number of cubes.
Do You Understand?
Show Me! How are these numbers alike? How are they different?

Guided Practice
Count the tens and ones. Then write the numbers.

35
35

The 3 in 35 is the tens digit. The 5 in 35 is the ones digit.

35 stands for
3 tens and 5 ones.

You can use a model to show the tens and ones.
The tens digit goes on the left. The ones digit goes on the right.
Independent Practice

Count the tens and ones. Then write the numbers.

3. Tens | Ones
   |   |   |
   |   |   |

4. Tens | Ones
   |   |   |
   |   |   |

5. Tens | Ones
   |   |   |
   |   |   |

6. Higher Order Thinking Mary has a number. It has the same number of tens and ones. What could Mary’s number be?
9. **Assessment**

There are 19 juice boxes.

**Number of Juice Cartons?**

- Which model shows the number of juice cartons?

**My number is**

- Than 75. Than write the number.
- Greater than 25 and less than 75. Then write the number.

8. **Higher Order Thinking**

Draw a picture to show a number greater than 25 and less than 75. Then write the number.

**Math Practices and Problem Solving**

- **Tools**: Use tools.
- **MP.4**: Represent problems.
How can you use place-value blocks to find the number that comes after 12? What about the number that comes before 12? Show your work. Write the numbers.

The number after 12 is

The number before 12 is
1. 34

2. 14

Use place-value blocks if needed.

Guided Practice

Complete each sentence.

10 less than 34 is 24.

10 more than 34 is 44.

34 is 3 less than 37.

35 is 34 more than 24.

Find 10 more than a number.

Do you understand?
Complete each sentence. Use place-value blocks if needed.

3. 71
   1 more than 71 is _____.
   1 less than 71 is _____.
   10 more than 71 is _____.
   10 less than 71 is _____.

4. 50
   1 more than 50 is _____.
   1 less than 50 is _____.
   10 more than 50 is _____.
   10 less than 50 is _____.

5. 19
   1 more than 19 is _____.
   1 less than 19 is _____.
   10 more than 19 is _____.
   10 less than 19 is _____.

6. 49
   1 more than 49 is _____.
   1 less than 49 is _____.
   10 more than 49 is _____.
   10 less than 49 is _____.

7. 85
   1 more than 85 is _____.
   1 less than 85 is _____.
   10 more than 85 is _____.
   10 less than 85 is _____.

8. 42
   1 more than 42 is _____.
   1 less than 42 is _____.
   10 more than 42 is _____.
   10 less than 42 is _____.

9. Higher Order Thinking
   Circle the picture that shows 10 more than 34. Explain how you know.
   [Diagram of place-value blocks]
Glossary

below

beside

break apart

6 - 3 = 3

attribute

balance scale

3 + 2 = 5

add

3 and 5 is 8.

above

addition sentence

behind
<table>
<thead>
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<td>31 32 22 33 34 23 24 25</td>
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</table>
cube

cylinder

decade

difference

\[ 8 - 3 = 5 \]

eight

eleven

equal

equal sign (=)

equation

\[ 4 + 3 = 7 \]

\[ 5 + 3 = 8 \]

\[ 8 = 8 \]
side

shorter

17

seventeen

slide

16

sixteen

six

stack

square

sphere

sort