Simply Addition

Learning to Add with a Rekenrek.

Level 1 - Addition within Ten



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MercyforMarthas.com

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Level 1: Addition within 10

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Introduction
Here are the most sequential and incremental steps to using a Rekenrek for addition. Both the student and the teacher should have their own rekenrek, so the teacher can model on her rekenrek and the student can copy on his.

Modeling and copying: Most of the learning will happen by the student copying your work on his/her own rekenrek. Always introduce each new concept by demonstrating first. Encourage your student to copy *everything* you do on his/her own rekenrek. Once your student has fully grasped a concept, slowly encourage independence, first by taking turns and then by giving the student work to do independently.

Worksheet Tip: Make ***three*** copies of each worksheet: one for your student and one for yourself. Do the worksheets together, so your student can copy what you are doing by watching you work. Another day, give him the same worksheets to try independently.

Keep the **tone of each lesson** playful and light-hearted. Never show disappointment when a student makes a mistake. Mistakes are part of the learning process but should be down-played. Offer lots of encouragement and praise for every effort.

It is not expected that a child complete one step in a day or even in a week. Spend as much time as needed for mastery before moving on. Depending on the child, some steps may take several weeks.

Materials you need:
- Two 20 bead rekenreks (one for student, one for teacher)
- Index cards to make addition flash cards.
- Number lines (see appendix)
- Rekenrek cards (see appendix)

To make flash cards: write the equation on one side of an index card and the answer on the other. This way, your student can flip the card over to check the answer. Use the color coding indicated on the following page.

3 + 1 =	4



Practice math facts with the flash cards or addition worksheets daily.

20-Bead Rekenreks are available at Amazon.

Addition Facts within Ten

1+1=2	1+2=3	1+3=4	1+4=5	1+5=6	1+6=7	1+7=8	1+8=9	1+9=10
2+1=3	**2+2=4**	2+3=5	2+4=6	2+5=7	2+6=8	2+7=9	2+8=10	
3+1=4	3+2=5	**3+3=6**	3+4=7	3+5=8	3+6=9	3+7=10		
4+1=5	4+2=6	4+3=7	**4+4=8**	4+5=9	4+6=10			
5+1=6	5+2=7	5+3=8	5+4=9	**5+5=10**				
6+1=7	6+2=8	6+3=9	6+4=10					
7+1=8	7+2=9	7+3=10						
8+1=9	8+2=10							
9+1=10								

Red: doubles facts
Blue: +1 facts
Teal: +2 facts
Orange: Facts that make ten
Green: +5 facts
Black: all other facts

Practice facts by color grouping to help with understanding and memorization

Rekenrek Addition

Level 1

Step 1: Learning to Subsitize 1-5

Learning to subsitize **is a key step** in learning to use the rekenrek properly. This is learning to recognize and make the numbers **without counting.**

1. Practice counting 1- 5 while moving one bead at a time on the rekenrek.

2. Learn to subsitize the **number one**. Show *one* on the top row of the rekenrek, then on the second row. Help your student find *one* on the top and bottom row of his rekenrek.



3. Learn to subsitize the **number two**. Show *two* on the top row of the rekenrek **(without counting)** then on the second row. Help your student find *two* on the top and bottom row of his rekenrek.



4. Learn to subsitize the **number three**. Show *three* on the top row of the rekenrek **(without counting)** then on the second row. Help your student find *three* on the top and bottom row of his rekenrek.



4. Continue with numbers four and five. Point out that *five* is all the red beads.

5. Review:
   - Take turns building and identifying the numbers 1-5 without counting on the rekenrek.
   - Use rekenrek flash cards to match, select, and identify 1-5.

Tip: Line up grapes, blueberries, buttons, etc. on the ten frame (see appendix) and practice subsitizing 1-5 items.

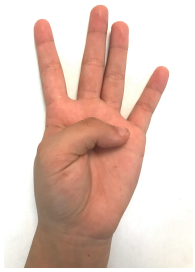
Tip: Teach your child to subsitize 1-5 fingers on the left hand.

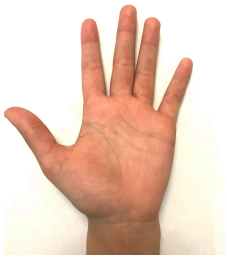
Step 1 Math in Real Life
How many fingers?









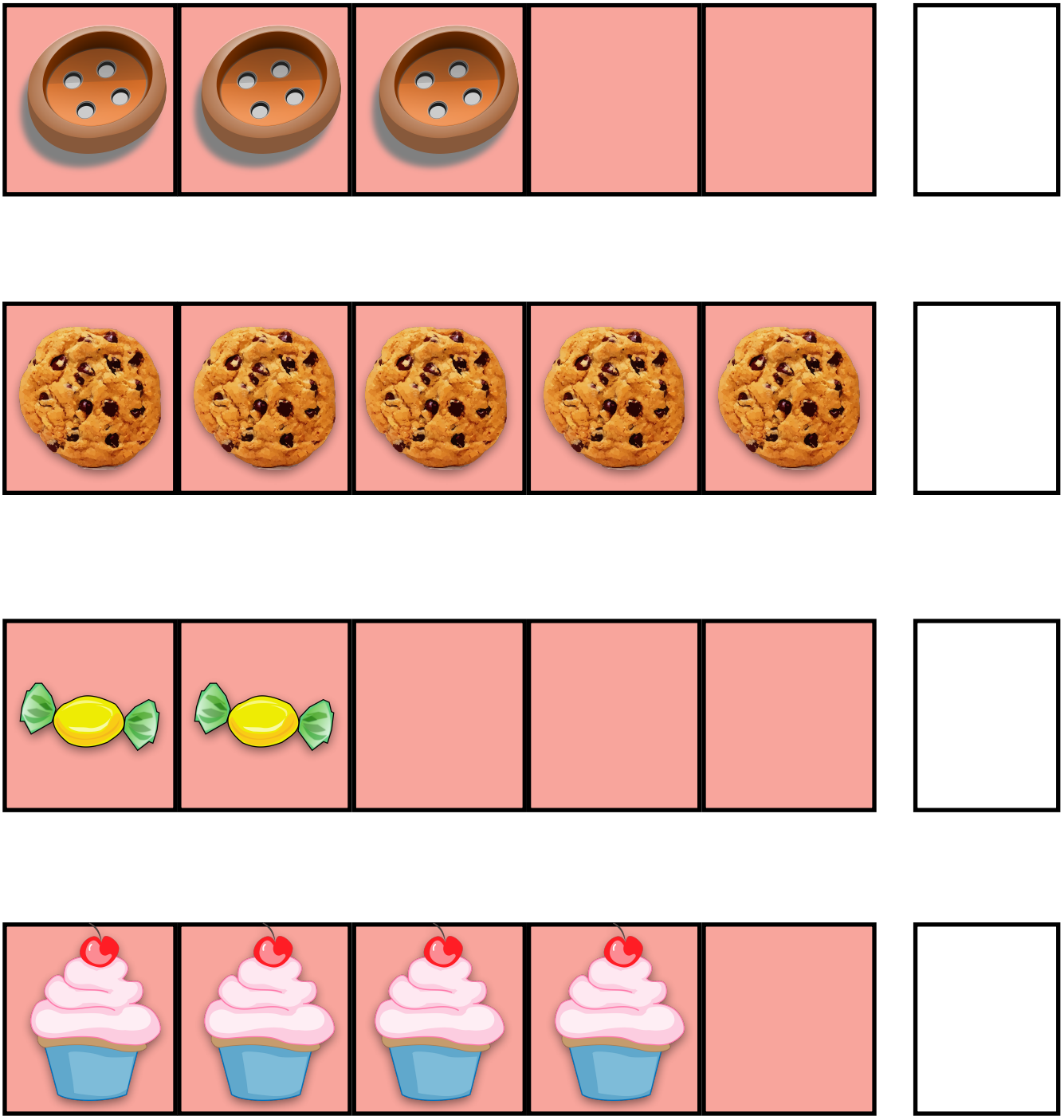


Can you learn to make these numbers on your hands without counting the fingers?

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Step 1 Math in Real Life

Count the items. Then name how many without counting.

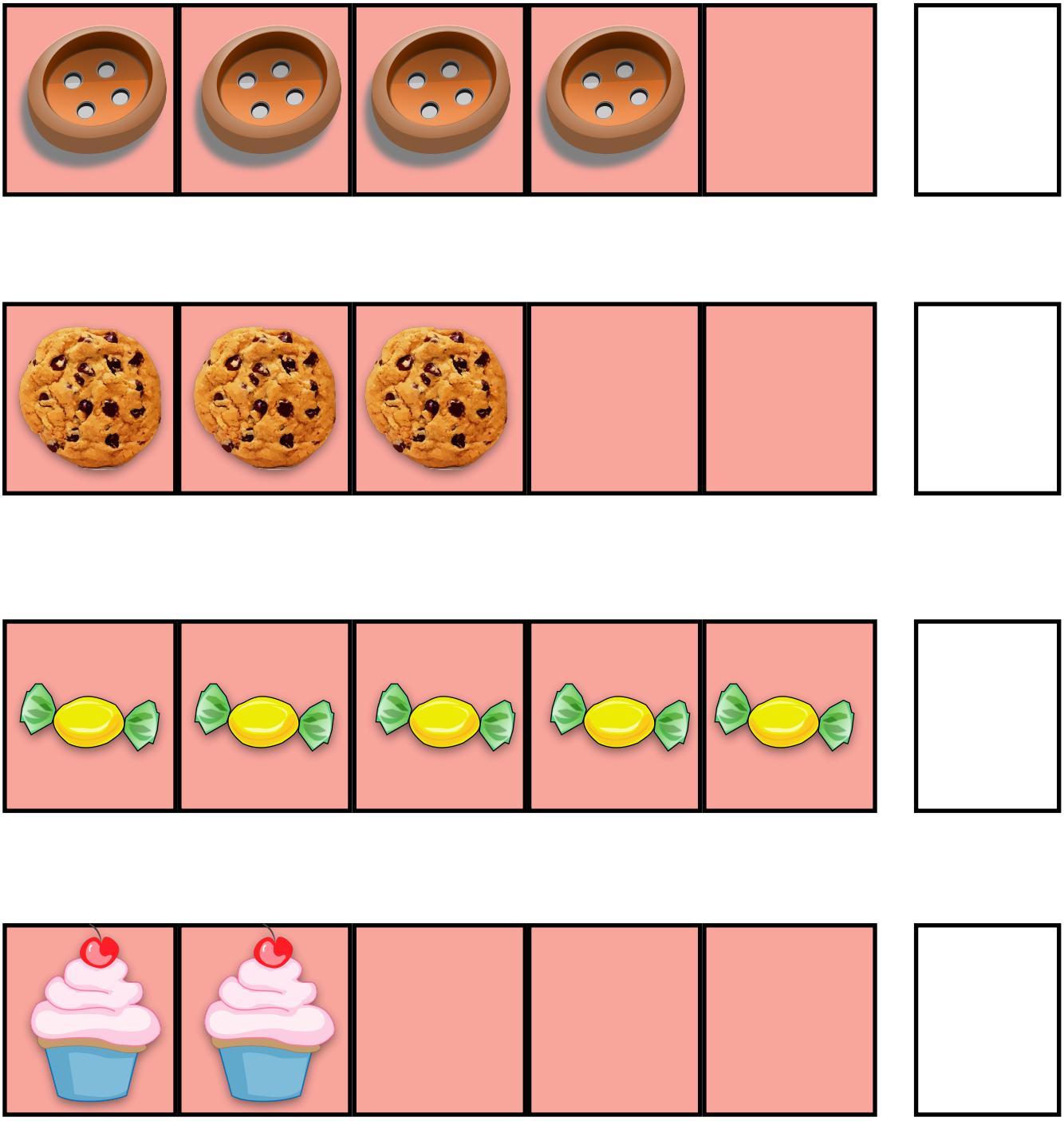


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Tip: Line up grapes, blueberries, buttons, etc. on the ten frame and practice subsitizing 1-5 items.

Step 1 Math in Real Life

Count the items. Then name how many without counting.



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Tip: Line up grapes, blueberries, buttons, etc. on the ten frame and practice subsitizing 1-5 items.

Step 2: Learning to Subsitize 6-10

Learning to subsitize **is a key step** in learning to use the rekenrek properly. This is learning to recognize and make the numbers **without counting.**

1. Practice counting 1- 10 while moving one bead at a time on the rekenrek.

2. Learn to subsitize the **number six**. Show *six* on the top row of the rekenrek **(without counting)** then on the second row. Point out that *six* is all the red beads and one white bead. Help your student find *six* on the top and bottom row of his rekenrek.



3. Learn to subsitize the **number ten**. Show *ten* on the top row of the rekenrek **(without counting)** then on the second row. Point out that *ten* is *all* beads in the row. Help your student find *ten* on the top and bottom row of his rekenrek.



4. Continue with the numbers *seven, eight,* and *nine*. Point out that *seven* is five and two. *Eight* is five and three. *Nine* is almost all the beads, with one less.

5. More ways to practice:
   - Take turns building and identifying the numbers 1-10 without counting.
   - Use rekenrek flash cards to match, select, and identify 1-10.
   - **Step 2 Worksheets** - Use red and yellow dot markers to dot numbers on a line or draw circles on a line to represent numbers.

Tip: Place small items on the ten frame (see appendix) and practice subsitizing how many.

Tip: Teach your child to subsitize 6-10 fingers using both hands.

Tip: Do not move onto the next step until your child can susbsitize 1-10 on the rekenrek with ease.

Step 2a

Use dot markers or draw circles to make the following numbers:

1



2



3



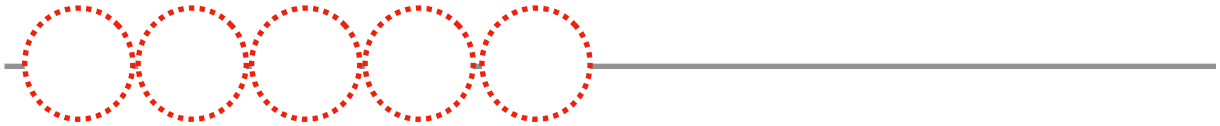
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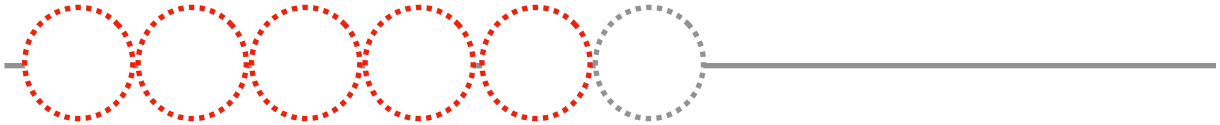
Step 2b

Use dot markers or draw circles to make the following numbers:

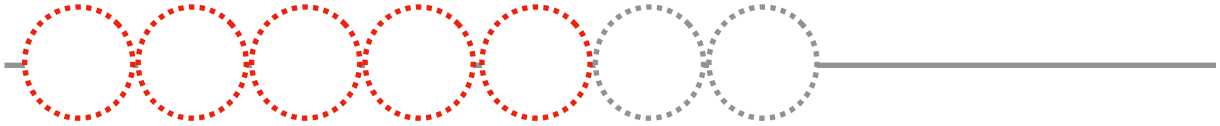
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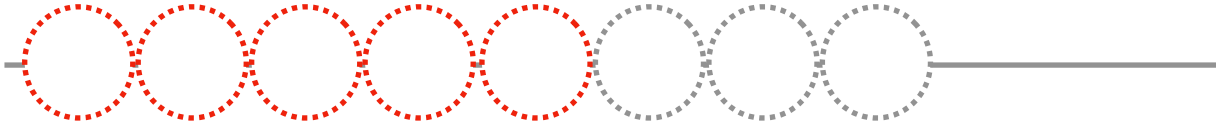
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7



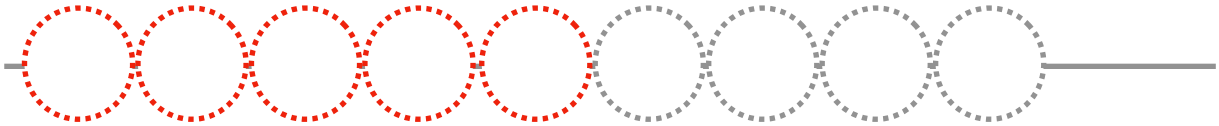
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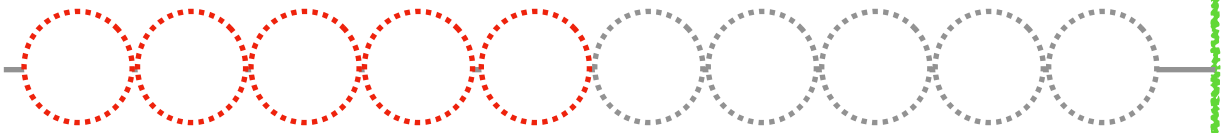
Step 2c

Use dot markers or draw circles to make the following numbers:

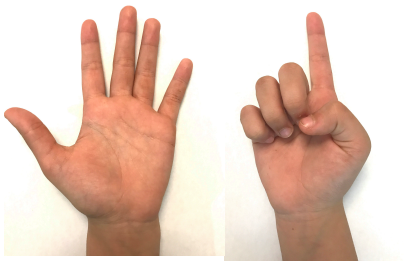
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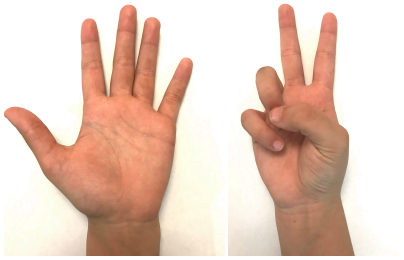


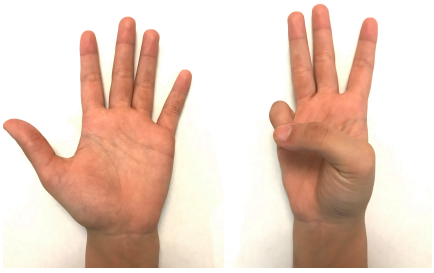
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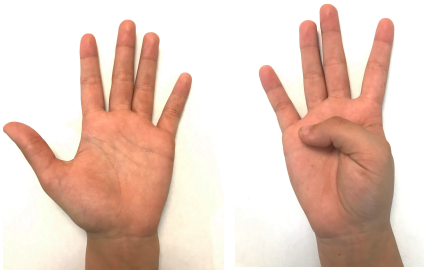


Step 2 Math in Real Life
How many fingers?











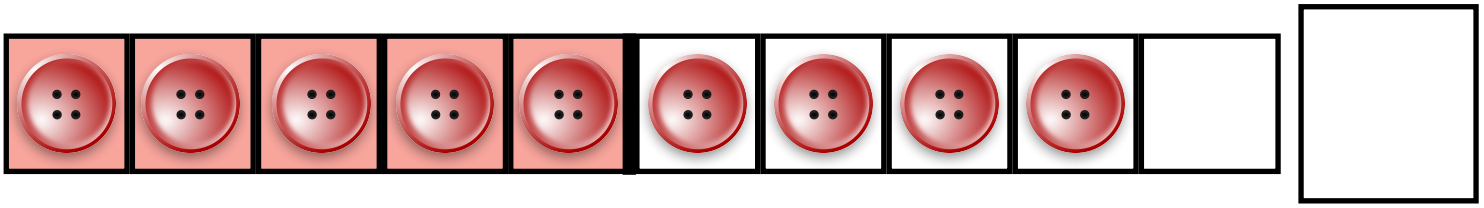
Can you learn to make these numbers on your hands without counting?

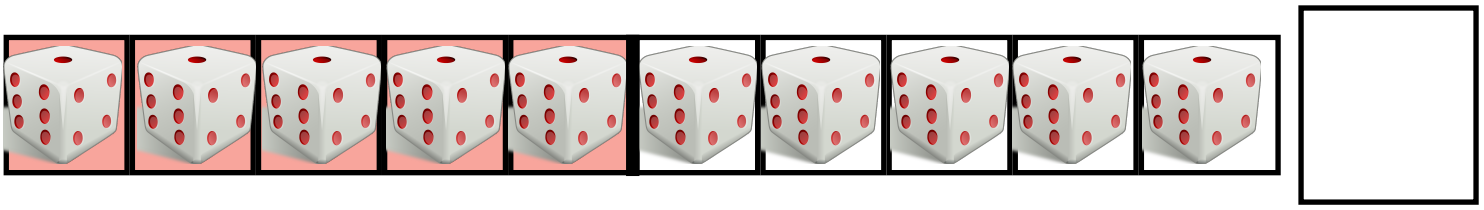
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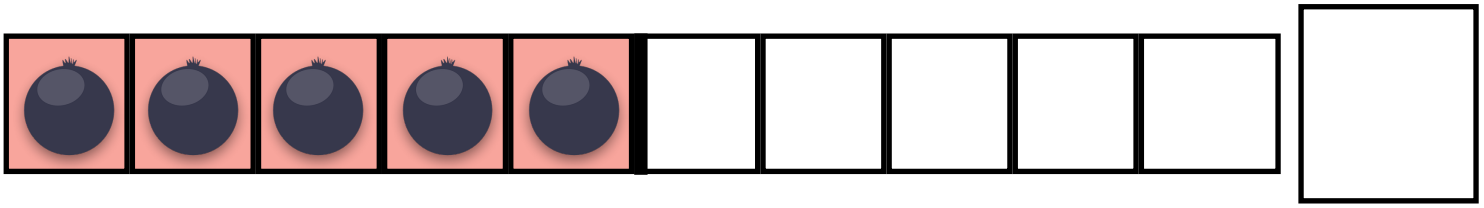
Step 2 Math in Real Life

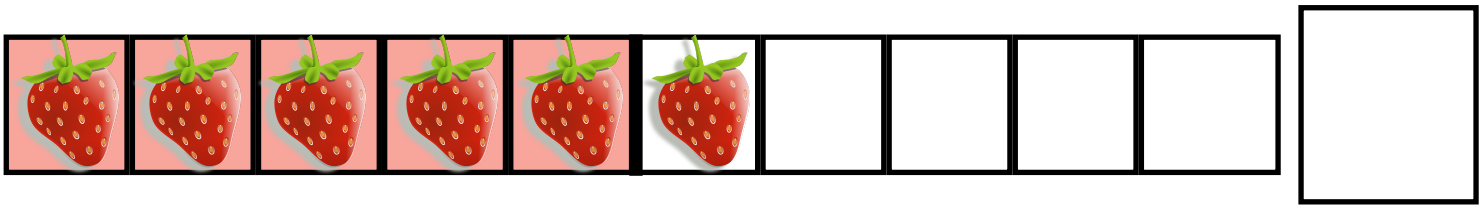
Count the items. Then name how many without counting.





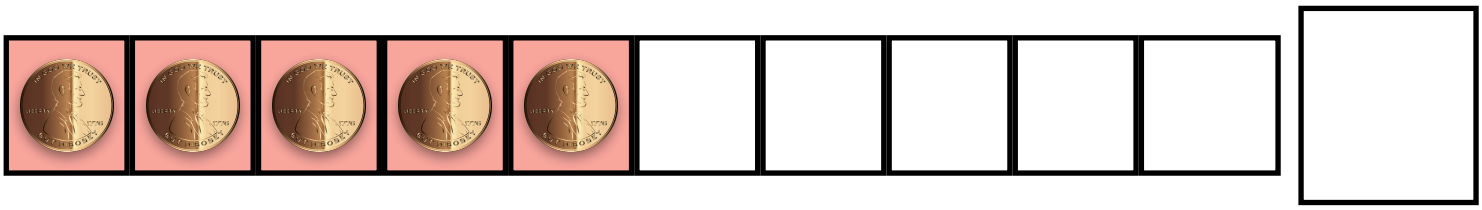


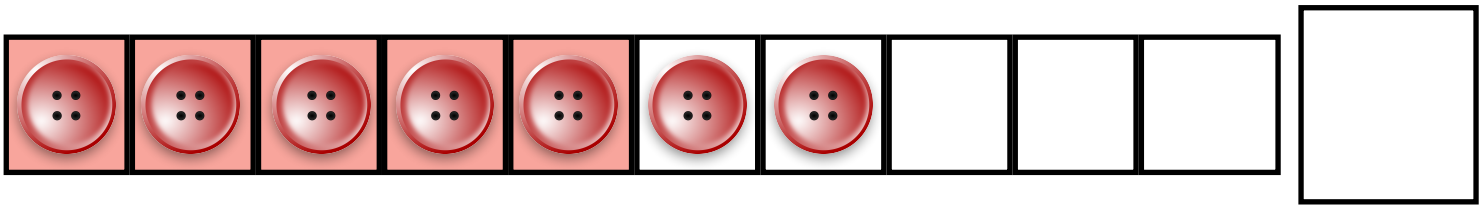


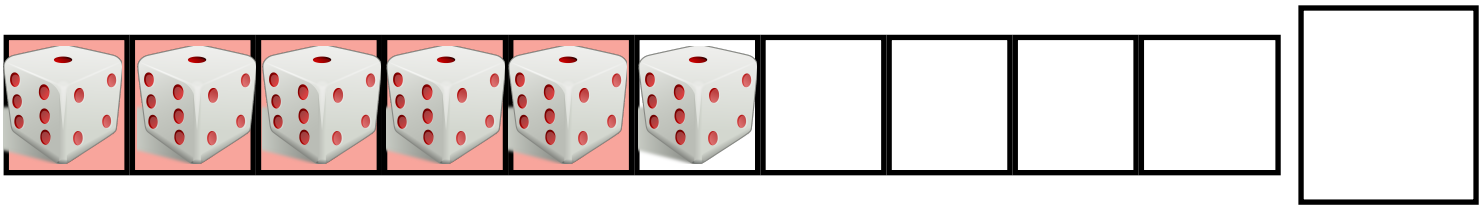


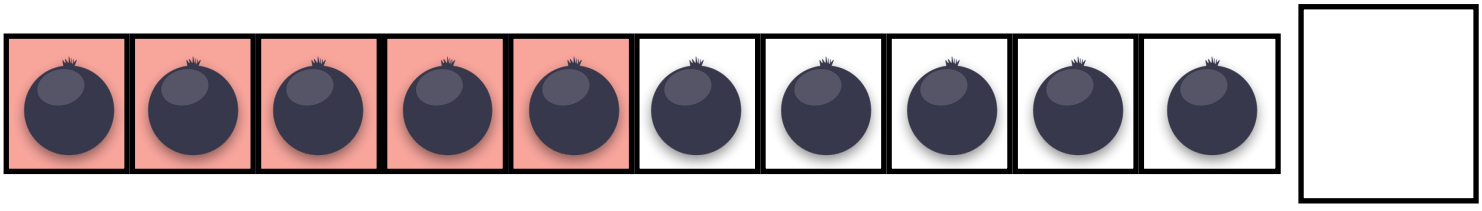
Step 2 Math in Real Life

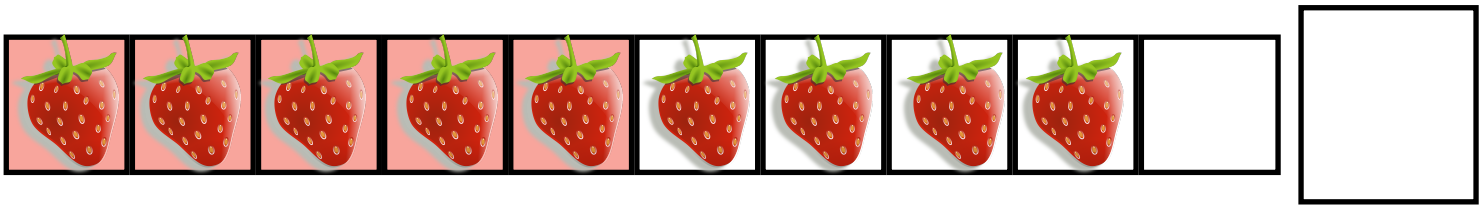
Count the items. Then name how many without counting.











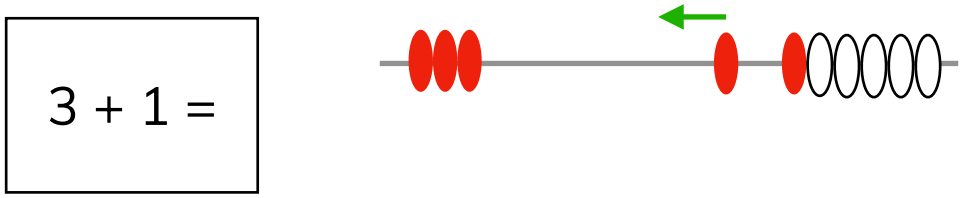
Step 3: +1, +2, +3, and +4 Addition Facts within 10

Daily review:
- Practice subsitizing numbers 1-10 on the rekenrek by copying, building, and identifying numbers
- Count 1-10 while moving the beads on the rekenrek

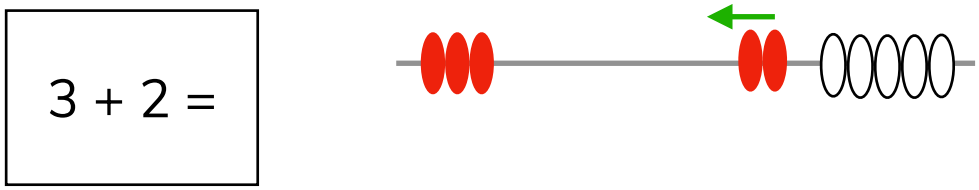
Materials:
- two rekenreks
- +1, +2, +3 , and +4 addition flash cards (make them on index cards)

Lessons:

1. Put all the **+1 addition flash cards** in a stack. Model adding +1 facts on the rekenrek. Invite the student to copy your work on his rekenrek. Always check the answers by flipping over the flashcard.



2. Put all the **+2 addition flash cards** in a stack. Model adding +2 facts on the rekenrek. Invite the student to copy your work on his rekenrek. Always check the answers by flipping over the flashcard.



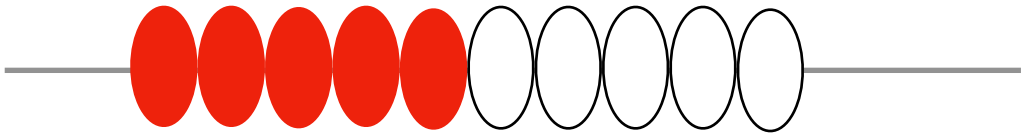
3. Encourage your child to practice the +1 and +2 facts independently using the number line addition worksheets.

4. Continue with the +3 and +4 addition facts flashcards.

5. Encourage your child to practice the +3 and +4 facts independently using the **addition worksheets.**

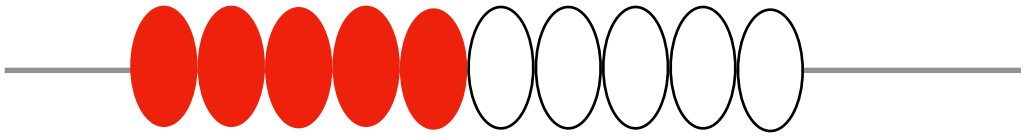
Tip: Spend as much time as your child needs on mastering these facts before moving on. Find objects to add in real life such as fruit, money, etc.

Step 3: +1 Addition Facts



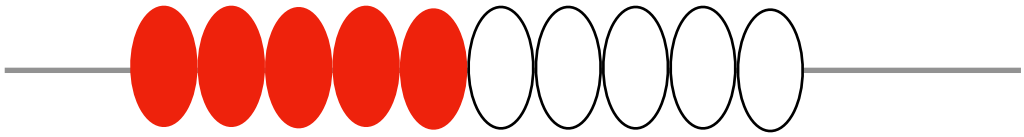
8 + 1 =	1 + 1 =
7 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
3 + 1 =	6 + 1 =
9 + 1 =	0 + 1 =

Step 3: +2 Addition Facts



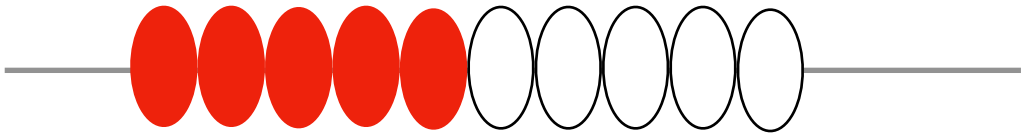
8 + 2 =	1 + 2 =
7 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
3 + 2 =	6 + 2 =
0 + 2 =	8 + 2 =

Step 3: +3 Addition Facts



6 + 3 =	1 + 3 =
7 + 3 =	2 + 3 =
5 + 3 =	4 + 3 =
3 + 3 =	6 + 3 =
0 + 3 =	7 + 3 =

Step 3: +4 Addition Facts



6 + 4 =	1 + 4 =
5 + 4 =	2 + 4 =
2 + 4 =	4 + 4 =
3 + 4 =	6 + 4 =
0 + 4 =	5 + 4 =

Step 3 Math in Real Life

1. Mom ate 3 cookies. Then she ate 1 more. How many did she eat?



$3 + 1 =$ ☐

2. Dad bought 5 hats. Then he bought two more. How many did he buy?



$5 + 2 =$ ☐

3. Sam found 6 pennies. Then he found three more. How many did he find?



$6 + 3 =$ ☐

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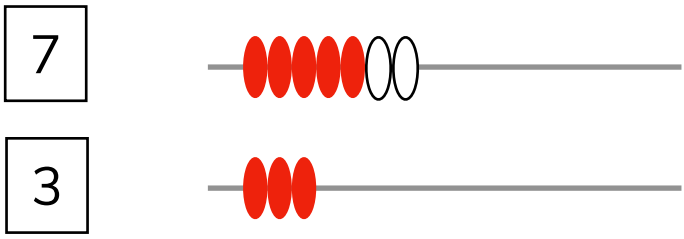
Step 4: Comparing Quantities on Two Bars

Daily review:
- Practice subsitizing numbers 1-10 on the rekenrek
- Count 1-10 while moving the beads on the rekenrek
- Practice adding +1 through +4 facts on the rekenrek using flash cards and/or number line addition worksheets

Materials:
- two rekenreks
- Montessori wooden numbers 1-10

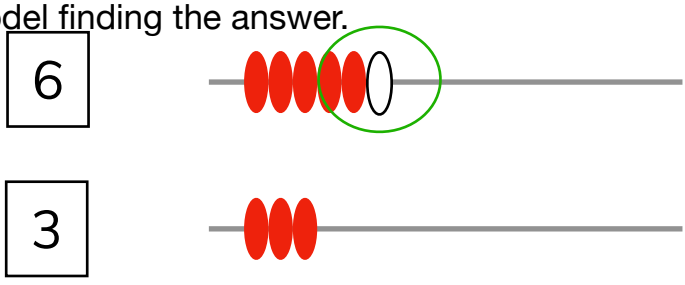
Lessons:

1. **Comparing quantities:** Lay out Montessori wooden numbers face down. Ask the student to choose two numbers. **"Let's see which one is more."** Build first number on the top row of the rekenrek. Build the second number on the bottom row. (Remember to encourage the student to copy your work.) Help the student identify **which one is more and which one is less.**



Repeat with several pairs of numbers.

2. **How much more?** Continue comparing pairs of numbers. Now begin asking, *how much more?* Model finding the answer.

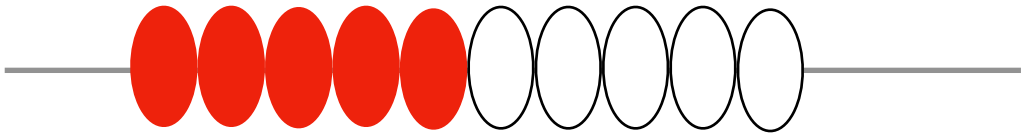


Which one is more? *6* ***How much more?*** *3 more.*

Repeat with several pairs of numbers.

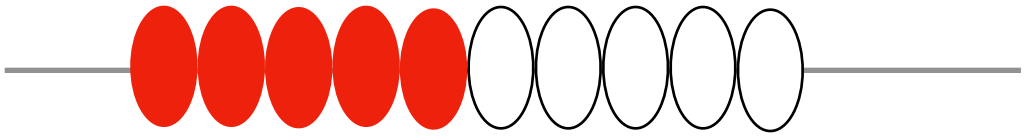
3. Together, complete **Step 4 worksheets**

Review: +1 Addition Facts



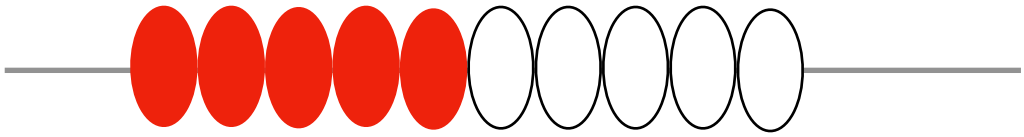
8 + 1 =	1 + 1 =
7 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
3 + 1 =	6 + 1 =
9 + 1 =	0 + 1 =

Review: +2 Addition Facts



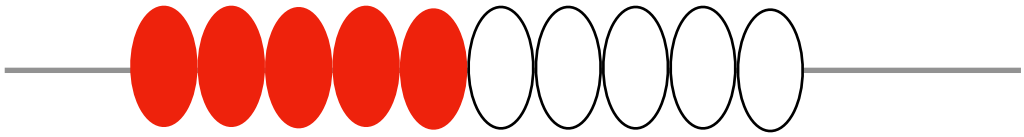
8 + 2 =	1 + 2 =
7 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
3 + 2 =	6 + 2 =
0 + 2 =	8 + 2 =

Review: +3 Addition Facts



6 + 3 =	1 + 3 =
7 + 3 =	2 + 3 =
5 + 3 =	4 + 3 =
3 + 3 =	6 + 3 =
0 + 3 =	7 + 3 =

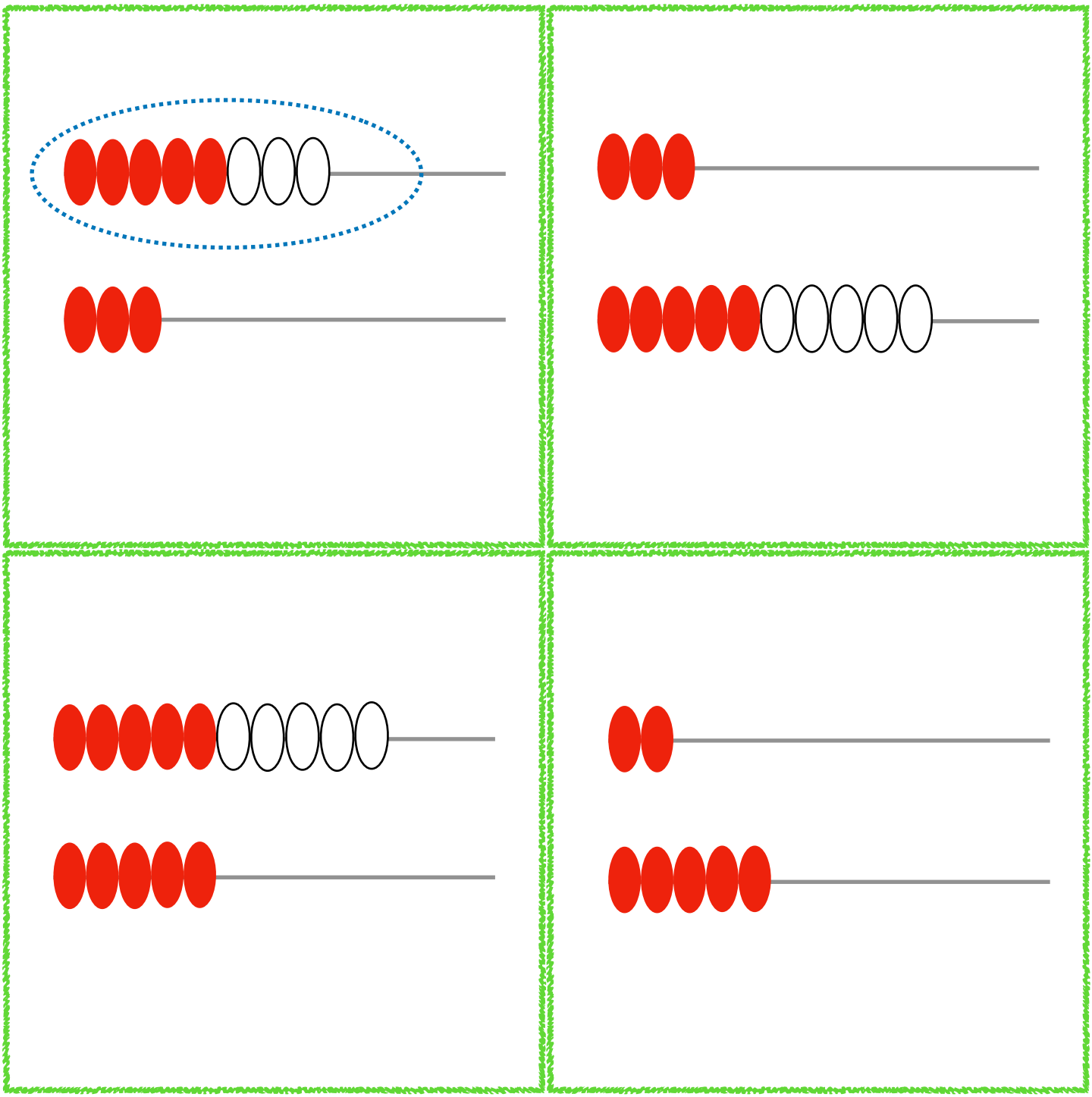
Review: +4 Addition Facts



6 + 4 =	1 + 4 =
5 + 4 =	2 + 4 =
2 + 4 =	4 + 4 =
3 + 4 =	6 + 4 =
0 + 4 =	5 + 4 =

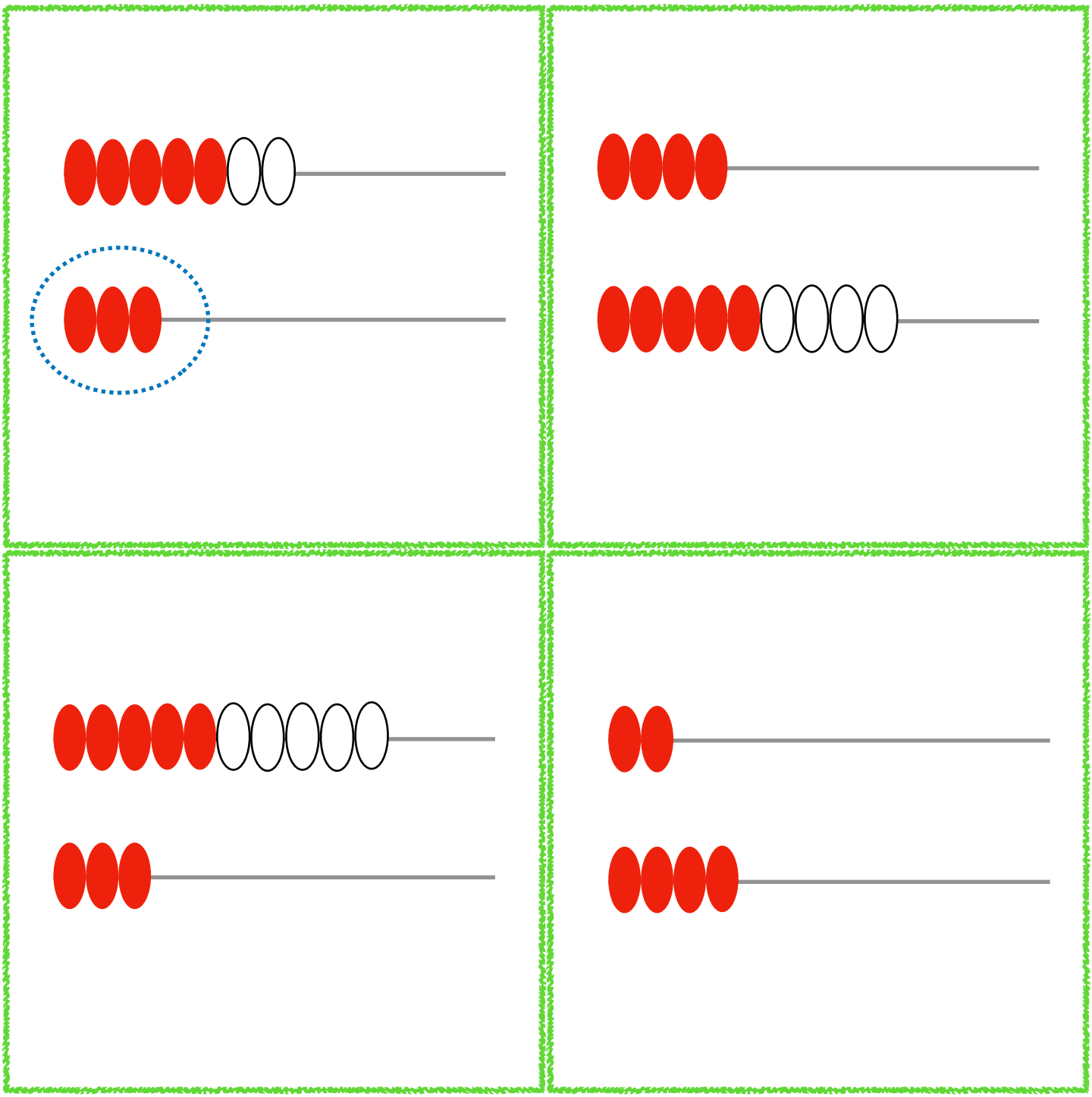
Step 4a

Circle the number that is more.



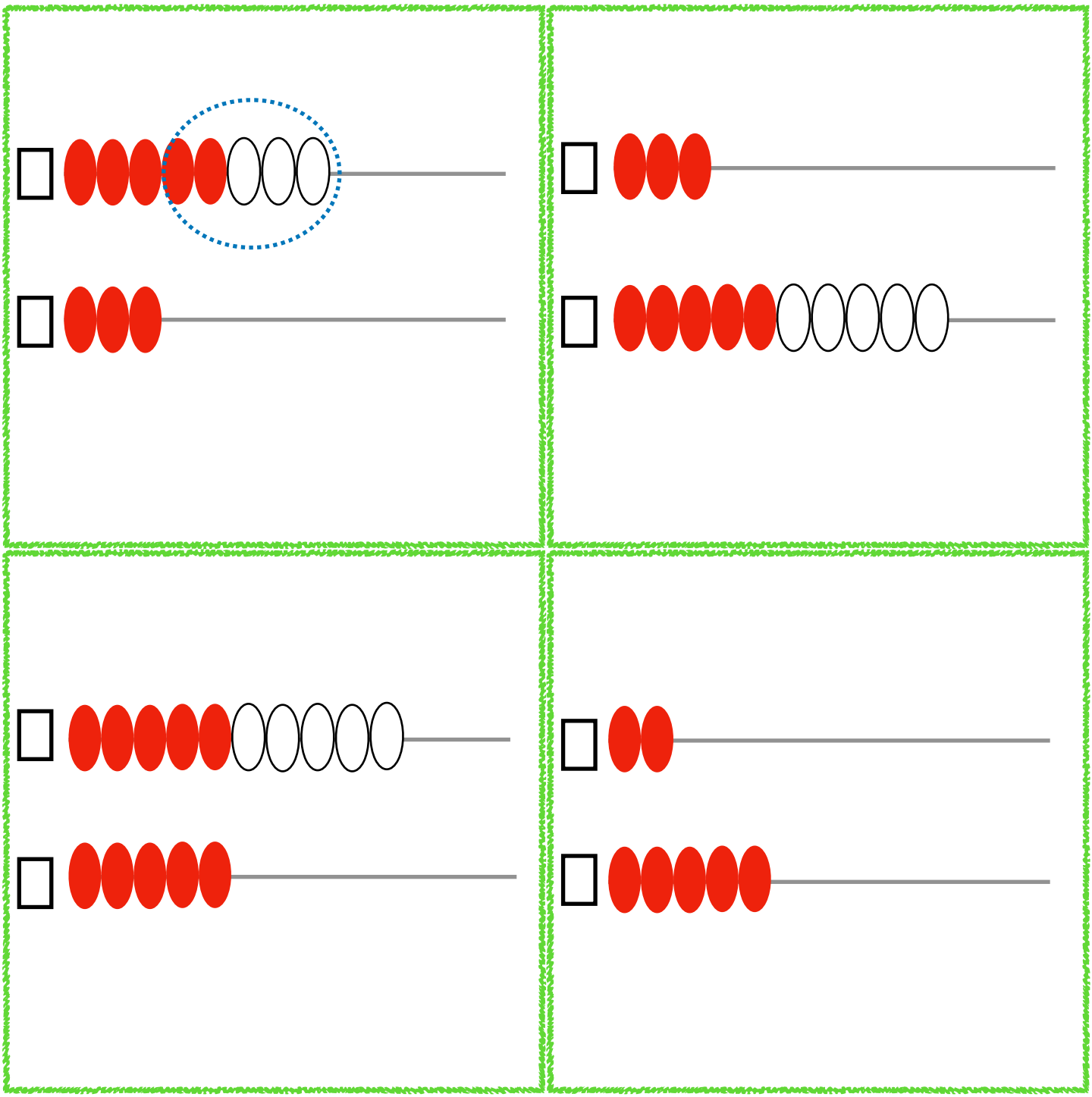
Step 4b

Circle the number that is less.



Step 4c

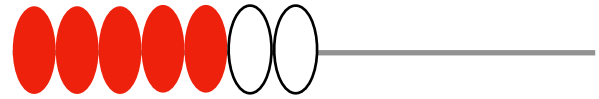
Put a check beside the number that is more.
Circle how much more.



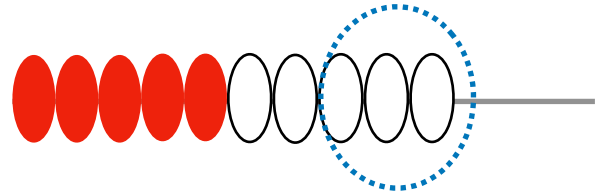
Step 4d

Put a check beside the number that is more.
Circle how much more.

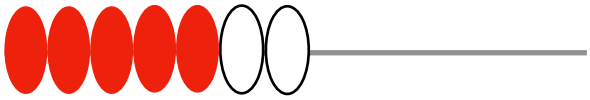
☐ 7



☑ 10



☐



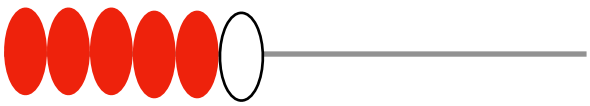
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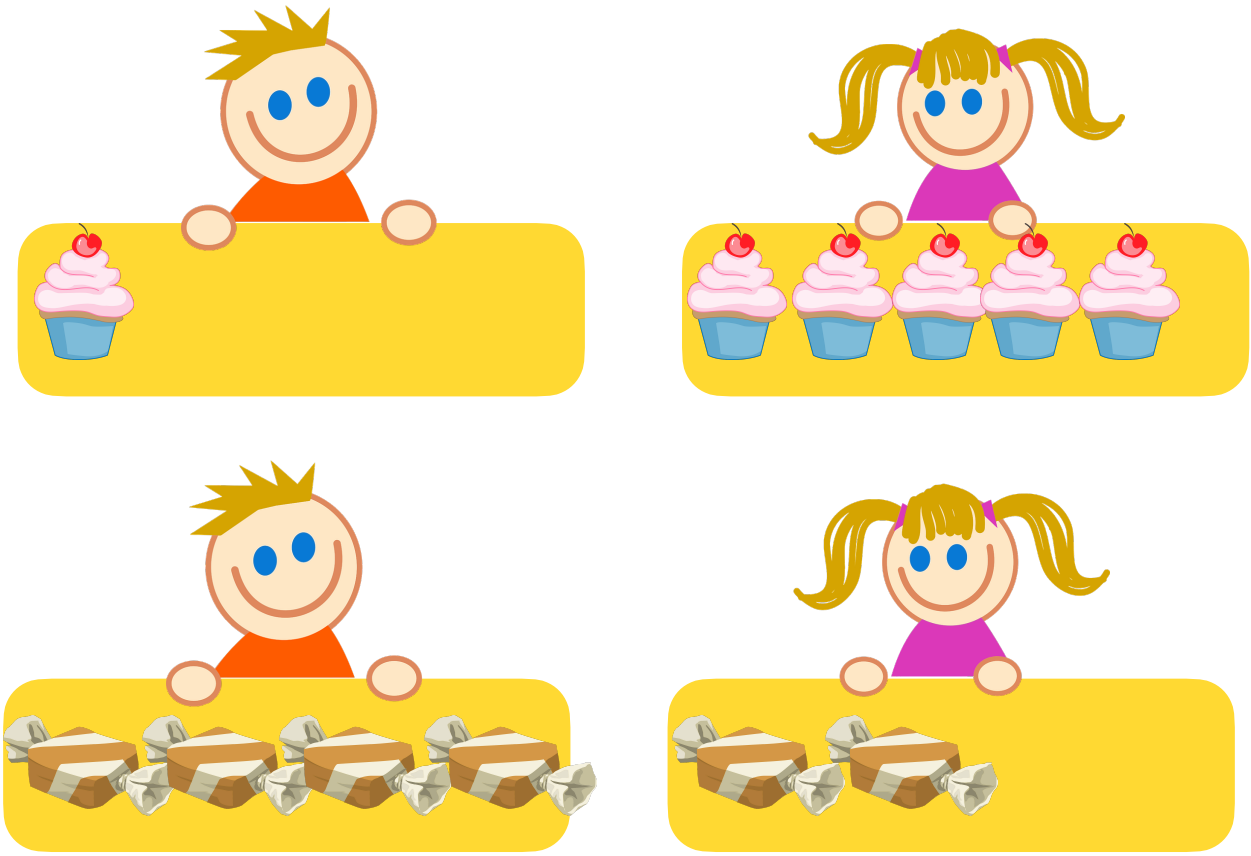


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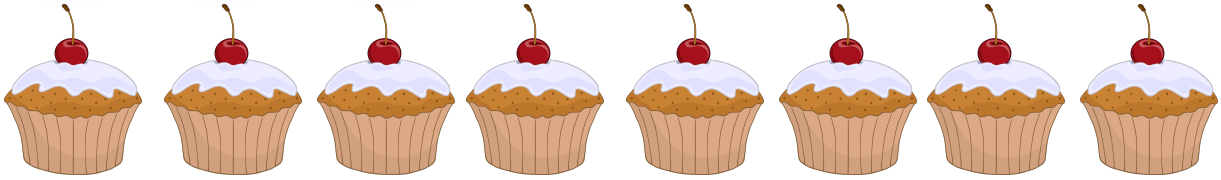
Step 4 Math in Real Life

1. Circle the picture of the child who has more:



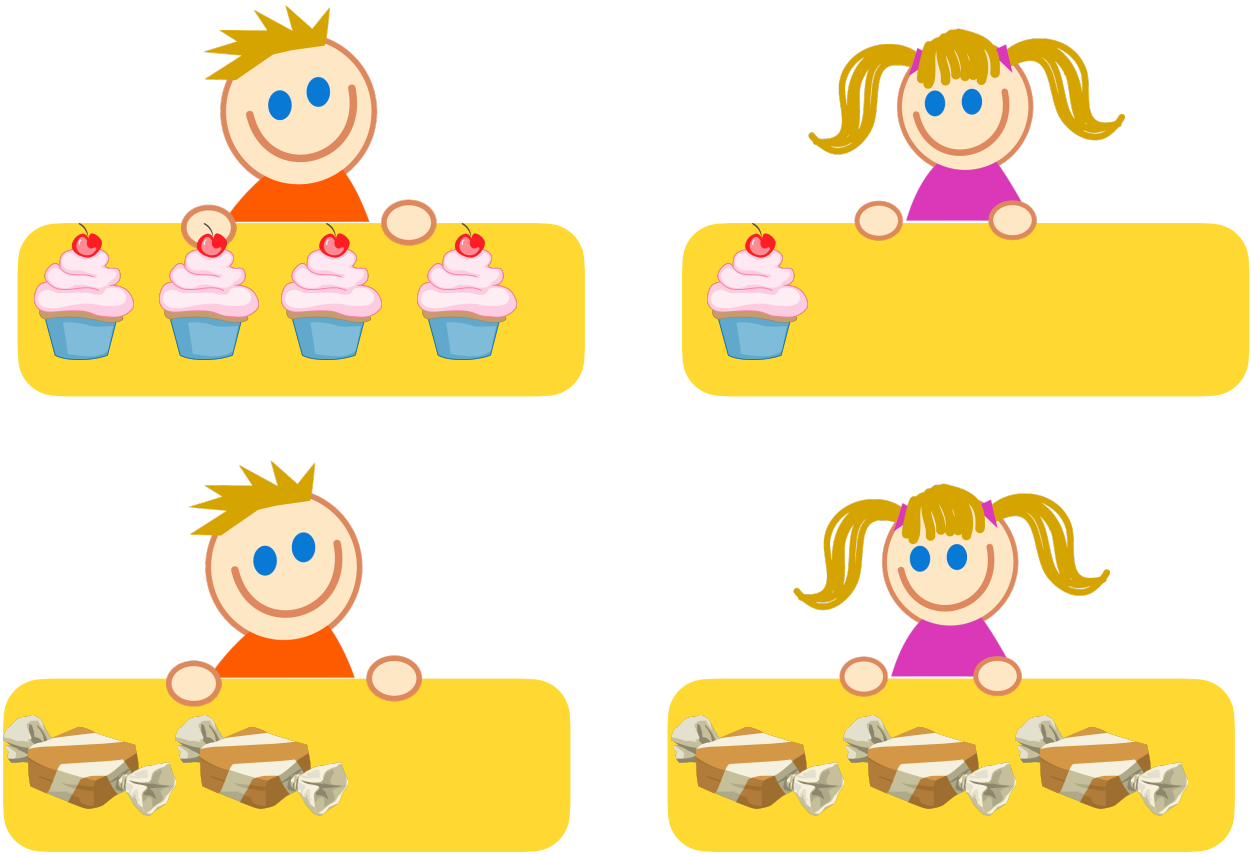
2. Put a check beside the group that has more. Circle how much more.

☐ 

☐ 

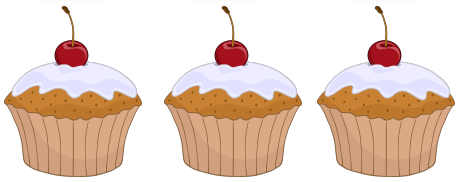
Step 4 Math in Real Life

1. Circle the picture of the child who has more:



2. Put a check beside the group that has more. Circle how much more.

☐ 

☐ 

Step 5: Demonstrating Commutativity

Daily review:

- Practice subsitizing numbers 1-10 on the rekenrek
- Count 1-10 while moving the beads on the rekenrek
- Practice comparing quantities: Which one is more? How much more? Which one is less?
- Practice adding +1 through +4 facts on the rekenrek using flash cards and/or number line addition worksheets

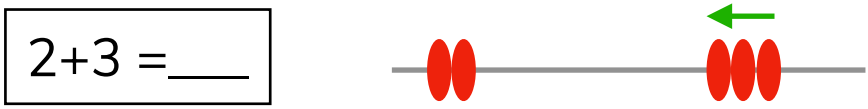
Materials:

- two rekenreks
- paper and markers

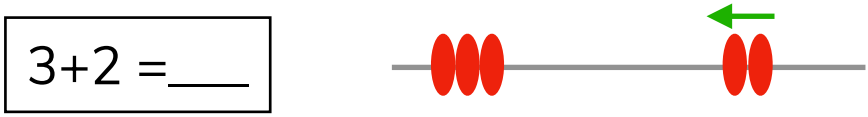
Commutativity is the principle that *a+b = b+a*. In addition, you can switch the order of the addends and still get the same answer.

Lessons:

1. **Demonstrate commutativity.** On a piece of paper write 2+3 = _____. Together, solve the equation on the top bar.



Ask: ***What happens if we switch the numbers?*** Write 3+2 = _____. Together, solve the equation on the bottom bar.

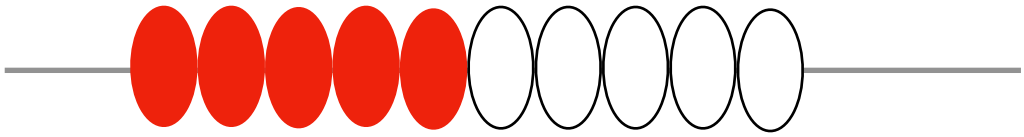


Point out that the answers are the same!

Repeat with several pairs of numbers.

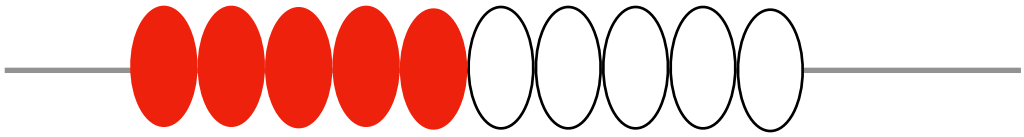
2. Together, complete **Step 5 worksheets.** Tip: Print out two copies of this worksheet. You work on one copy, while your students works on the other.

Review: +1 Addition Facts



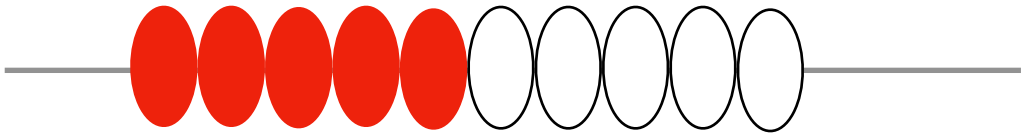
8 + 1 =	1 + 1 =
7 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
3 + 1 =	6 + 1 =
9 + 1 =	0 + 1 =

Review: +2 Addition Facts



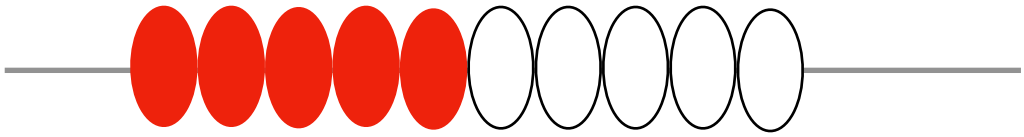
8 + 2 =	1 + 2 =
7 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
3 + 2 =	6 + 2 =
0 + 2 =	8 + 2 =

Review: +3 Addition Facts



6 + 3 =	1 + 3 =
7 + 3 =	2 + 3 =
5 + 3 =	4 + 3 =
3 + 3 =	6 + 3 =
0 + 3 =	7 + 3 =

Review: +4 Addition Facts



6 + 4 =	1 + 4 =
5 + 4 =	2 + 4 =
2 + 4 =	4 + 4 =
3 + 4 =	6 + 4 =
0 + 4 =	5 + 4 =

Step 5

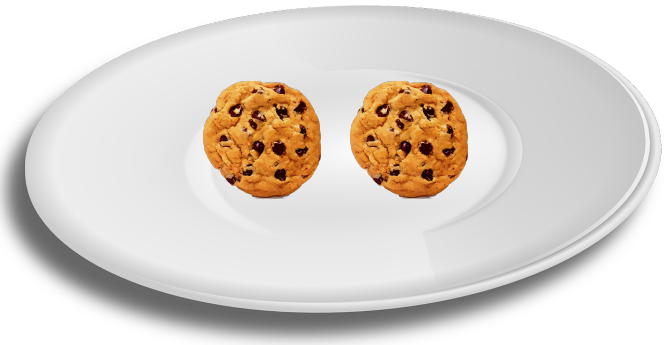
Use the rekenrek to solve the math equations.

$2 + 3 = \square$	$4 + 1 = \square$
$3 + 2 = \square$	$1 + 4 = \square$
$1 + 3 = \square$	$2 + 4 = \square$
$3 + 1 = \square$	$4 + 2 = \square$

Step 5 Math in Real Life

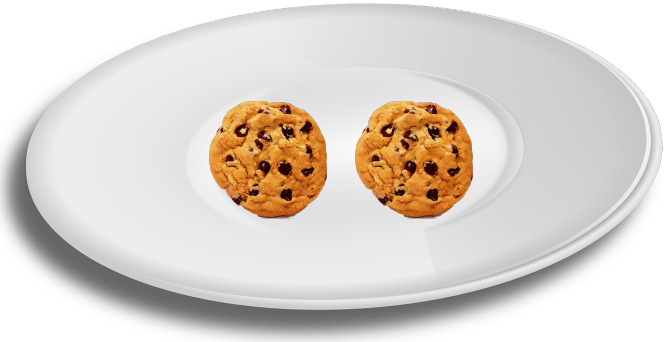
1. Count how many and add.





_____ + _____ = _____

2. Count how many and add. Did you get the same answer?





_____ + _____ = _____

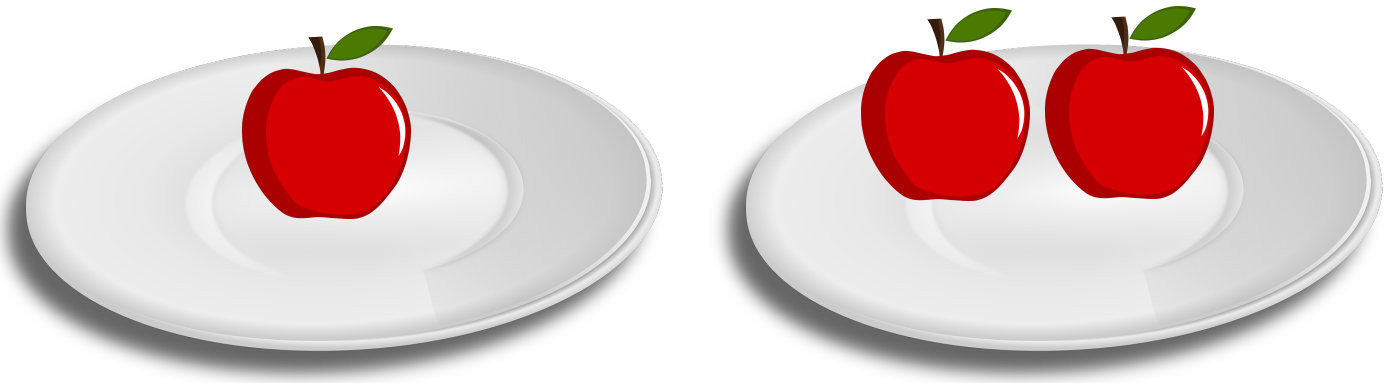
Step 5 Math in Real Life

1. Count how many and add.



_____ + _____ = _____

2. Count how many and add. Did you get the same answer?



_____ + _____ = _____

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Step 6: + 5 Addition Facts within 10

Daily review:
- Practice subsitizing numbers 1-10 on the rekenrek
- Count 1-10 while moving the beads on the rekenrek
- Practice comparing quantities: Which one is more? How much more?
- Practice adding +1 through +4 facts on the rekenrek
-

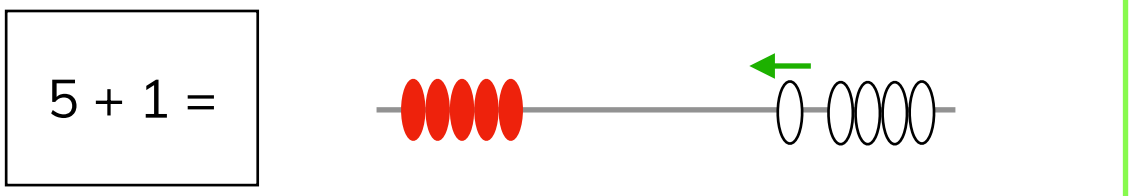
Materials:
- two rekenreks
- +5 addition flash cards (make them on index cards)

Lessons:

1. Say: ***Today we are going to practice adding +5. These are easy facts because we can always start with five*.**
   - On a piece of paper, write 1 + 5 = _____
   - On the top bar, model adding 1 + 5 = 6 facts on the rekenrek. Invite the student to copy your work on his rekenrek.



   - Say: ***What happens if we start with 5 first?*** Write 5 + 1 = _____
   - On the bottom bar, model adding 1 + 5 = 6 facts on the rekenrek. Invite the student to copy your work on his rekenrek.

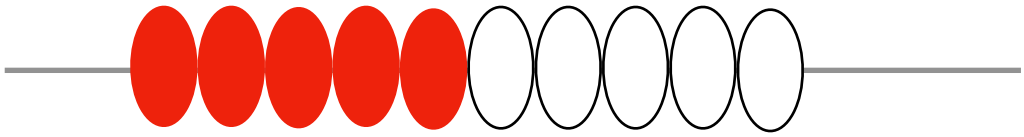


   - Say: ***Remember, with addition, you can start with either number. When there is a five, it is easier to start with five*.**

2. Using the **+ 5 addition flash cards**, model adding all the +5 facts, always beginning with 5. Encourage the student to work alongside you on his rekenrek.

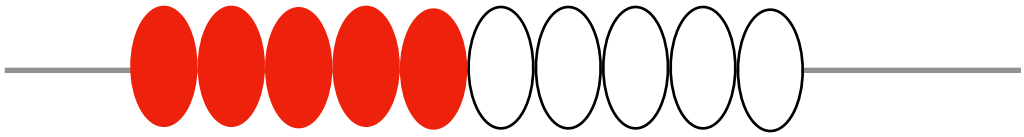
3. Encourage your child to practice the +5 facts independently using the **+5 addition worksheets**.

Review: +1 Addition Facts



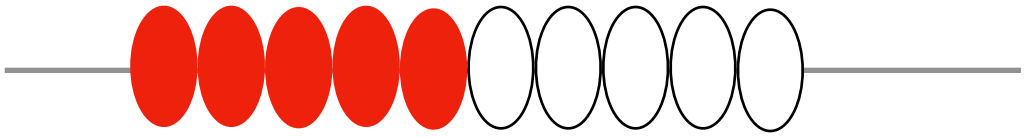
3 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
7 + 1 =	6 + 1 =
9 + 1 =	8 + 1 =
1 + 1 =	0 + 1 =

Review: +2 Addition Facts



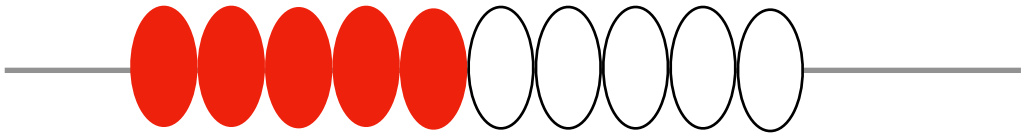
8 + 2 =	1 + 2 =
7 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
3 + 2 =	6 + 2 =
0 + 2 =	8 + 2 =

Review: +3 Addition Facts



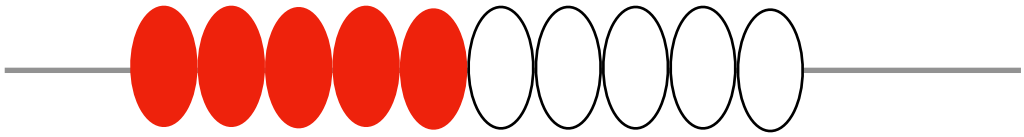
1+ 3 =	2 + 3 =
3 + 3 =	4 + 3 =
5 + 3 =	6 + 3 =
7+ 3 =	2 + 3 =
0 + 3 =	7 + 3 =

Review: +4 Addition Facts



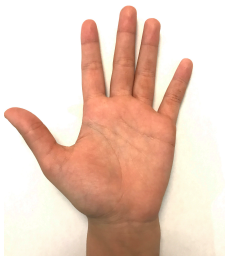
1 + 4 =	6 + 4 =
3 + 4 =	1+ 4 =
5 + 4 =	4 + 4 =
2 + 4 =	3 + 4 =
4 + 4 =	5 + 4 =

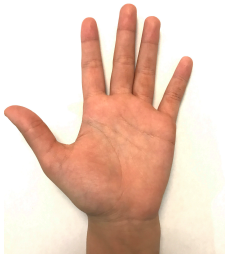
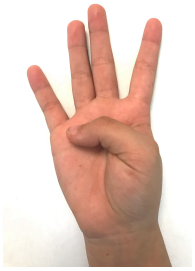
Step 6: +5 Addition Facts

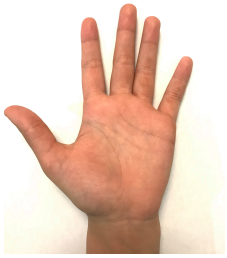


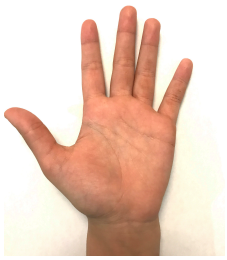
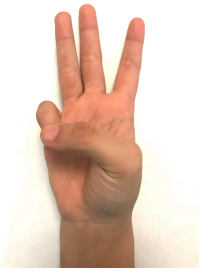
5 + 4 =	1 + 5 =
5 + 3 =	2 + 5 =
5 + 1 =	4 + 5 =
5 + 5 =	3 + 5 =
5 + 2 =	0 + 5 =

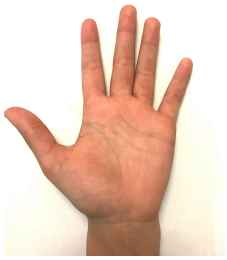
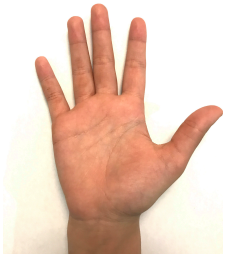
Step 6 Math in Real Life
Add the fingers


5 + 
2 =


□ + 
□ =


□ + 
□ =

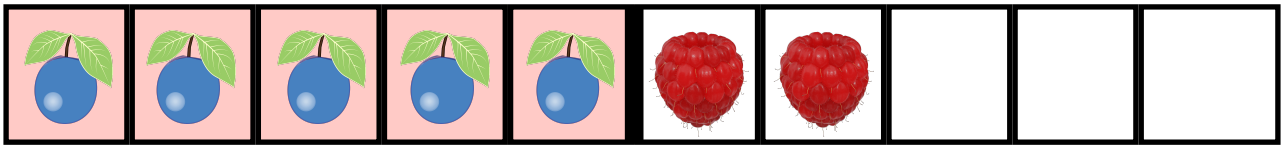

□ + 
□ =


□ + 
□ =

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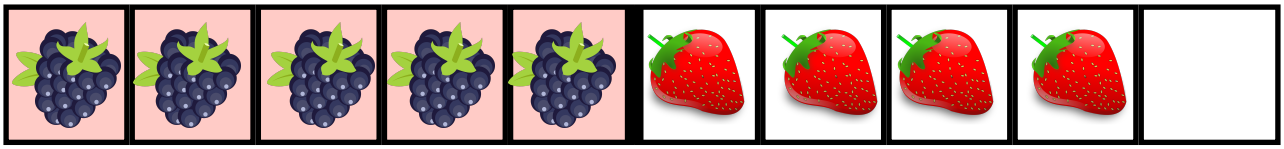
Step 6 Math in Real Life

1. Ted ate 5 blueberries. Then he ate 2 raspberries. How many berries did he eat altogether?



☐ + ☐ = ☐

2. Sam ate 5 blackberries. Then he ate 4 strawberries. How many berries did he eat altogether?



☐ + ☐ = ☐

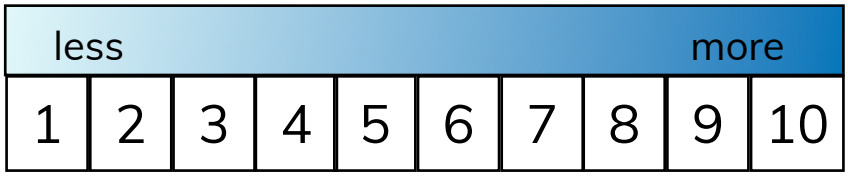
Step 7: Comparing Two Quantities on a Number line

Daily review:
- Count 1-10 while moving the beads on the rekenrek
- Practice comparing quantities: Which one is more? How much more?
- Practice adding +1 through +5 facts on the rekenrek

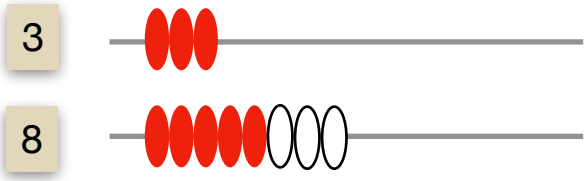
Materials:
- two rekenreks
- Montessori wooden numbers 1-10 or 1-10 numbers on small pieces of paper
- Number line

Lessons:

1. **Comparing quantities on a number line :** Put out the number line.
   - Lay out Montessori wooden numbers face down. Ask the student to choose two numbers.
   - Say: ***Let's see which one is more. Match the wooden numbers to the numbers on the number line.***



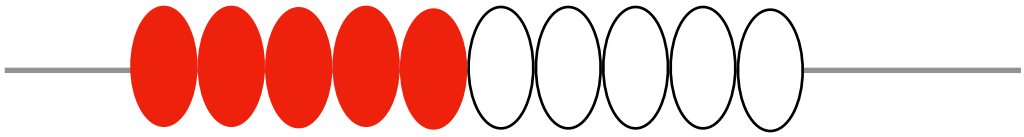
   - Say: ***The further to the right, the greater the number. The further to the left, the less the number. Eight is more to the right, so it is greater. Three is less. Let's check on the rekenrek:***



   - *Continue comparing several* with several pairs of numbers on the number line. Always check on the rekenrek to show that the number further to the right is more and the number further to the left is less.

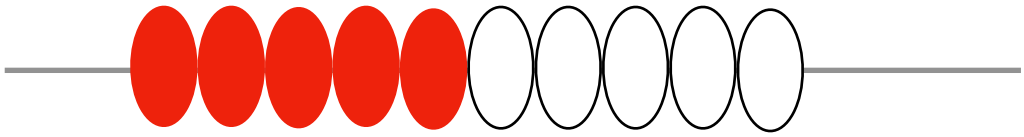
2. Together, complete **Step 7 Worksheets.**

Review: +1 Addition Facts



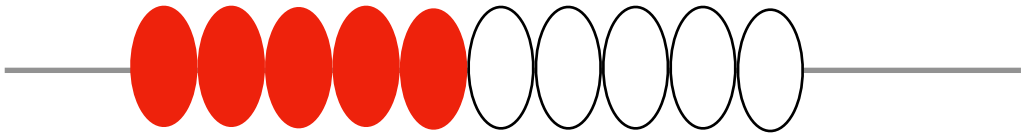
3 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
7 + 1 =	6 + 1 =
9 + 1 =	8 + 1 =
1 + 1 =	0 + 1 =

Review: +2 Addition Facts



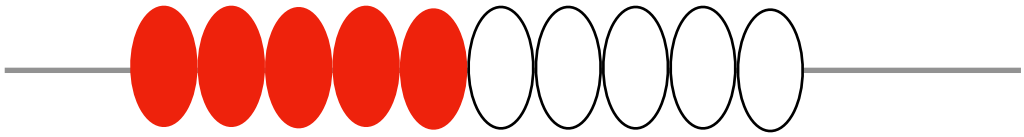
8 + 2 =	1 + 2 =
7 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
3 + 2 =	6 + 2 =
0 + 2 =	8 + 2 =

Review: +3 Addition Facts



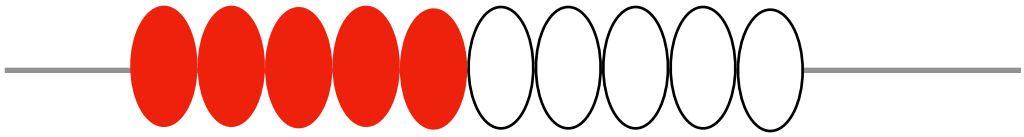
1+ 3 =	2 + 3 =
3 + 3 =	4 + 3 =
5 + 3 =	6 + 3 =
7+ 3 =	2 + 3 =
0 + 3 =	7 + 3 =

Review: +4 Addition Facts



1 + 4 =	6 + 4 =
3 + 4 =	1+ 4 =
5 + 4 =	4 + 4 =
2 + 4 =	3 + 4 =
4 + 4 =	5 + 4 =

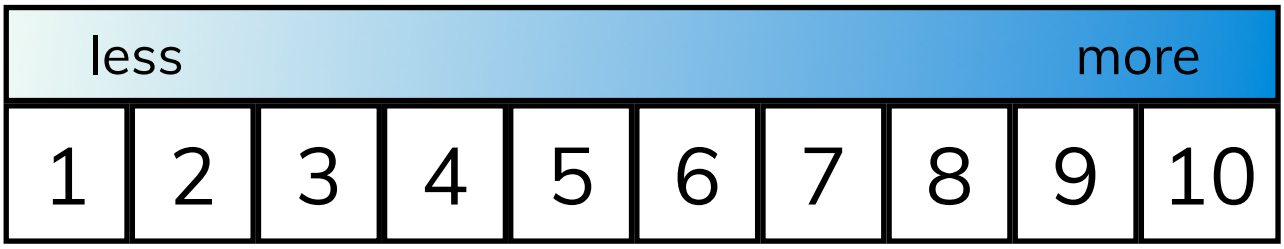
Review: +5 Addition Facts



5 + 4 =	1 + 5 =
5 + 3 =	2 + 5 =
5 + 1 =	4 + 5 =
5 + 5 =	3 + 5 =
5 + 2 =	0 + 5 =

Step 7a

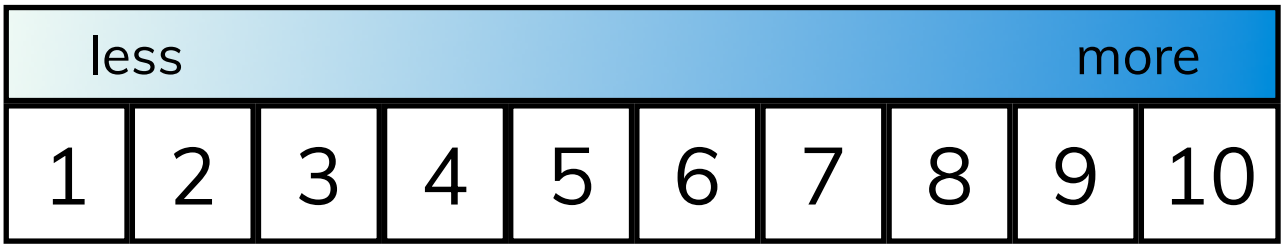
Use the number line to see which number is more.
Circle the number that is more.



8 5	2 4
9 1	3 7
5 6	2 3

Step 7b

Use the number line to see which number is more.
Circle the number that is more.

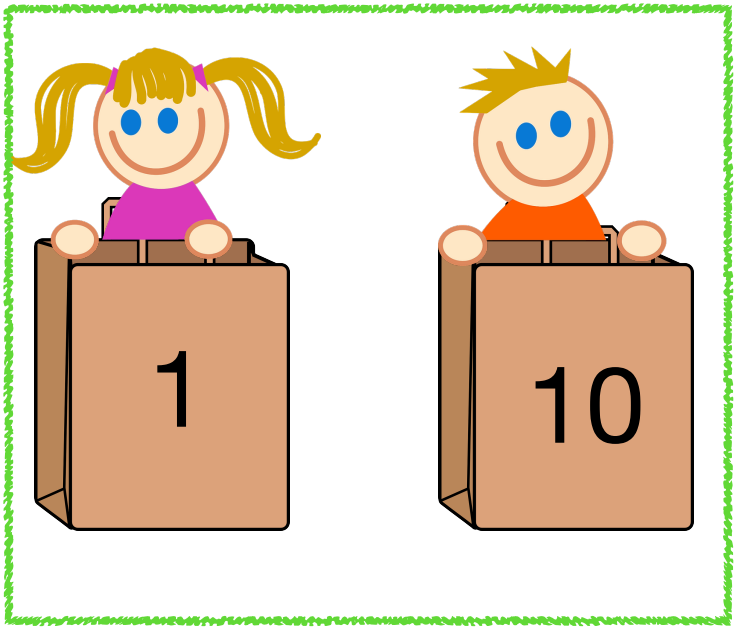


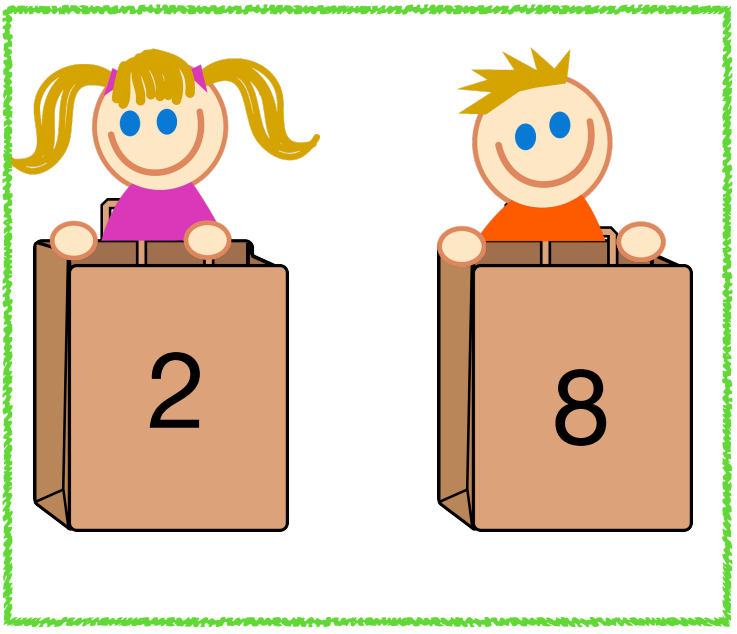
4 10	1 7
9 3	2 6
5 7	8 3

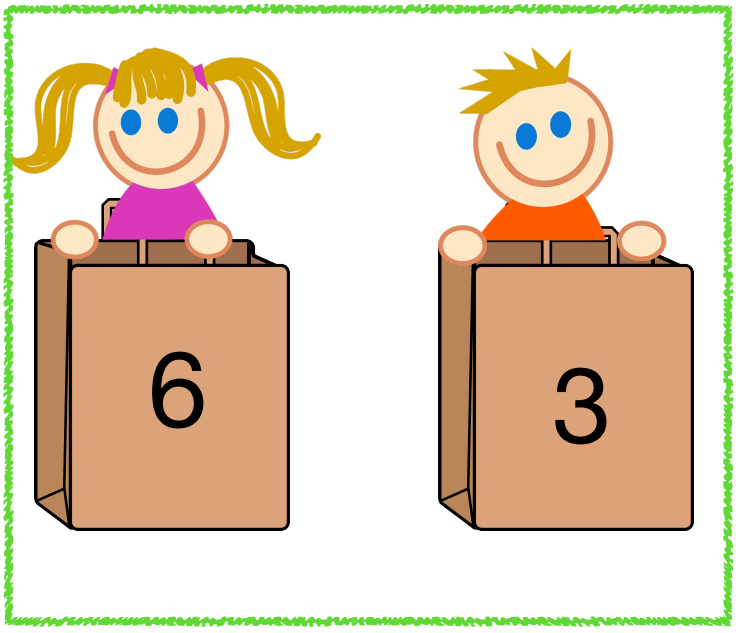
Step 7 Math in Real Life

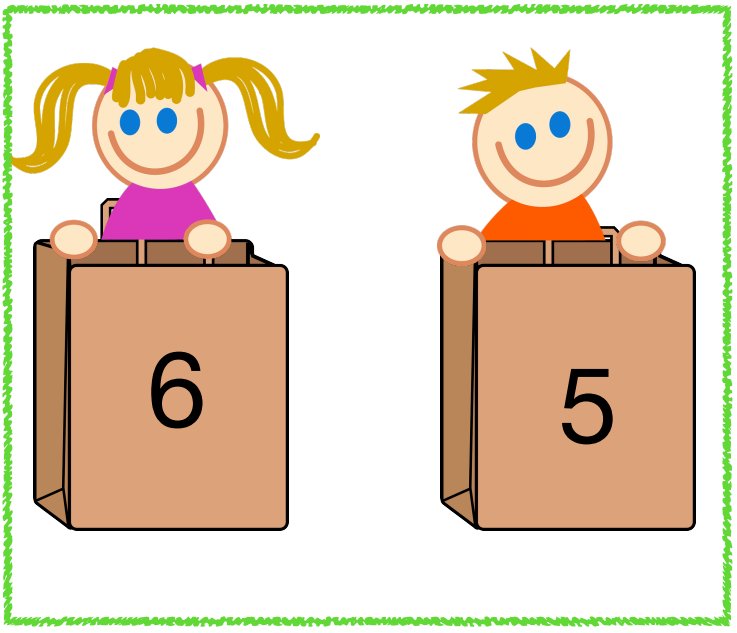
1. Circle the picture of the child who has more toys in their bag:

less									more
1	2	3	4	5	6	7	8	9	10





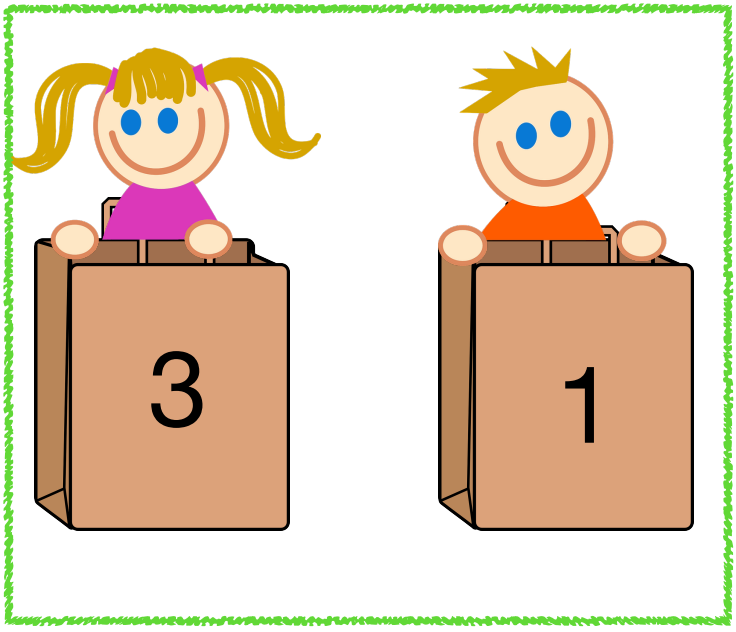


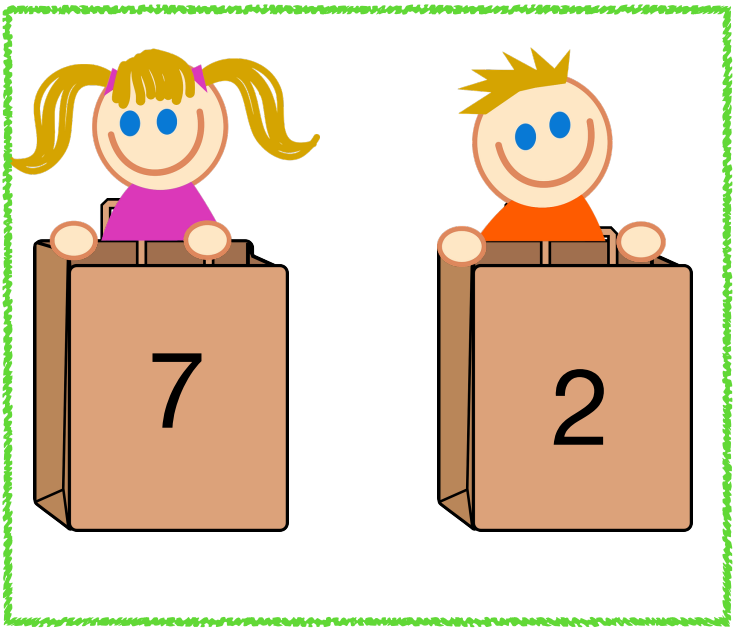


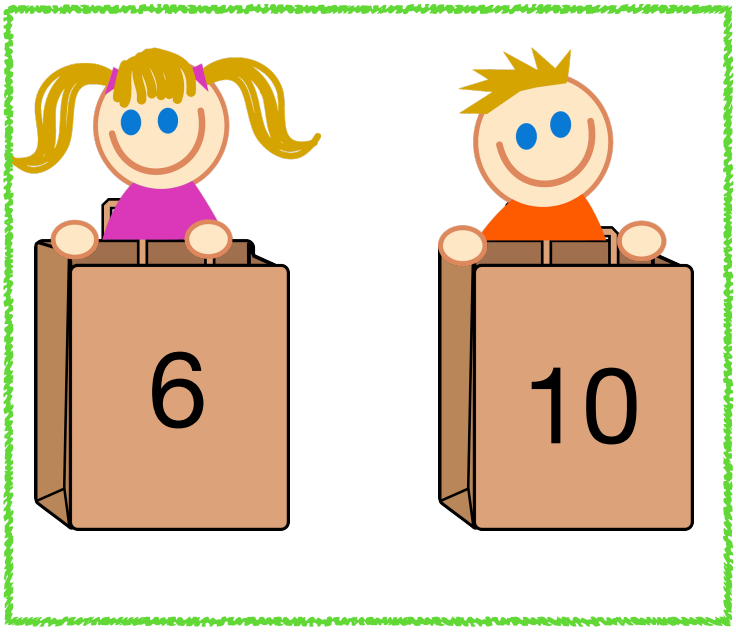
Step 7 Math in Real Life

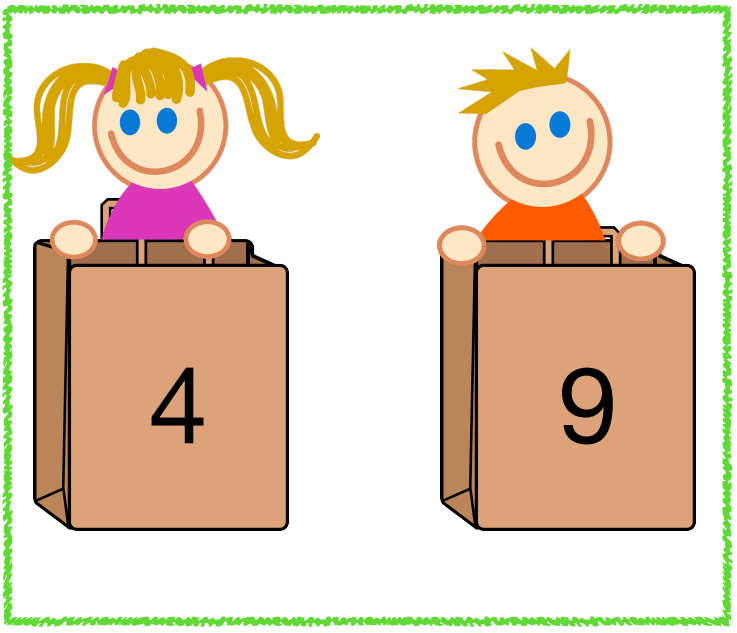
1. Circle the picture of the child who has more toys in their bag:

less									more
1	2	3	4	5	6	7	8	9	10









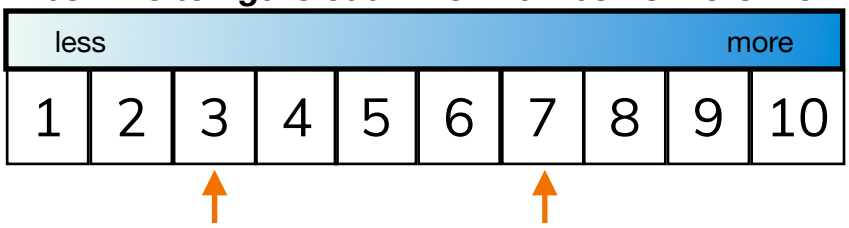
Step 8a: Adding by Starting with the Greater Number

Daily review:
- Practice subsitizing numbers 1-10 on the rekenrek
- Count 1-10 while moving the beads on the rekenrek
- Practice comparing quantities: Which one is more? How much more?
- Practice adding +1 through +5 facts on the rekenrek

Materials:
- two rekenreks
- all addition flash cards within ten (make them on index cards)
- more/less number line

Lessons:
1. Say and demonstrate: ***Remember that with addition we can start with either number. You can add 1+5 or 5+1 and both times the answer is the same: 6.***
   - ***When you are adding numbers, it is faster and easier to start with the greater number (the number that is more).***
   - ***We can use a number line to figure out which number is more. For example:***

$3 + 7 =$

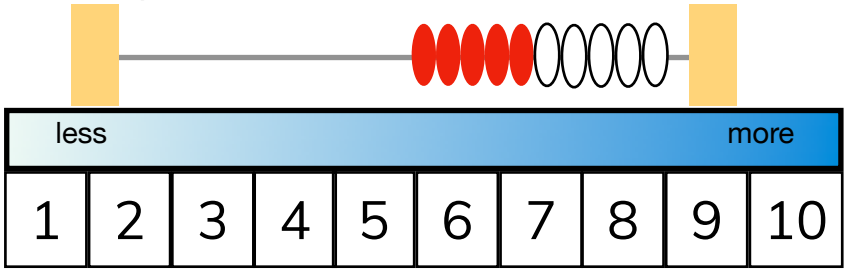


7 is further to the right. It is more. So we will start adding with 7.



TIP: See Lesson 8b if your student has difficulty with this.

2. Using the **addition flash cards**, model adding several addition facts always beginning with greater number. Encourage the student to work alongside you on his rekenrek. It is helpful to set up the number line below the rekenrek and to have your student point to the numbers on the number line.



3. Together, work on the **Step 8 addition worksheets,** finding the greater number on a number line and starting with that.

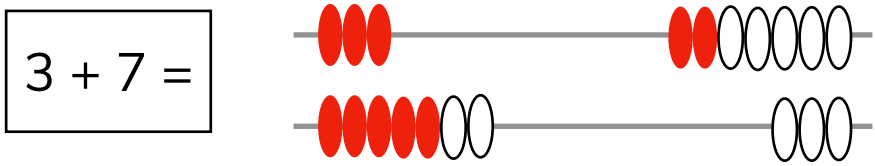
Optional Step 8b: Adding by Counting On

Materials:
- two rekenreks
- all addition flash cards within ten (make them on index cards)

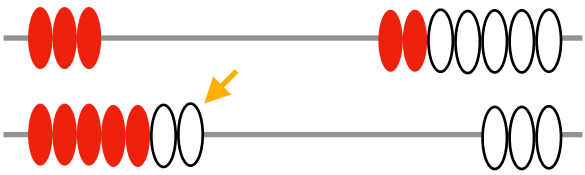
Note: Learning to add the greater number first on the rekenrek is not just a matter of expediency. This also develops number sense because the student gets a lot of practice comparing quantities. Many students with special needs require extra practice comparing quantities in order to develop number sense.

However, if the step of comparing numbers on a number line is too difficult for a student, it may be helpful to let the student compare numbers on the rekenrek. In this case, teach your child to follow this sequence of steps in order to add:

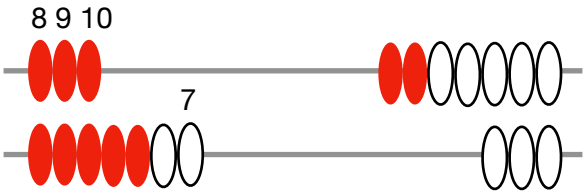
1. **Slide the beads** (in the order given)



2. **Which is more**? The student should tap last bead of the number that is more.



3. **Count on.** The student says the number on the row that has more beads and counts on while touching and counting the beads on the row that has less.



Model this process several times, and have your student memorize the steps: "*Slide the beads, Which is more? Count on*." Touching the beads while counting on will help your student be more accurate.

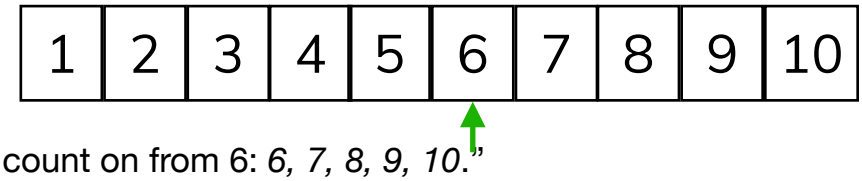
NOTE: Moving forward, review sheets will give you the option of adding by sliding beads on one bar (lesson 8a) or two bars (lesson 8b). Choose the method that works best for your student.

Ways to Practice Counting on from a number other than one

Some children will need extra practice counting on from a number other than one. Here are some ways to help your child master counting on:

1. Using a number line

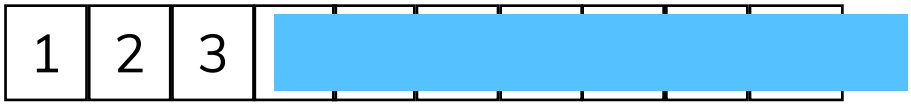
Place a number line on the table. Point to a number and together practice counting on from that number while pointing to the numbers on the number line.



ie. "Let's count on from 6: *6, 7, 8, 9, 10*."
Take turns choosing what number to count on from.

2. Covering numbers on a number line.

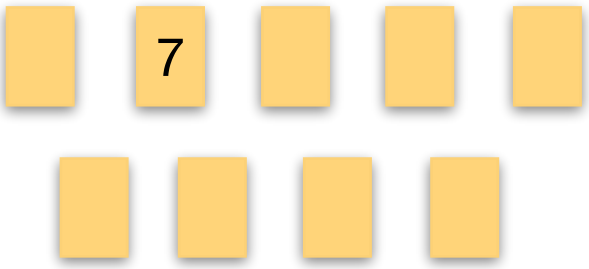
Place a number line on the table. Take a strip of paper and cover the numbers that come after the number you want to start counting on from. Together, practice counting on from that number, then remove the strip.



ie. "Let's count on from 3: *3 ,4 ,5 , 6, 7, 8, 9, 10*."

3. Choosing numbers to count on from using number cards.

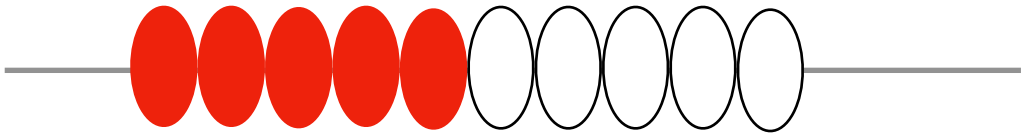
Place numbers cards 1-9 face down on a table in a random order. Choose a card and together practice counting on from that number.



ie. "Let's count on from 7: *7, 8, 9, 10*."

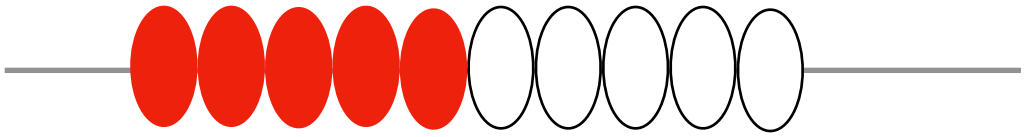
Another option is to throw a dice and count on from the number that is face up.

Review: +1/+2/+3 Addition Facts



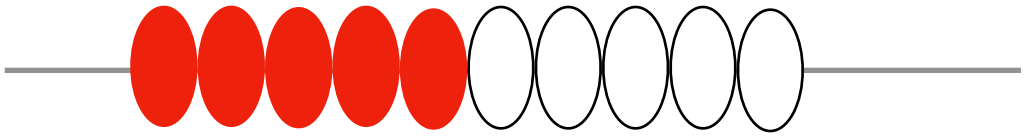
8 + 1 =	1 + 2 =
7 + 2 =	2 + 3 =
5 + 3 =	4 + 1 =
3 + 2 =	6 + 3 =
0 + 1=	8 + 2 =

Review: +3/+4 Addition Facts



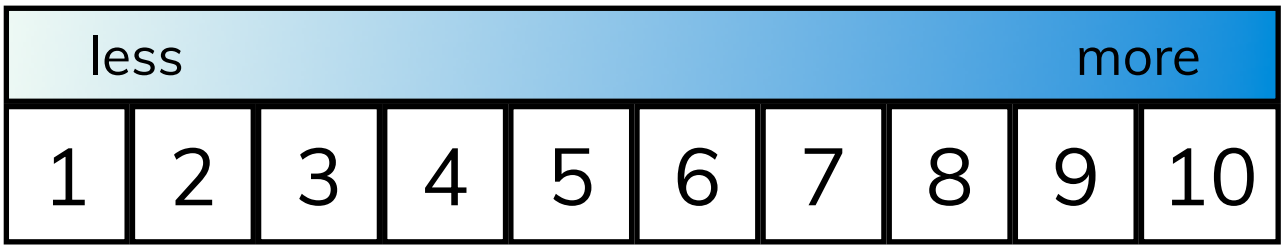
1 + 4 =	6 + 4 =
3 + 3 =	1+ 3 =
5 + 4 =	4 + 4 =
2 + 3 =	3 + 3 =
4 + 4 =	5 + 3 =

Review: +5 Addition Facts



5 + 4 =	1 + 5 =
5 + 3 =	2 + 5 =
5 + 1 =	4 + 5 =
5 + 5 =	3 + 5 =
5 + 2 =	0 + 5 =

Step 8: Addition Facts within 10



5 + 3 =	7 + 2 =
2 + 8 =	3 + 6 =
3 + 7 =	4 + 5 =
6 + 3 =	1 + 7 =
1 + 9 =	0 + 5 =

Step 8b: Addition Facts within 10

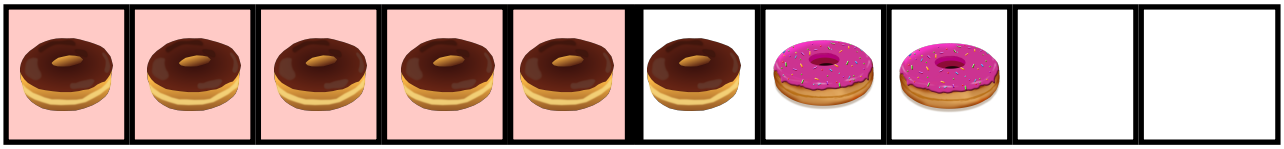


Slide the beads.
Which is more?
Count on.

5 + 3 =	7 + 2 =
2 + 8 =	3 + 6 =
3 + 7 =	4 + 5 =
6 + 3 =	1 + 7 =
1 + 9 =	0 + 5 =

Step 8 Math in Real Life

1. Kim bought 6 donuts. Then she bought 2 more donuts. How many donuts did she buy altogether?



☐ + ☐ = ☐

2. Tom saw 7 butterflies . Then he saw 3 beetles. How many bugs did he see altogether?



☐ + ☐ = ☐

Step 8 Math in Real Life

1. Kim read 5 books. Then she read 1 more. How many did she read?




$5 + 1 = \square$

2. Ted kicked 6 balls. Then he kicked three more. How many balls did he kick?



$6 + 3 = \square$

3. Tom saw 4 birds. Then he saw 2 more. How many did he see?



$4 + 2 = \square$

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Step 9: Memorizing the Doubles Facts within Ten

Daily review:
- Count 1-10 while moving the beads on the rekenrek
- Practice comparing quantities: Which one is more? How much more?
- Practice adding all the addition facts within ten on the rekenrek. Identify the larger number first on a number line and begin with that on the rekenrek. OR use the "Go with Green" number line.

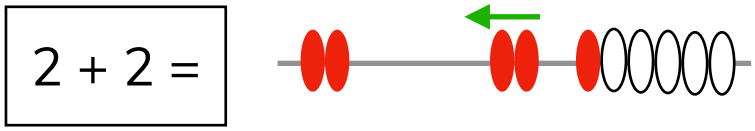
Materials:
- two rekenreks

Lessons:

1. **Memorizing Doubles**
   - Say: ***Some facts are easy to memorize. Once we memorize facts, we no longer need to use a rekenrek to figure out the answer.***
   - Say: ***One plus one equals two.*** Demonstrate it on the rekenrek. Chant it several times and invite your student to join in.
   - Repeat with 2+2=4 and 3+3=6.

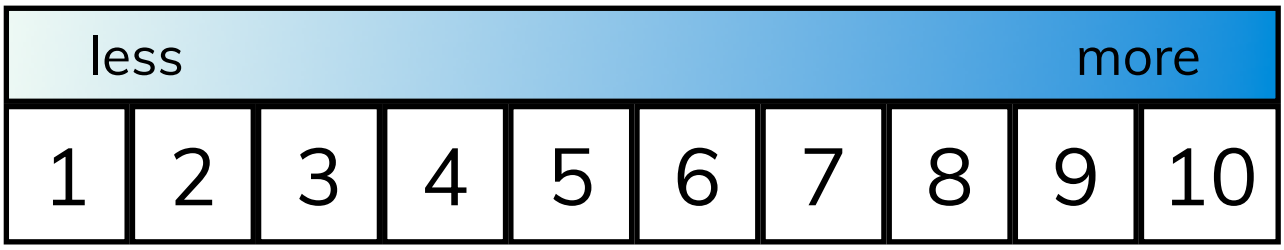
   - Another day, help your child to memorize 4+4=8 and 5+5=10.

2. Put all the doubles addition flash cards in a pile. Take turns drawing them and saying the answer by memory. Always check the answer on the rekenrek.



3. Encourage your child to practice the doubles facts independently using the **Step 9 Doubles Facts worksheets**.

Review: Addition Facts within 10



4 + 3 =	6 + 2 =
2 + 7 =	4 + 5 =
4 + 6 =	3 + 6 =
9 + 1 =	2 + 8 =
2 + 5 =	0 + 10 =

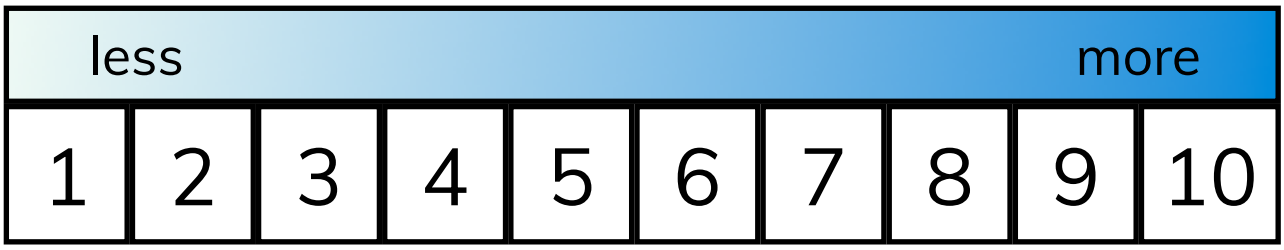
Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

4 + 3 =	6 + 2 =
2 + 7 =	4 + 5 =
4 + 6 =	3 + 6 =
9 + 1 =	2 + 8 =
2 + 5 =	0 + 10 =

Review: Addition Facts within 10



5 + 3 =	7 + 2 =
2 + 8 =	3 + 6 =
3 + 7 =	4 + 5 =
6 + 3 =	1 + 7 =
1 + 9 =	0 + 5 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

5 + 3 =	7 + 2 =
2 + 8 =	3 + 6 =
3 + 7 =	4 + 5 =
6 + 3 =	1 + 7 =
1 + 9 =	0 + 5 =

Step 9: Doubles Facts within 10

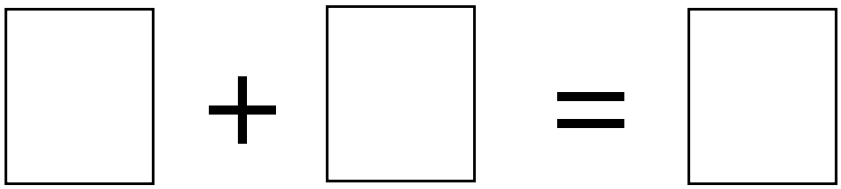
1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

Step 9 Math in Real Life

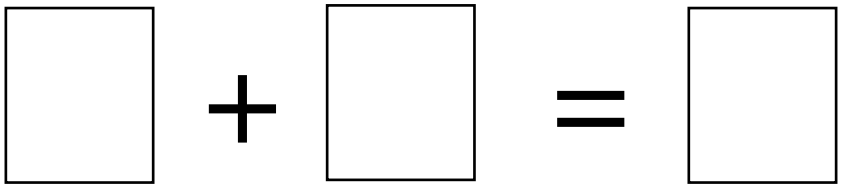
1. Kim bought 4 donuts. Then she bought 4 more donuts. How many donuts did she buy altogether?





2. Tom saw 3 butterflies . Then he saw 3 beetles. How many bugs did he see altogether?



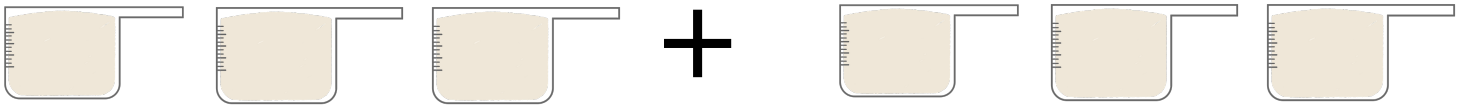


Step 9 Math in Real Life

1. Jen has a recipe for cookies. She wants to double the recipe. Help her by writing the number sentence and adding.



1 + 1 = ☐



☐ + ☐ = ☐



☐ + ☐ = ☐

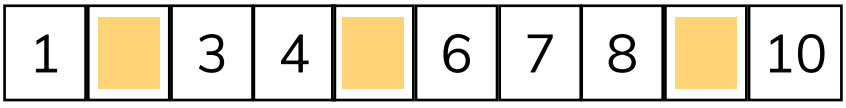
Step 10: Adding +1 by Counting On

Daily review:
- Count 1-10 while moving the beads on the rekenrek
- Practice comparing quantities: Which one is more? How much more?
- Practice adding all the addition facts within ten on the rekenrek. Identify the larger number first on a number line and begin with that on the rekenrek.
- Practice the doubles facts by memory

Materials:
- two rekenreks
- Number line

Lessons:

1. **What's the next number?**
   - Point to a number on the number line. Ask: ***What's the next number?*** Do this several times, encouraging your student to point to and name the next number.
   - Say: ***We're going to play "Peek". Close your eyes while I cover some numbers.*** Cover some numbers with a small piece of paper. For example:



   Help your student name the next number. Let your child mover the paper to check the answer.

2. Say: ***Adding +1 is the same as naming the next number.*** Demonstrate with the rekenrek and the number line.

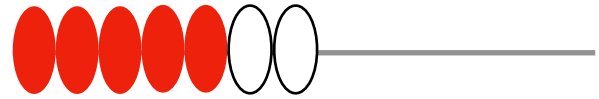
3. Say: ***Let's see if we can add +1 just by naming the next number.*** Practice several +1 facts with flash cards.

4. Encourage your child to practice the +1 facts independently using the **Step 10 addition worksheets**.

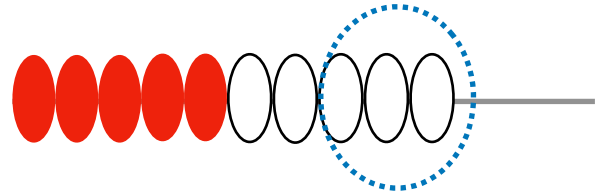
Review: Comparing Numbers

Put a check beside the number that is more.
Circle how much more.

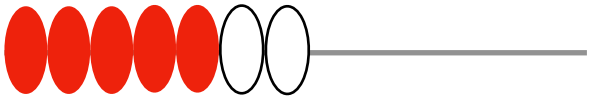
☐ 7



☑ 10



☐



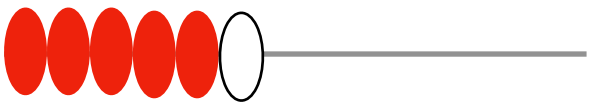
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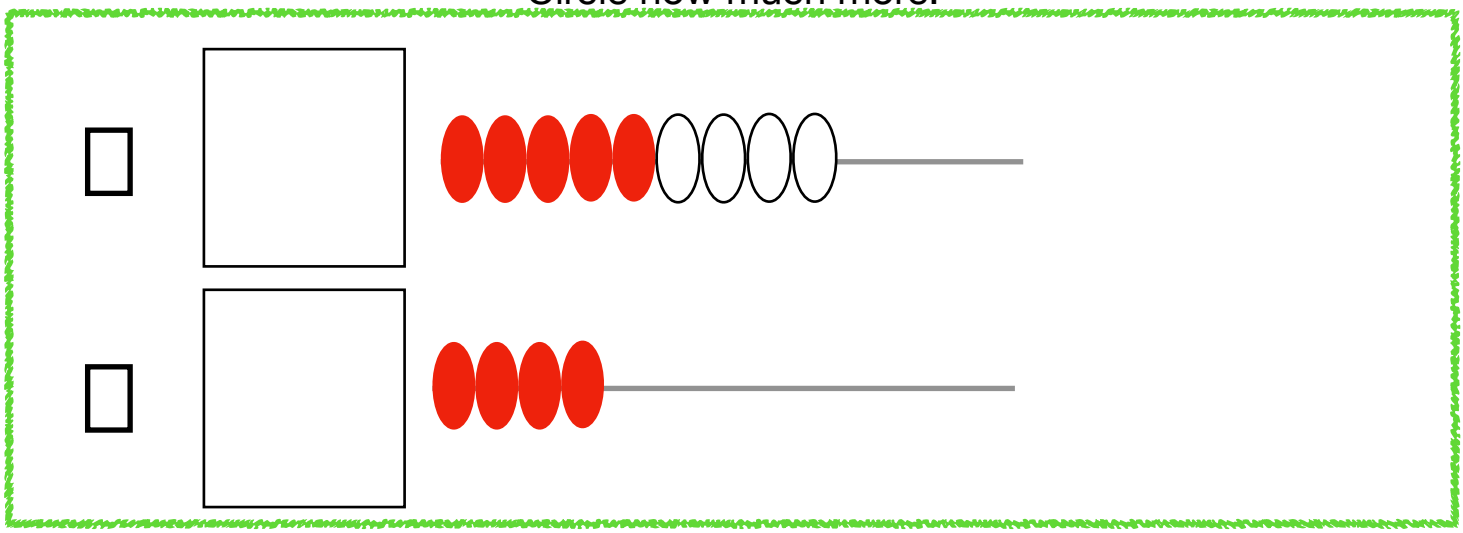


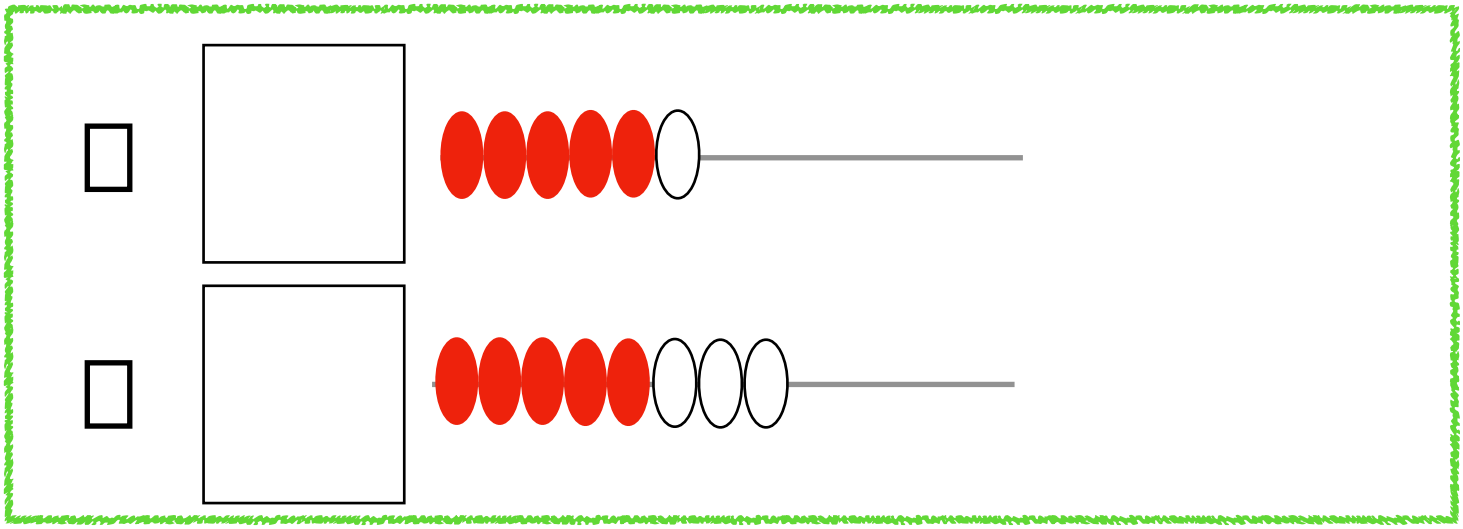
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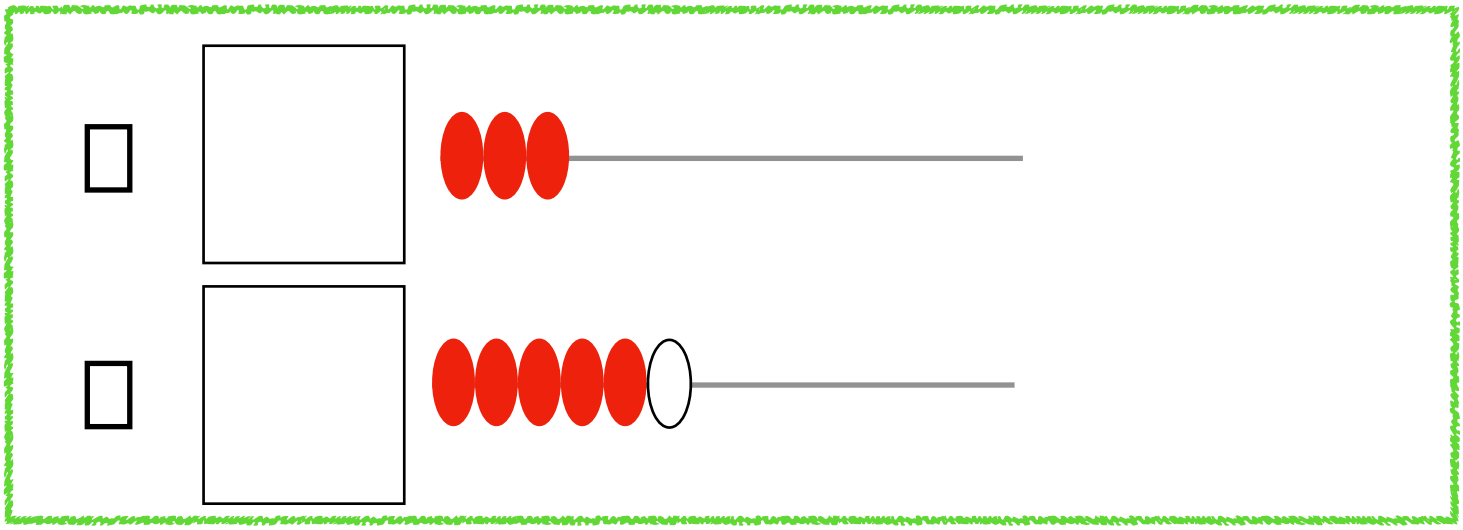


Review: Comparing Numbers

Put a check beside the number that is more.
Circle how much more.



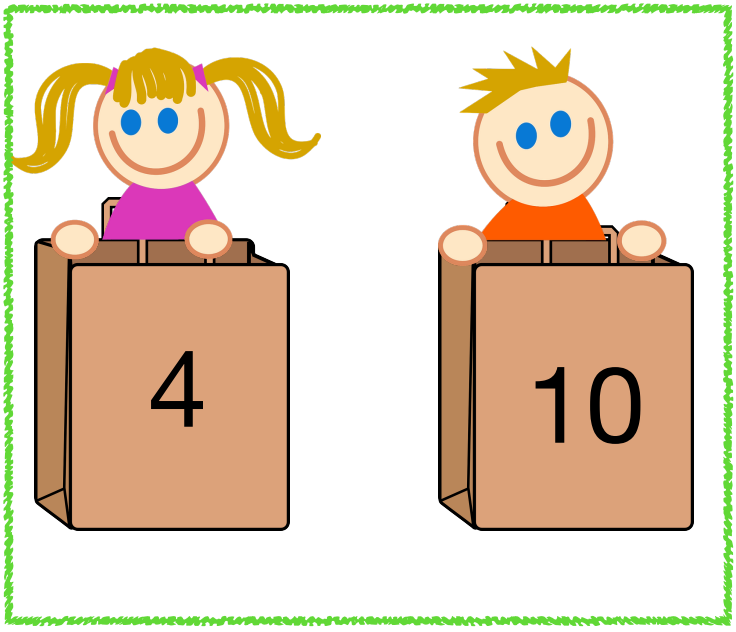


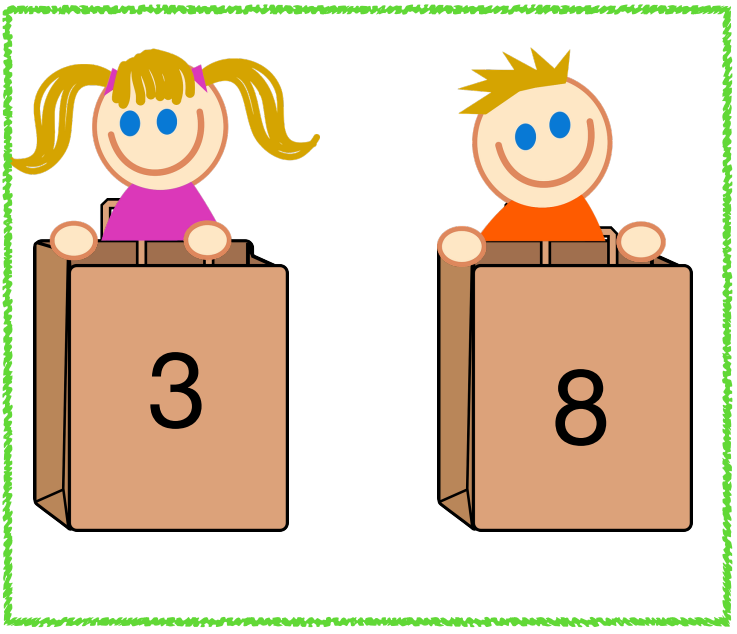


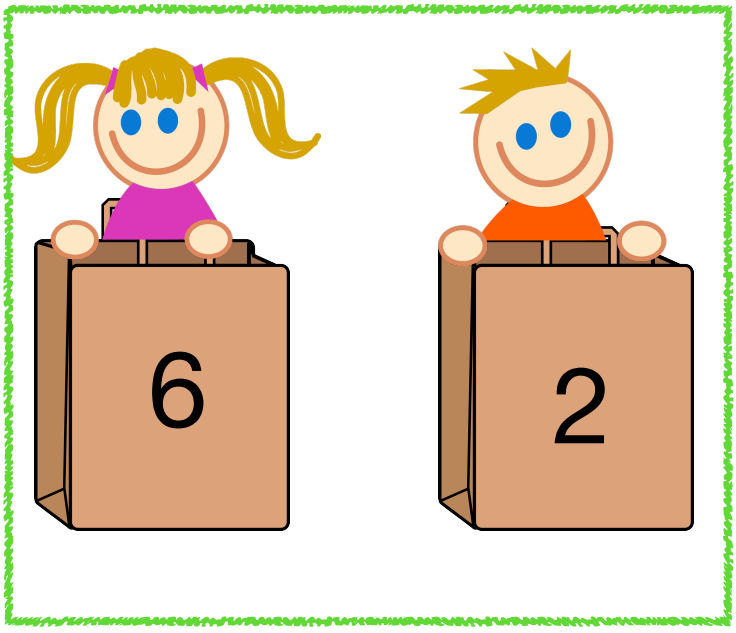
Review: Comparing Numbers

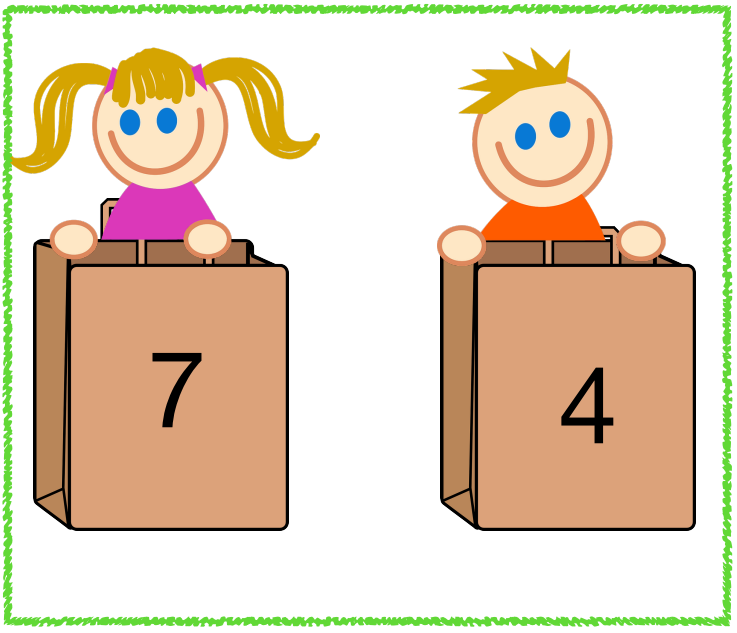
1. Circle the picture of the child who has more toys in their bag:

less									more
1	2	3	4	5	6	7	8	9	10









Review: Addition Facts within 10

less									more
1	2	3	4	5	6	7	8	9	10

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

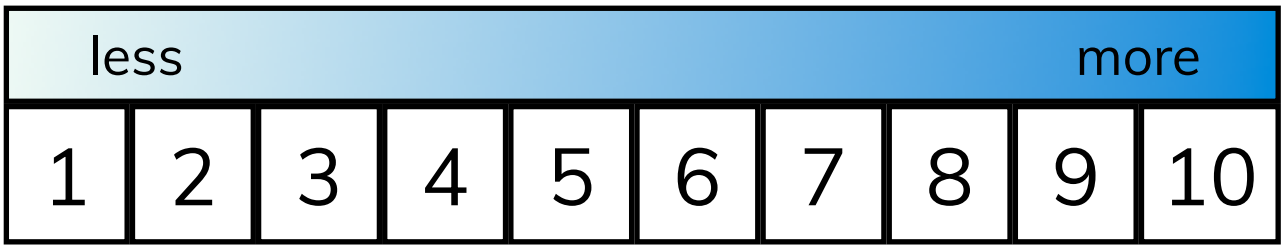
Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Review: Addition Facts within 10



6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

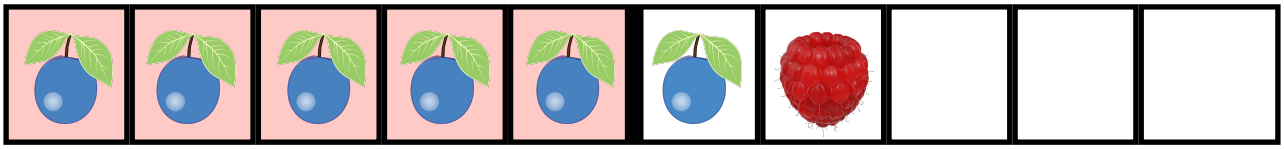
Step 10: +1 Addition Facts by Counting On

1	2	3	4	5	6	7	8	9	10

3 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
7 + 1 =	6 + 1 =
9 + 1 =	8 + 1 =
1 + 1 =	0 + 1 =

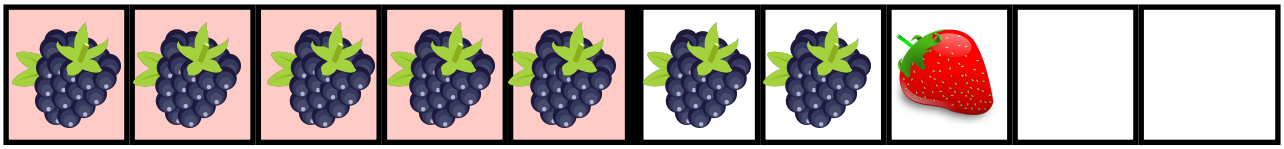
Step 10 Math in Real Life

1. Sal ate 6 blueberries. Then he ate 1 raspberry. How many berries did he eat altogether?



☐ + ☐ = ☐

2. Jen ate 7 blackberries. Then she ate 1 strawberry. How many berries did she eat altogether?



☐ + ☐ = ☐

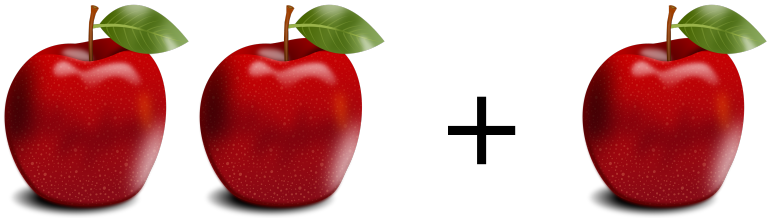
Step 10 Math in Real Life

1. Dad ate 4 cookies. Then he ate 1 more. How many did he eat? Write the number sentence and add.



☐ + ☐ = ☐

2. Sue ate 2 apples. Then she ate 1 more. How many did she eat? Write the number sentence and add.



☐ + ☐ = ☐

3. Jack ate 3 strawberries. Then he ate 1 more. How many did he eat? Write the number sentence and add.



☐ + ☐ = ☐

Step 11: Adding +2 by Counting On

Daily review:
- Practice adding all the addition facts within ten on the rekenrek.
- Practice the doubles facts by memory
- Practice +1 facts by counting on (without the rekenrek)

Materials:
- two rekenreks
- Number line

Lessons:

1. **What are the next two numbers?**
   - Point to a number on the number line. Ask: ***What are the next two numbers?*** Do this several times, showing your student how to count on to the next two numbers while pointing to them on number line.
   - Say: ***We're going to play "Peek". Close your eyes while I cover some numbers.*** Cover some numbers with a small piece of paper. For example:



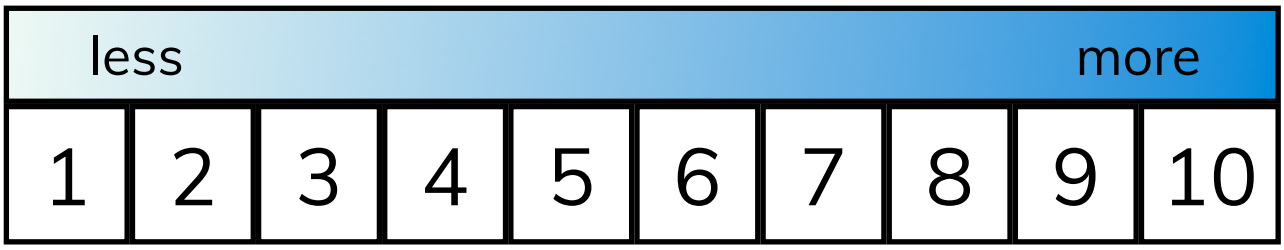
   Help your student name the next two numbers. Let your child remove the paper to check the answer.

2. Say: ***To add 2, you can just count the next two numbers.*** Demonstrate with the rekenrek and the number line, and then simply by counting. For example: *5+2= five… six, seven. 5+2=7.*

3. Say: ***Let's see if we can add +2 just by naming the next two numbers.*** Practice several +2 facts with flash cards and no rekenrek.

4. Encourage your child to practice the +2 facts independently using the **Step 11 addition worksheets**.

Review: Addition Facts within 10



6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

Review: +1 Addition Facts by Counting On

1	2	3	4	5	6	7	8	9	10

3 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
7 + 1 =	6 + 1 =
9 + 1 =	8 + 1 =
1 + 1 =	0 + 1 =

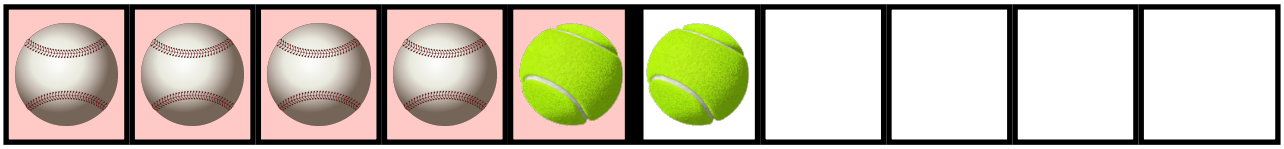
Step 11: +2 Addition Facts by Counting On

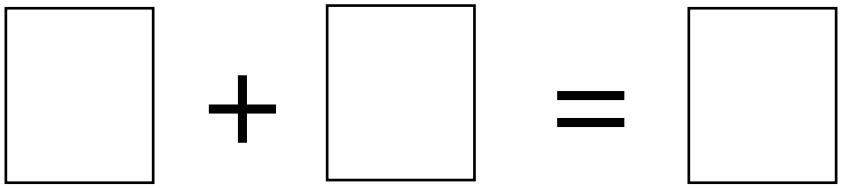
1	2	3	4	5	6	7	8	9	10

3 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
7 + 2 =	6 + 2 =
8 + 2 =	8 + 2 =
1 + 2 =	0 + 2 =

Step 11 Math in Real Life

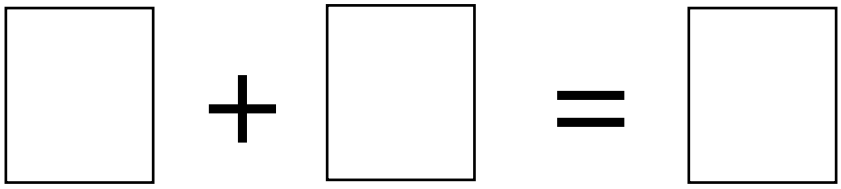
1. Ann threw 4 baseballs. Then she threw 2 tennis balls. How many balls did she throw altogether?





2. Jen picked 7 red flowers. Then she picked 2 blue flowers. How many flowers did she pick altogether?





Step 11 Math in Real Life

1. Jed saw 4 butterflies. Then he saw 2 more. How many did he see altogether? Write the number sentence and add.



☐ + ☐ = ☐

2. Bill caught 3 frogs. Then he caught 2 more. How many did he catch altogether? Write the number sentence and add.



☐ + ☐ = ☐

3. Kim saw 7 ladybugs. Then she saw 2 more. How many did she see altogether? Write the number sentence and add.



☐ + ☐ = ☐

Step 12: Introduction to Number Bonds

Daily review:

- Practice adding all the addition facts within ten on the rekenrek..
- Practice the doubles facts by memory
- Practice +1 and +2 facts by counting on (without the rekenrek)

Materials:

- two rekenreks
- blank number bond worksheet #1
- five beads or counters, all the same color

Lessons:

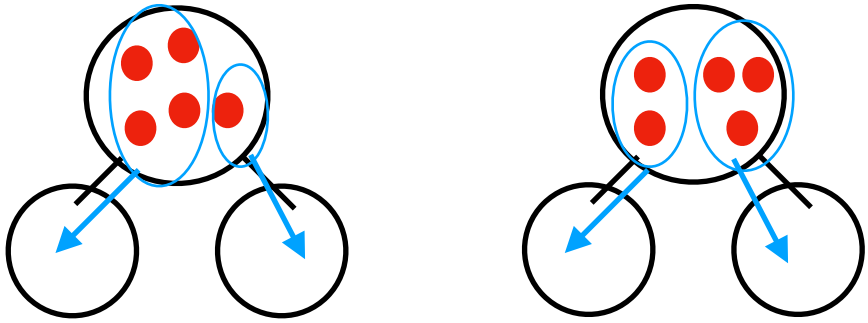
1. **What makes five?**
   - Line up five beads on the top row of the rekenrek. Line four beads on the bottom row.



Say: ***How many beads are on the top row? How many on the bottom?***
Then: ***I want to make the bottom row five, also. How can I do that?***

   - Help your student see that by adding one more bead, the bottom row becomes five.
   - Say: ***You just made five by adding 4 and 1. Let's look at another way of making five.*** Repeat the process with three and two.

2. **Introduce number bonds:** Take out **Step 12 worksheet**. Say: ***This is a number bond. The top big circle is for the total. The smaller circles are where we record the parts of a number. Let's record how we made five.***
   - Place five counters on the top circle. Say: ***Here we have five. This is the total.***



   - Say and demonstrate: ***We can break up five into its parts. We can break it up into four and one. Or we can break it into two and three.***
   - Help your student fill in the remaining two number bonds with numbers.

Review: Addition Facts within 10

less									more
1	2	3	4	5	6	7	8	9	10

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

Review: +1 Addition Facts by Counting On

1	2	3	4	5	6	7	8	9	10

3 + 1 =	2 + 1 =
5 + 1 =	4 + 1 =
7 + 1 =	6 + 1 =
9 + 1 =	8 + 1 =
1 + 1 =	0 + 1 =

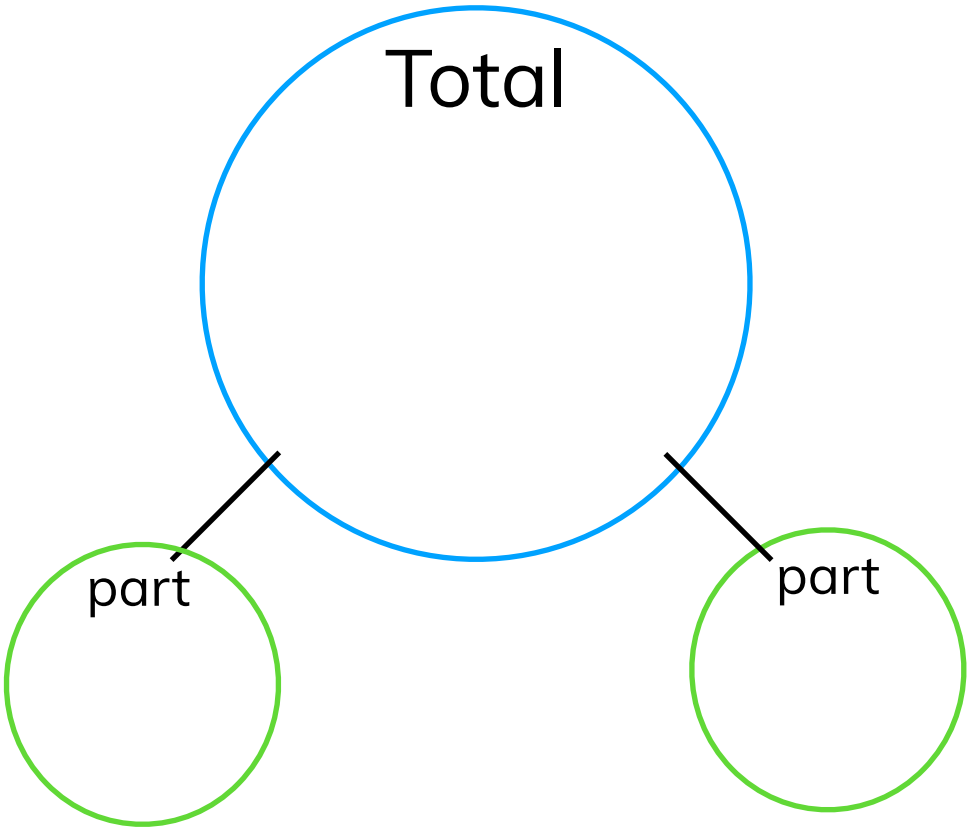
Review: +2 Addition Facts by Counting On

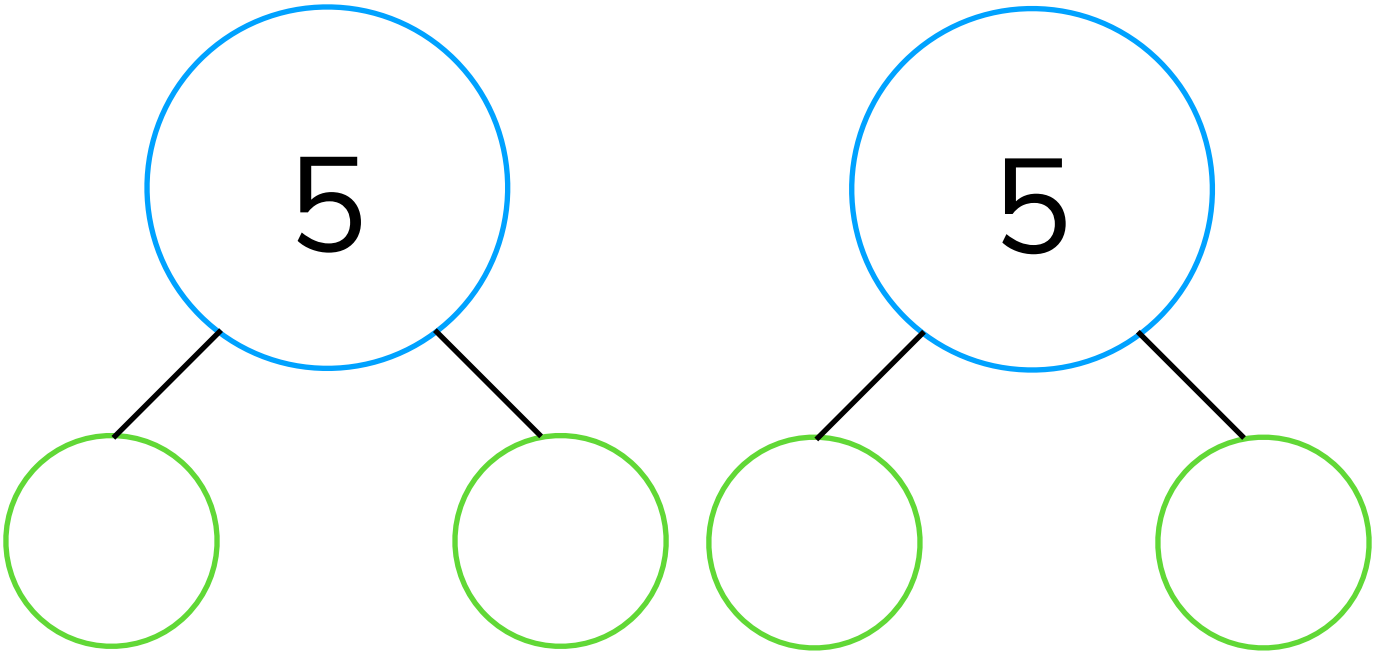
1	2	3	4	5	6	7	8	9	10

3 + 2 =	2 + 2 =
5 + 2 =	4 + 2 =
7 + 2 =	6 + 2 =
8 + 2 =	8 + 2 =
1 + 2 =	0 + 2 =

Step 12

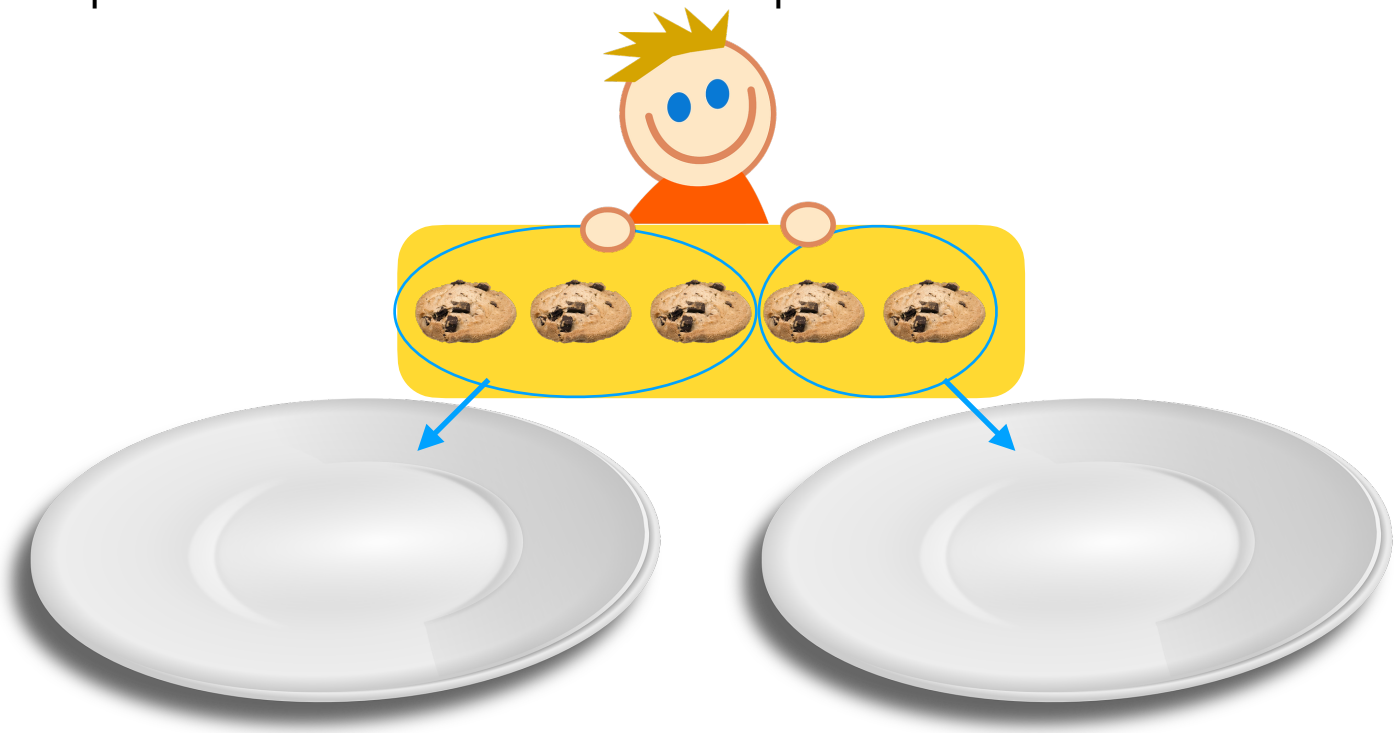
Use the rekenrek to figure out what makes 5.



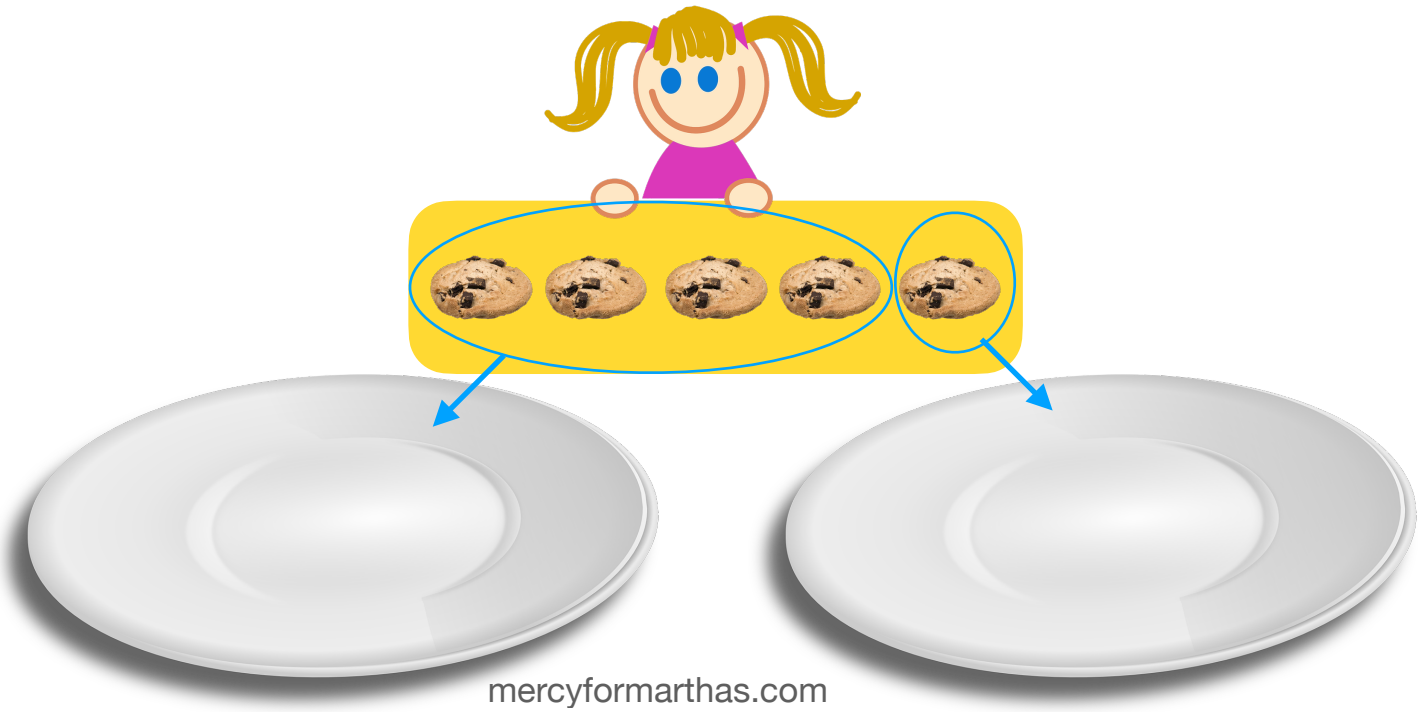


Step 12 Math in Real Life

1. Tom has 5 cookies. He puts 3 on one plate and 2 on another plate. Draw the cookies on the plates.

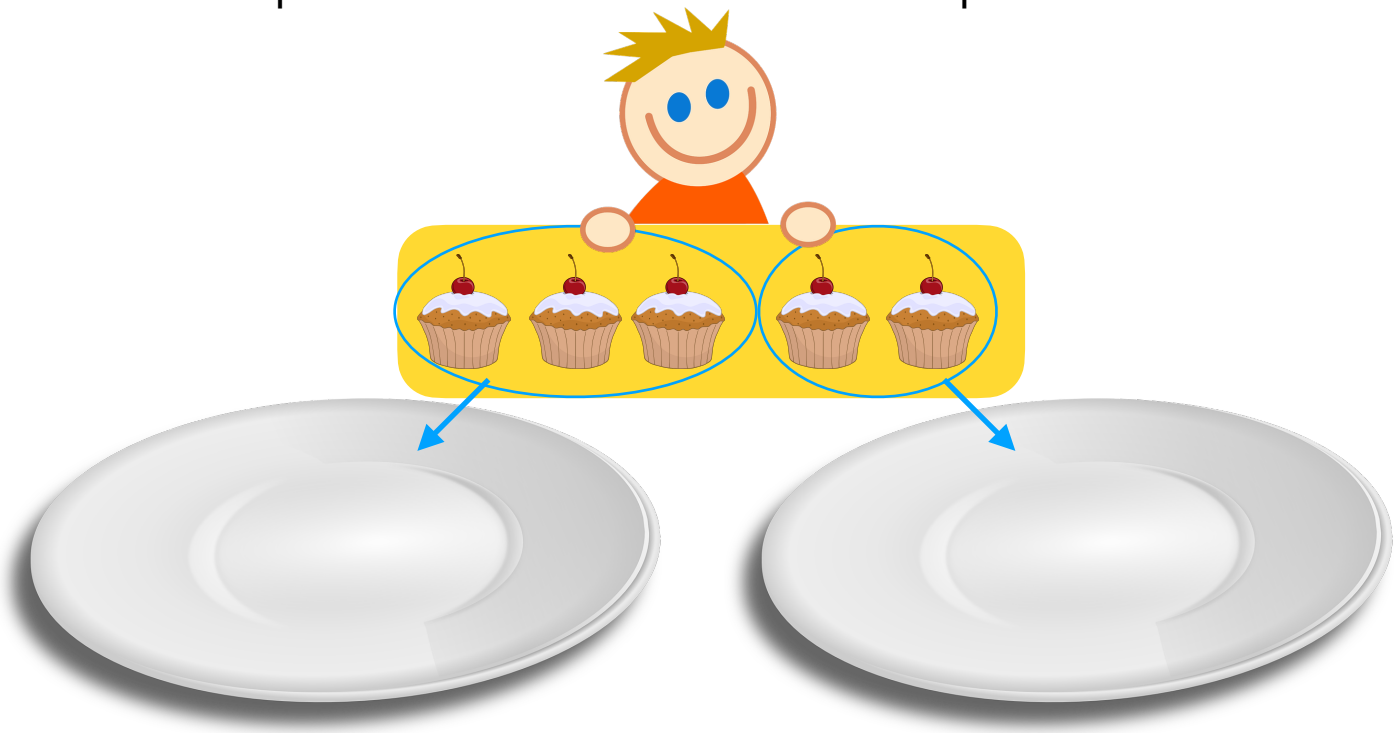


2. Ann has 5 cookies. She puts 4 on one plate and 1 on another plate. Draw the cookies on the plates.

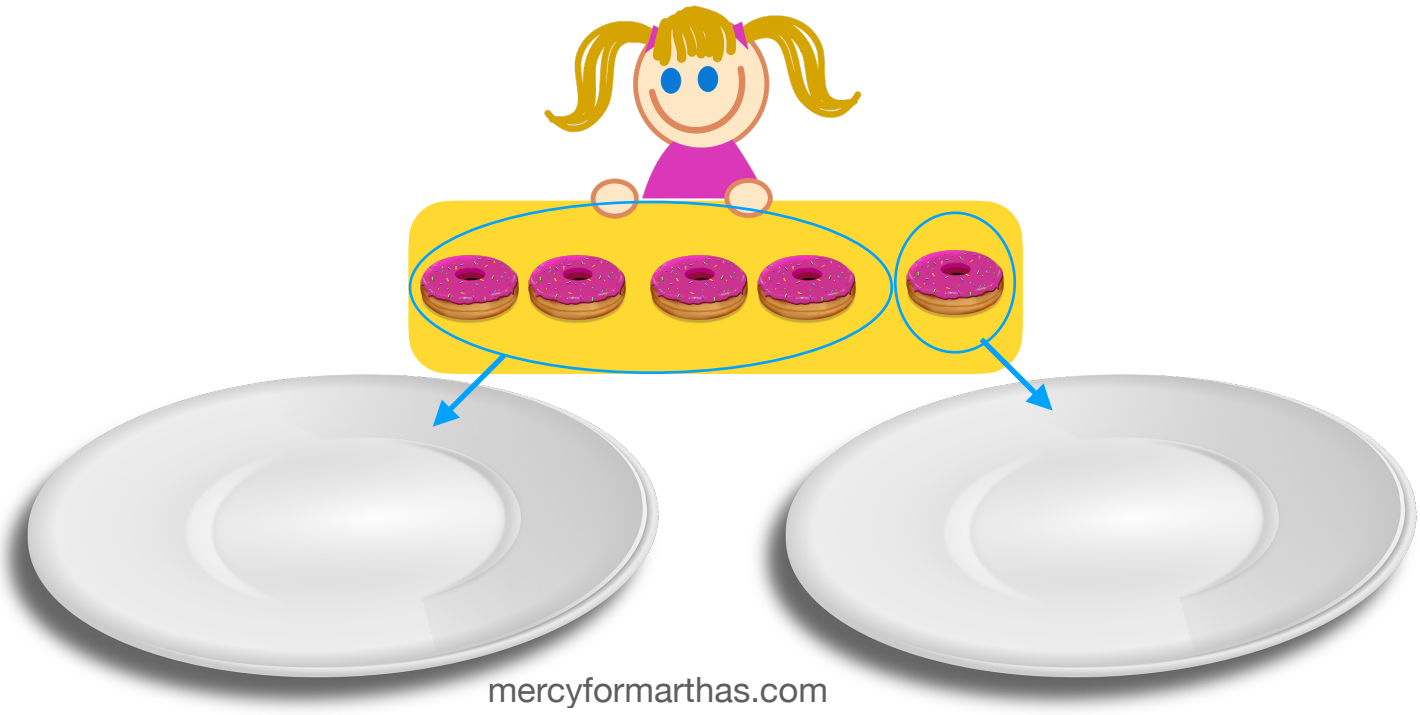


Step 12 Math in Real Life

1. Tom has five muffins. He puts 3 on one plate and 2 on another plate. Draw the muffins on the plates.



2. Ann has five donuts. She puts 4 on one plate and 1 on another plate. Draw the donuts on the plates.



Step 13: Number Bonds and What Makes Ten

Daily review:

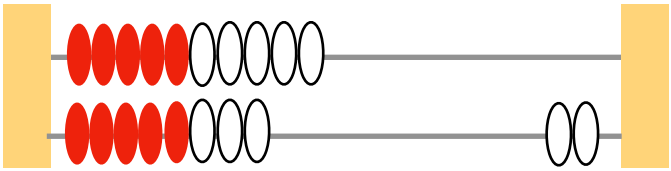
- Practice adding all the addition facts within ten on the rekenrek..
- Practice the doubles facts by memory
- Practice +1 and +2 facts by counting on (without the rekenrek)

Materials:

- two rekenreks
- number bond worksheets #2 and 3
- ten beads or counters

Lessons:

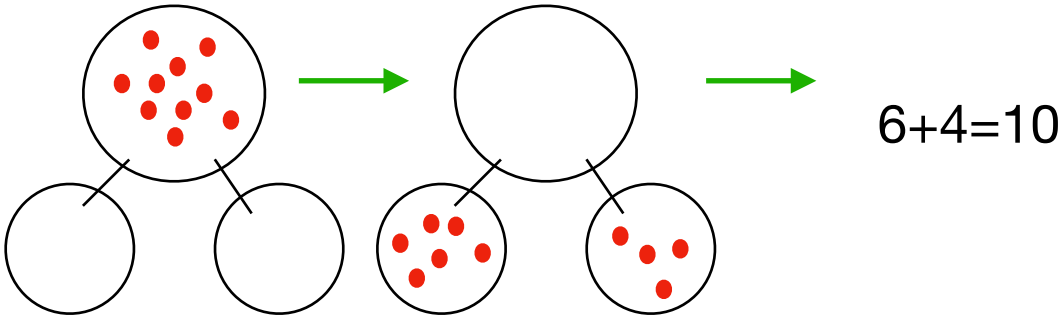
1. **What makes ten?**
   - Line up ten beads on the top row of the rekenrek. Line eight beads on the bottom row.



Say: ***How many beads are on the top row? How many on the bottom?***
Then: ***I want to make the bottom row ten, also. How can I do that?***

   - Help your student see that by adding two more bead, the bottom row becomes ten.
   - Take out **Step 13a worksheet.** Say: ***You just made ten by adding 8 and 2. Let's record that on a number bond.*** Together, record it on the first number bond.
   - ***Let's look more ways of making ten.*** Repeat the process the following pairs: 10 = 7+ _____, 10 = 4+ _____, 10 = 5 + _____. Record on the number bond worksheet.

2. ***Counters on Number Bonds***
   - Demonstrate this concept further by placing ten counters/beads on the top circle of **Step 13b worksheet**
   - Break the ten counters into parts to show different ways of making ten, such as 1+9, 2+8, 3+7, 4+6, and 5+5. For example:



Review: Addition Facts within 10

less									more
1	2	3	4	5	6	7	8	9	10

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

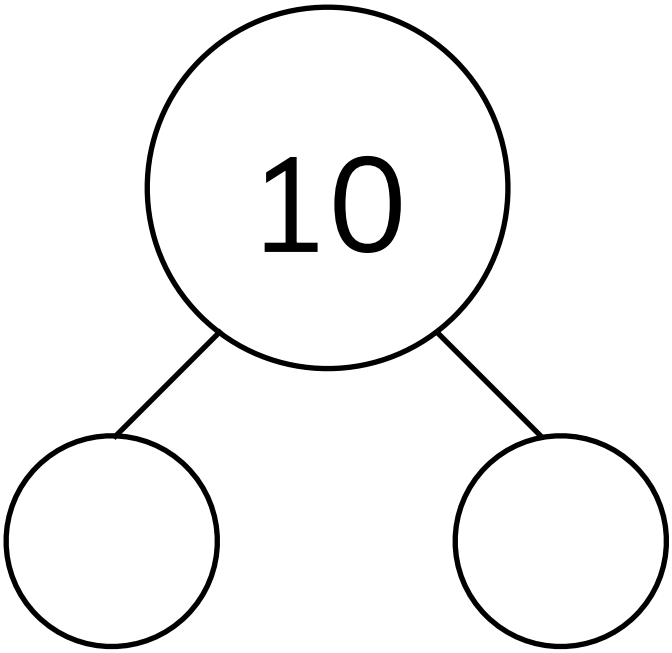
Review: +1/+2 Addition Facts by Counting On

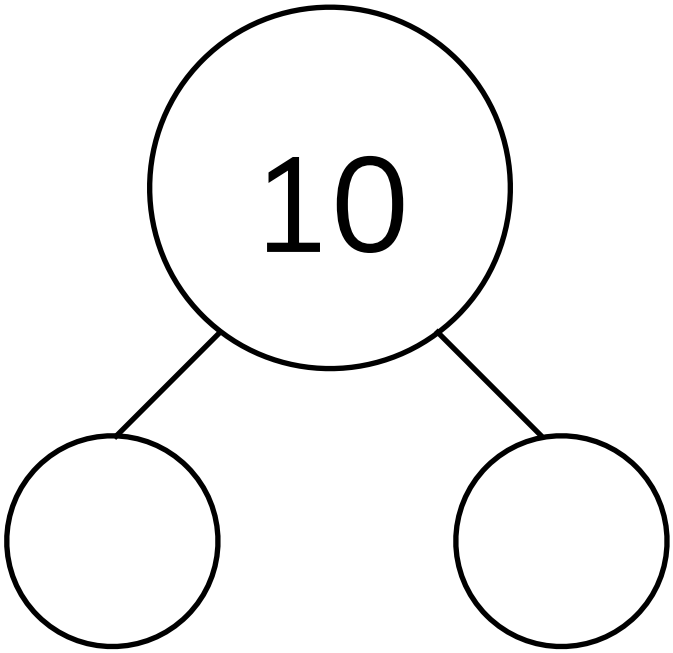
1	2	3	4	5	6	7	8	9	10

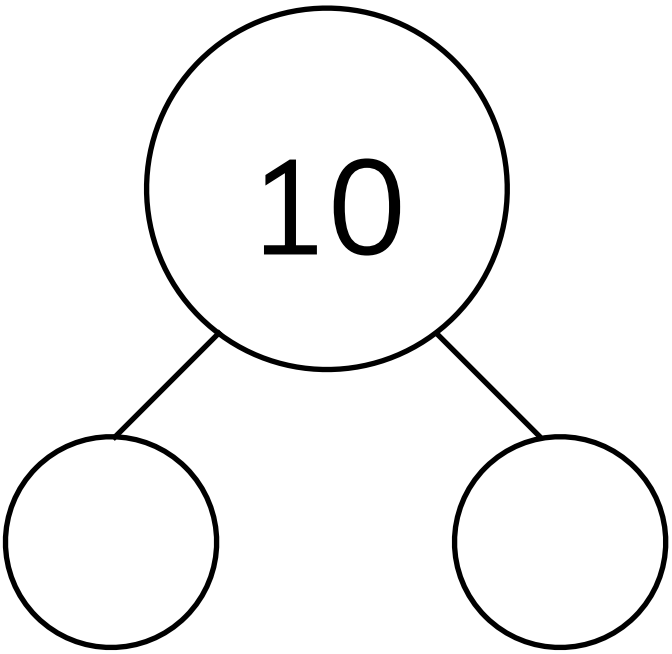
3 + 1 =	2 + 2 =
5 + 1 =	4 + 2 =
7 + 1 =	6 + 2 =
9 + 1 =	8 + 2 =
1 + 1 =	0 + 2 =

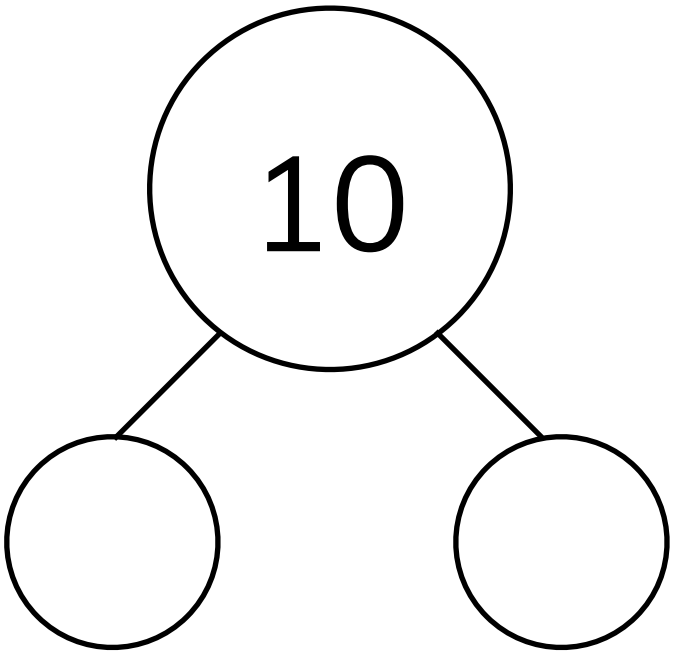
Step 13a

Record different ways to make ten.



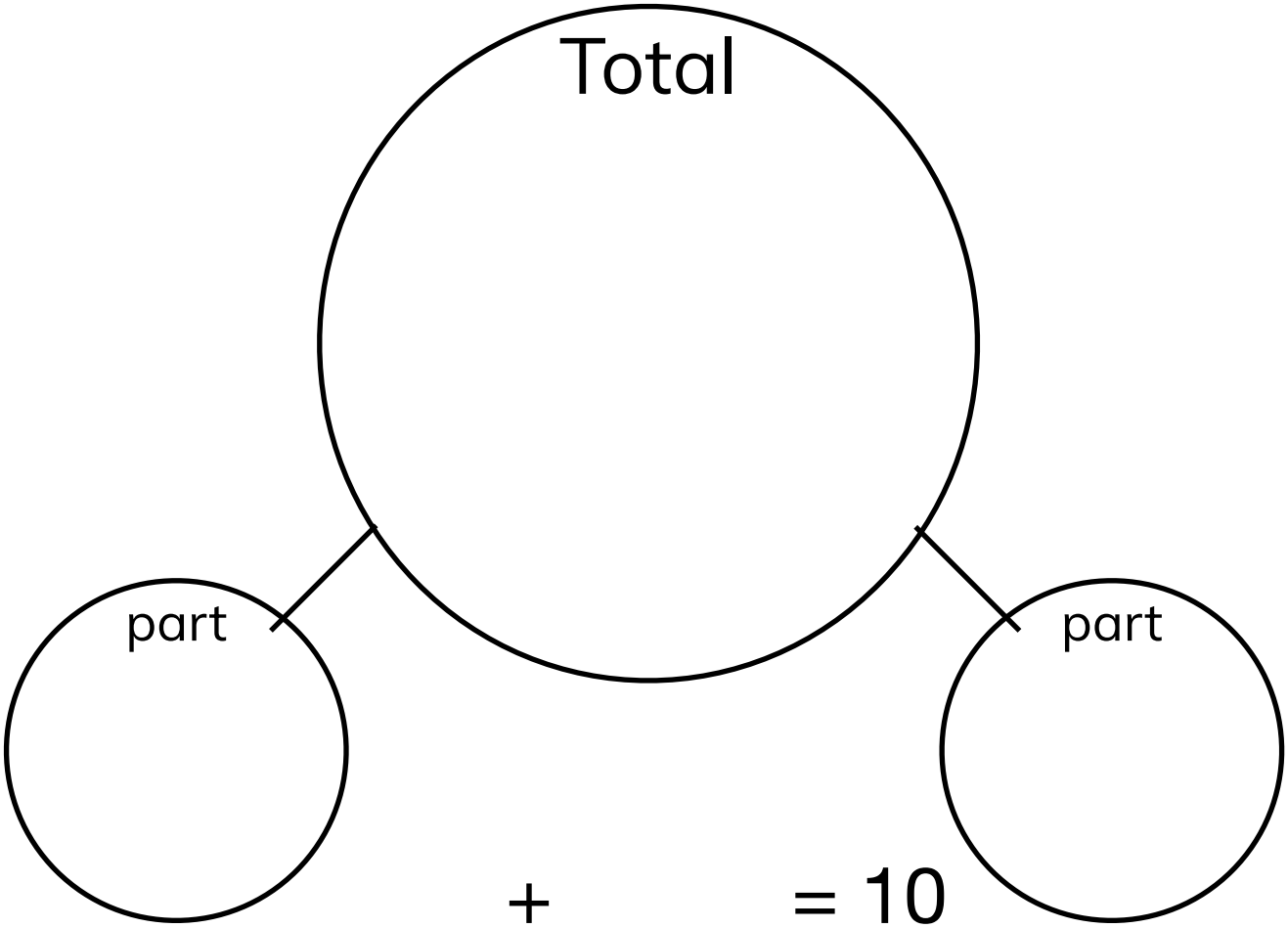






Step 13b

Use counters to discover different ways to make ten.



____ + _____ = 10

____ + _____ = 10

____ + _____ = 10

____ + _____ = 10

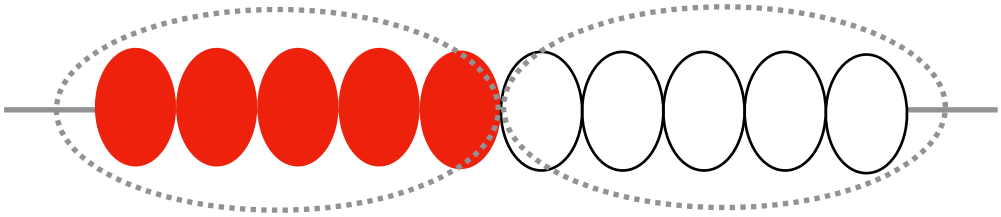
____ + _____ = 10

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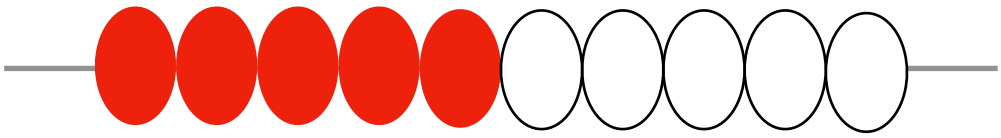
Step 13c

Make ten on the rekenrek

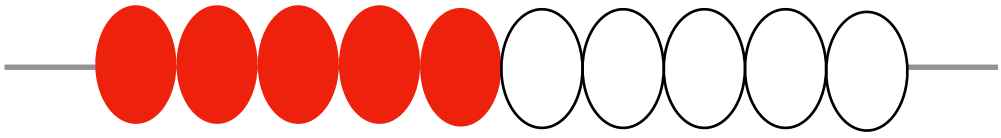
1. Circle the beads to show how to make ten.



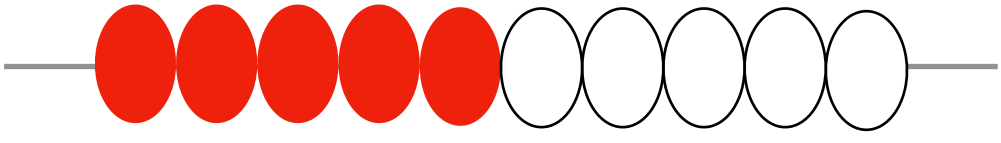
5 + 5 = 10



2 + 8 = 10



4 + 6 = 10

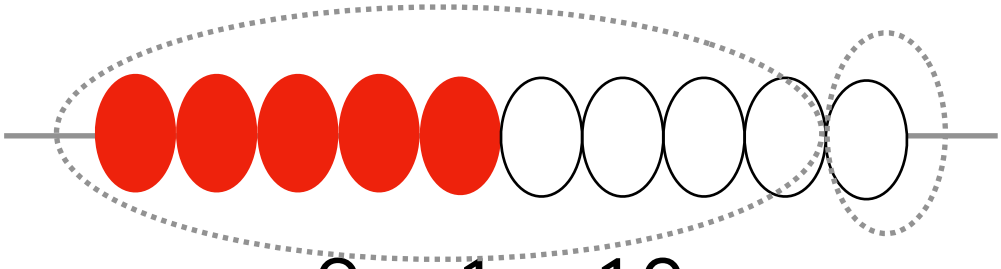


7 + 3 = 10

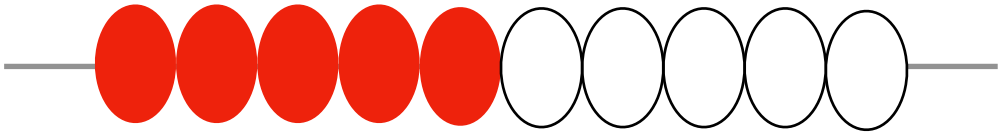
Step 13c

Make ten on the rekenrek

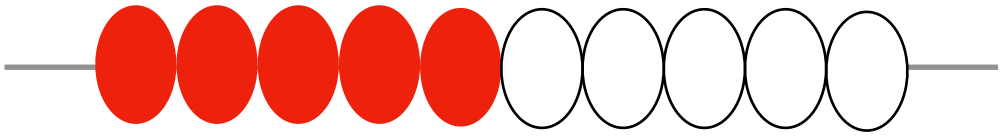
1. Circle the beads to show how to make ten.



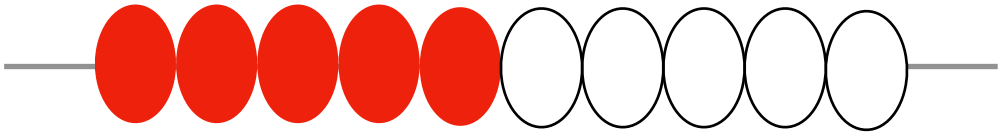
9 + 1 = 10



6 + 4 = 10



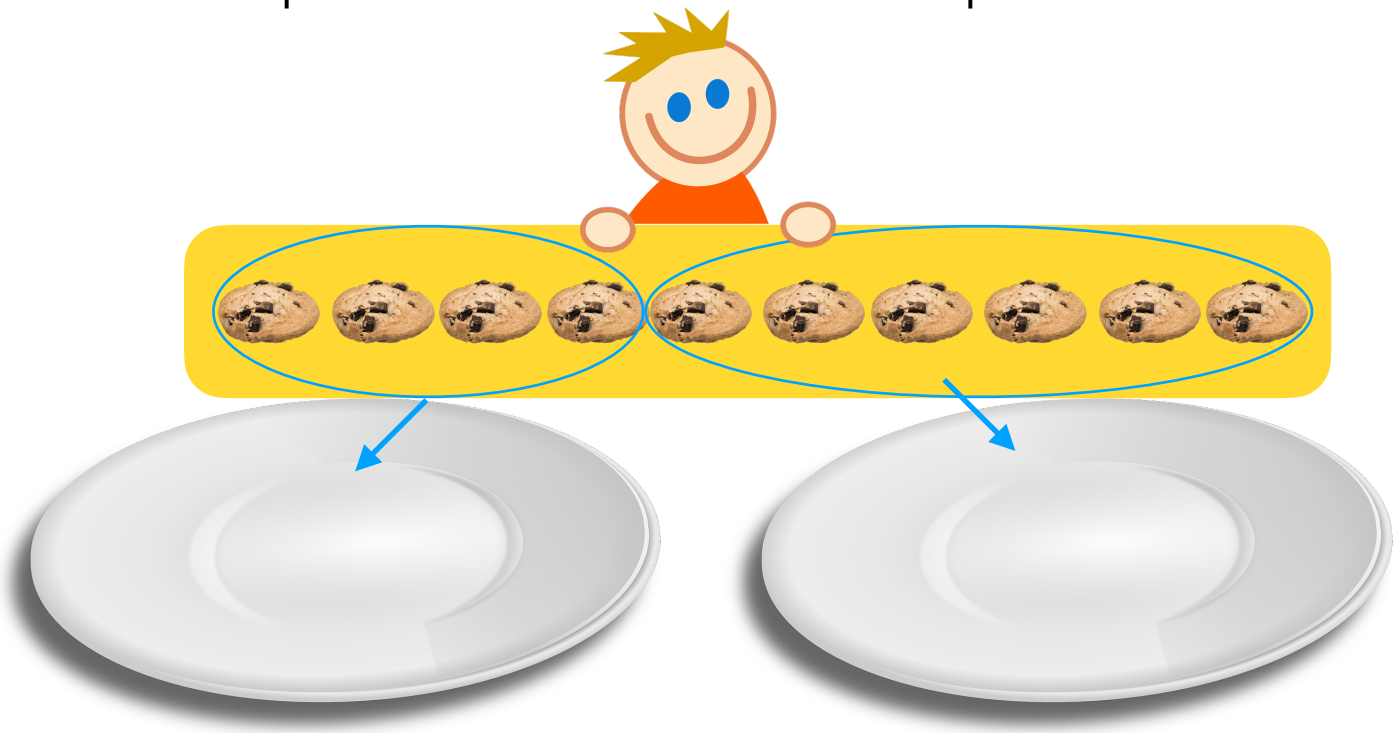
3 + 7 = 10



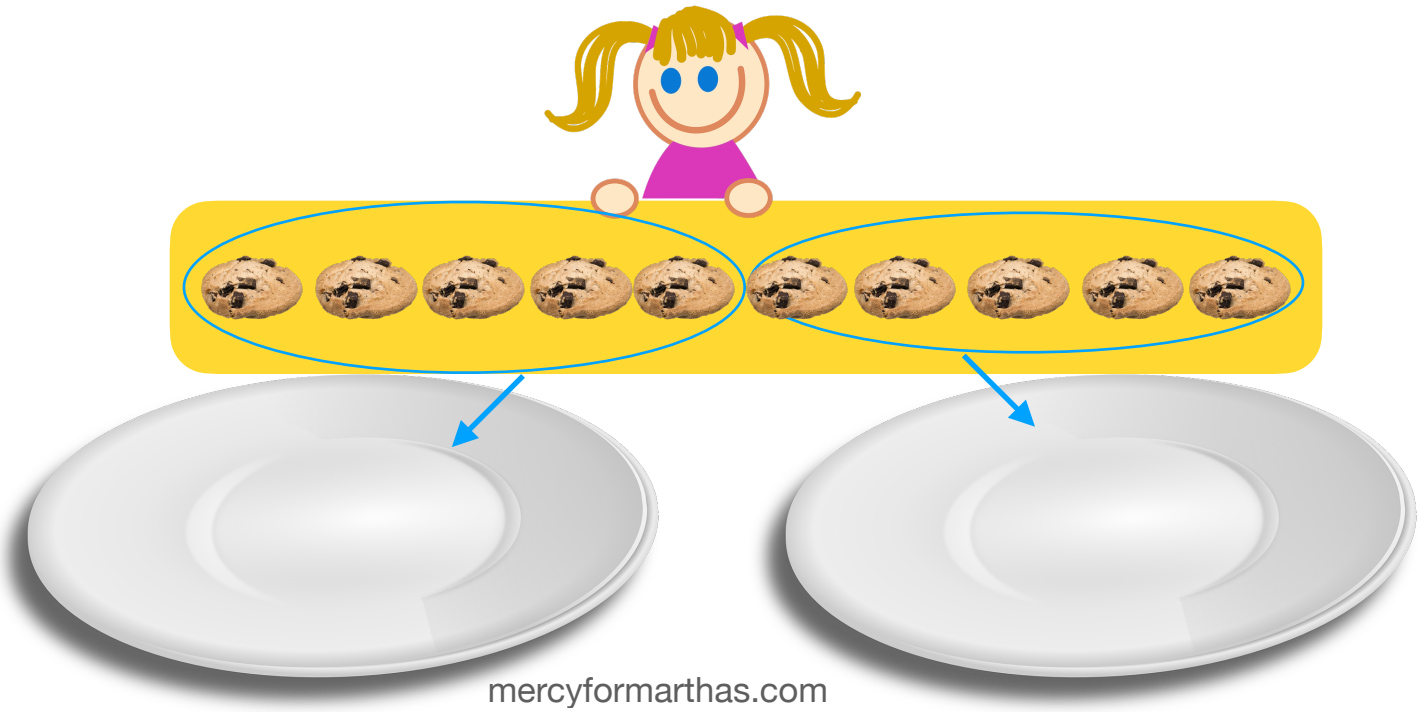
8 + 2 = 10

Step 13 Math in Real Life

1. Tom has 10 cookies. He puts 4 on one plate and 6 on another plate. Draw the cookies on the plates.

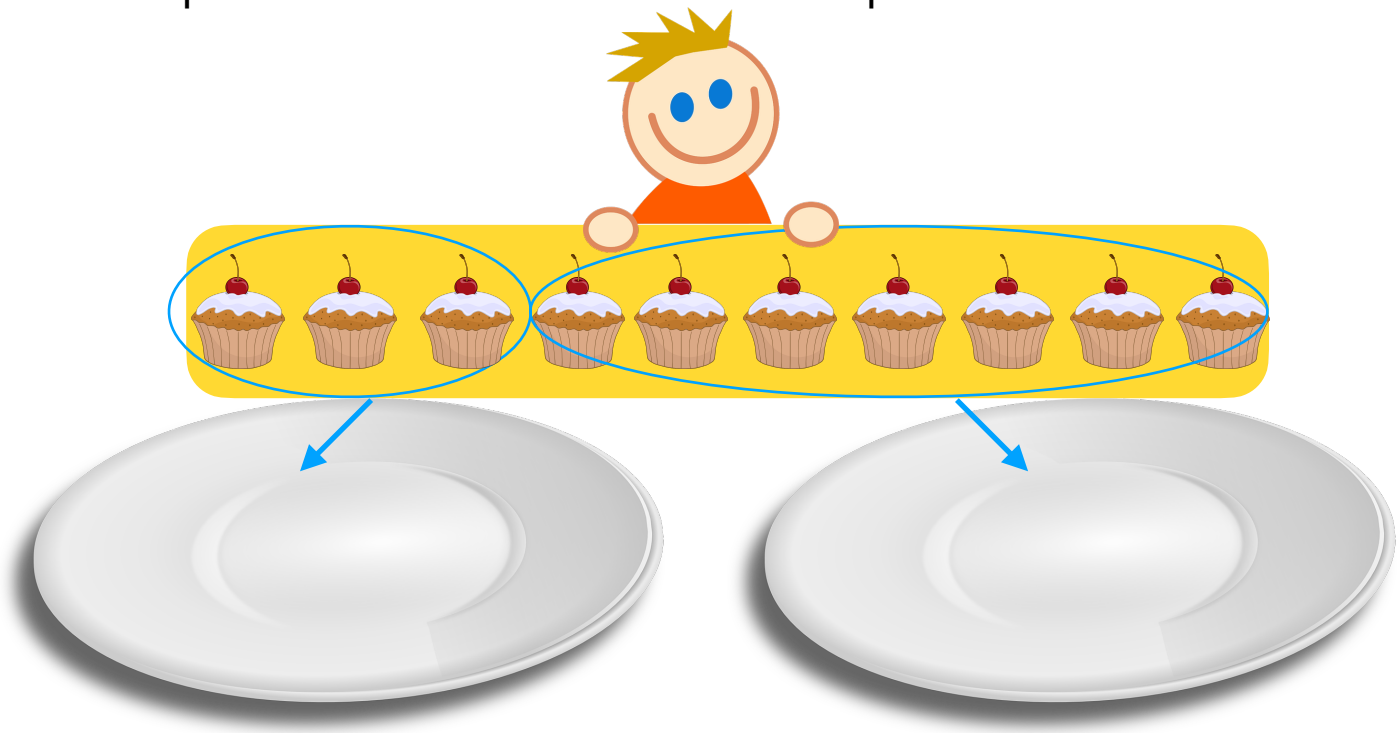


2. Ann has 10 cookies. She puts 5 on one plate and 5 on another plate. Draw the cookies on the plates.

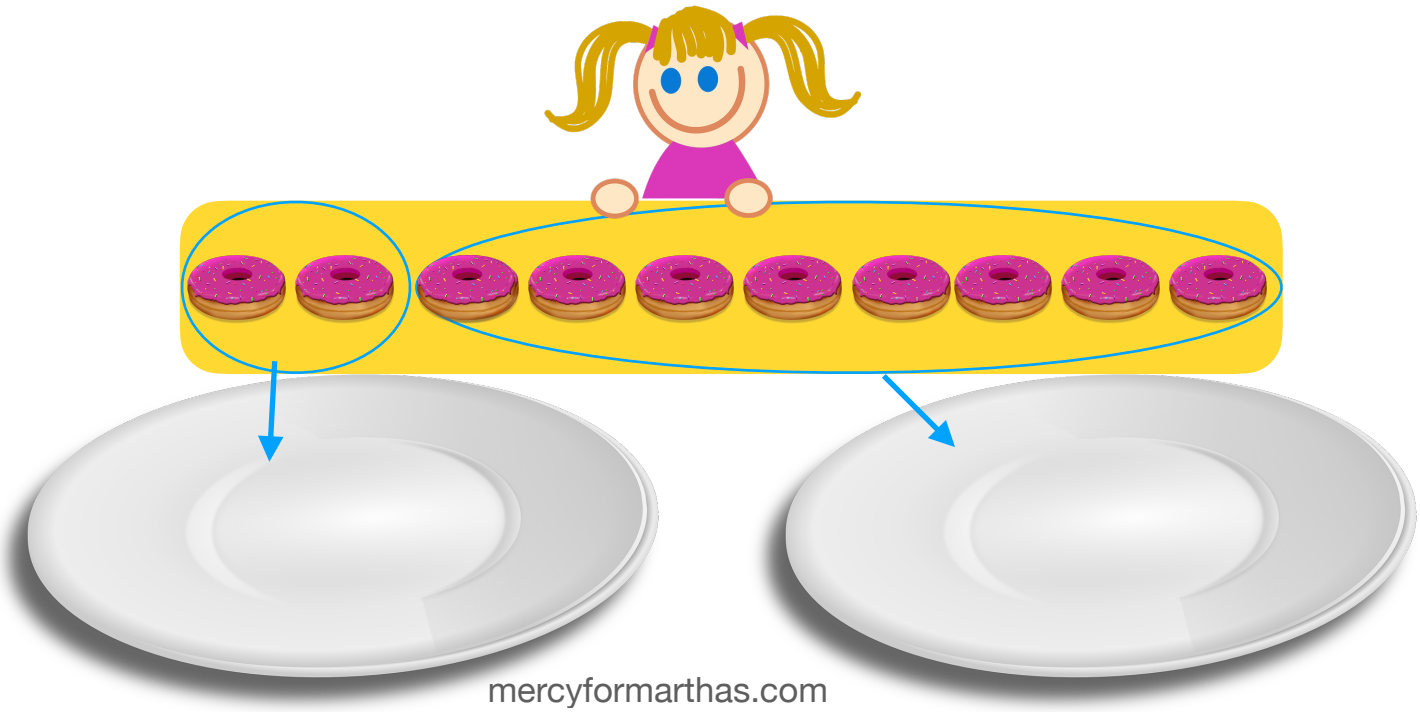


Step 13 Math in Real Life

1. Tom has 10 muffins. He puts 3 on one plate and 7 on another plate. Draw the muffins on the plates.



2. Ann has 10 donuts. She puts 2 on one plate and 8 on another plate. Draw the donuts on the plates.



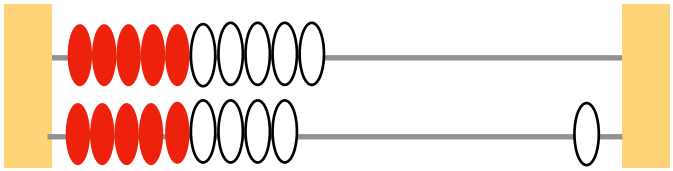
Step 14: Number Bonds and Commutativity

Daily review:
- Practice adding all the addition facts within ten on the rekenrek..
- Practice the doubles facts by memory
- Practice +1 and +2 facts by counting on (without the rekenrek)

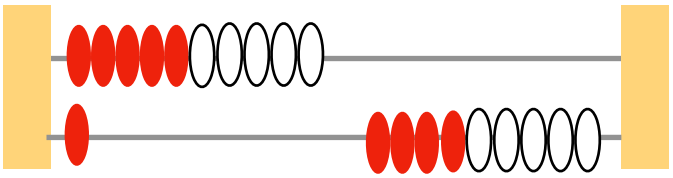
Materials:
- two rekenreks
- number bond worksheets 4a and 4b
- ten beads or counters

Lessons:

1. **Number Bonds and Commutativity**
   - Line up ten beads on the top row of the rekenrek. Line nine beads on the bottom row.



Say: ***How many beads are on the top row? How many on the bottom?***
Then: ***I want to make the bottom row ten, also. How can I do that?***
   - Help your student see that by adding one more bead, the bottom row becomes ten.
   - Take out **Step 14a worksheet.** Say: ***You just made ten by adding 9 and 1. Let's record that on a number bond.*** Together, record it on the first number bond.
   - Say: ***If we start with one, how many do we need to make ten?***

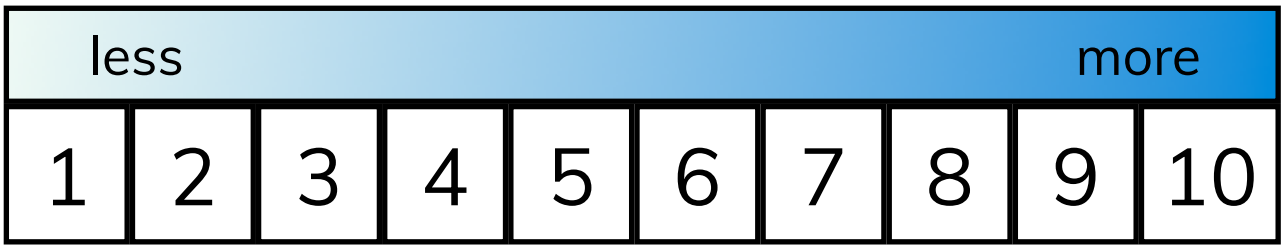


   - Help your student see that they need to bring over 9 beads to make ten.
   - Together, record it on the second number bond. Then say: ***Look! Nine and one make ten. One and nine make ten. Remember, when we add, it does not matter which number we start with.***

2. Together, use the rekenrek to complete **Step 14 Worksheets a and b.**
   - Always begin with ten on the top row of the rekenrek and use the bottom row to find the parts.

3. Start working on **memorizing the facts that make ten**.

Review: Addition Facts within 10



6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

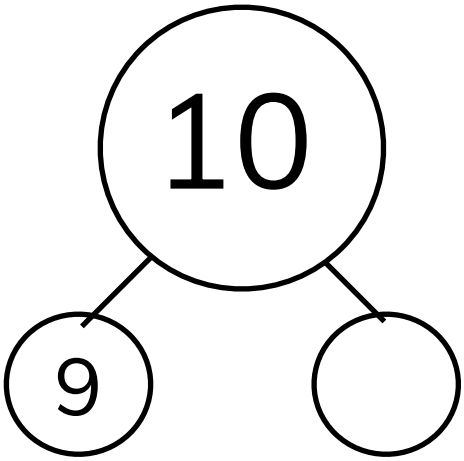
Review: +1/+2 Addition Facts by Counting On

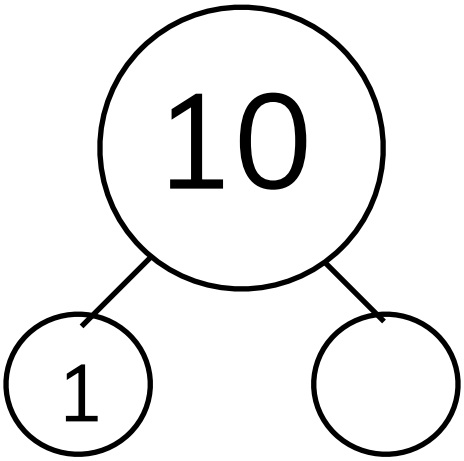
1	2	3	4	5	6	7	8	9	10

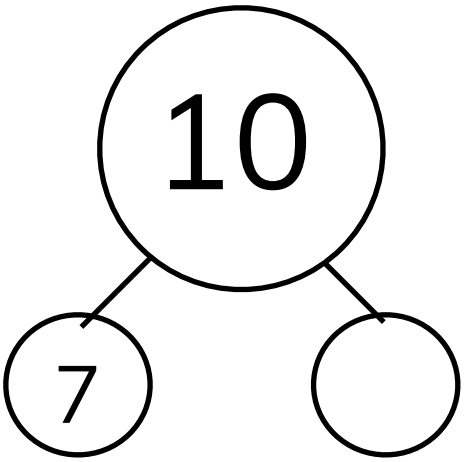
4 + 1 =	3 + 2 =
6 + 1 =	5 + 2 =
9 + 1 =	7 + 2 =
7 + 1 =	1 + 2 =
2 + 1 =	0 + 2 =

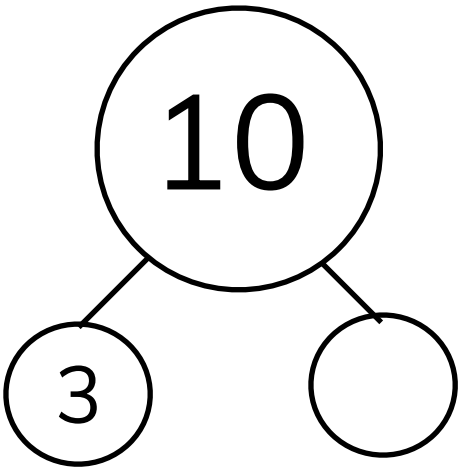
Step 14a

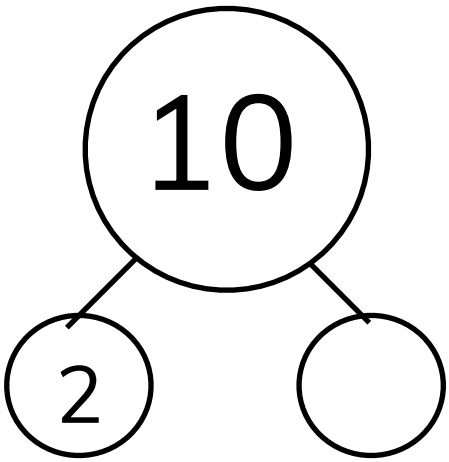
What makes 10? Fill in the parts.

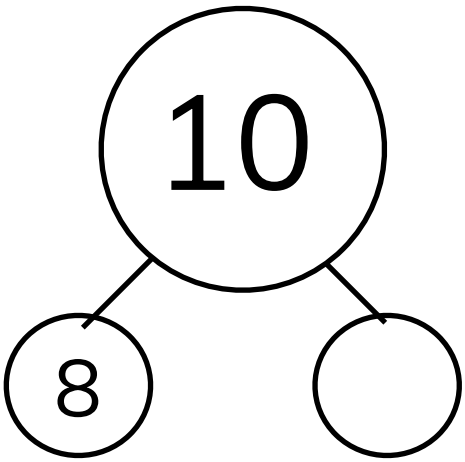








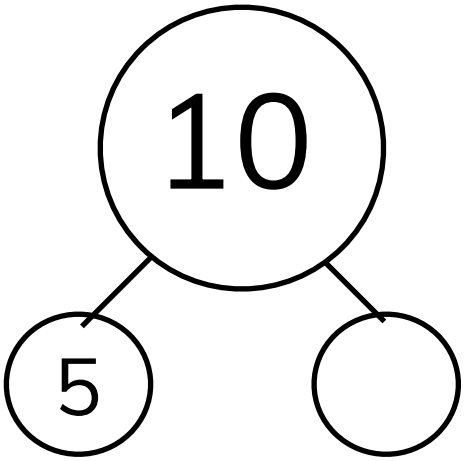


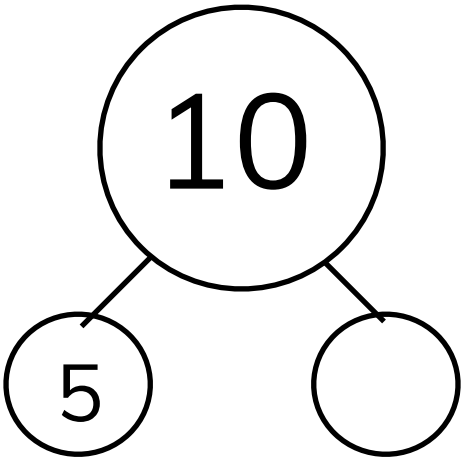


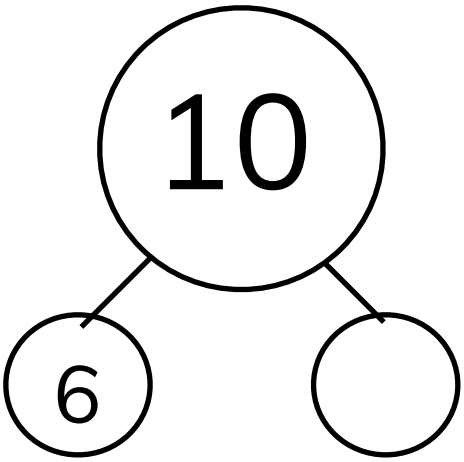
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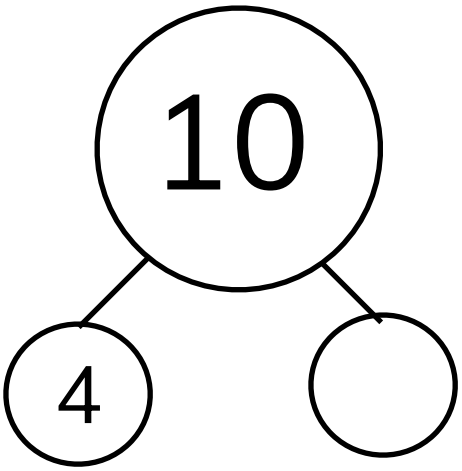
Step 14b

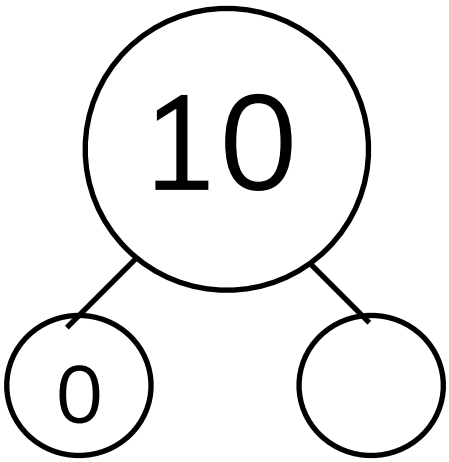
What makes 10? Fill in the parts.

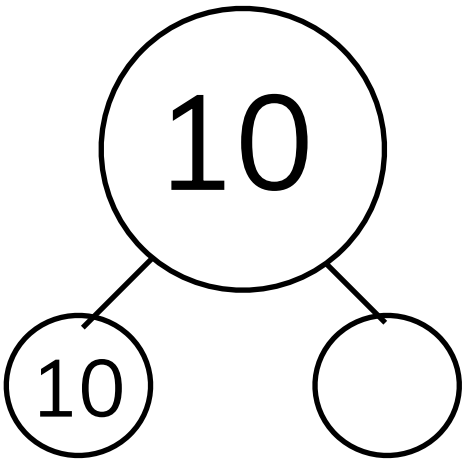












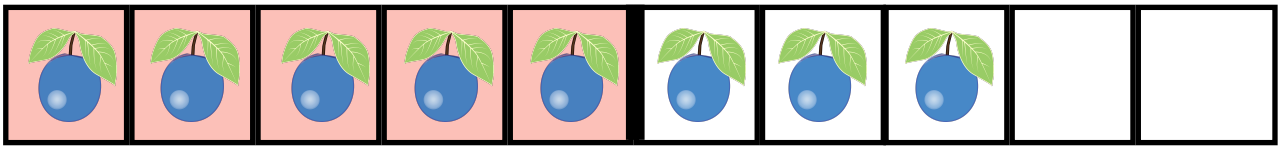
mercyformarthas.com

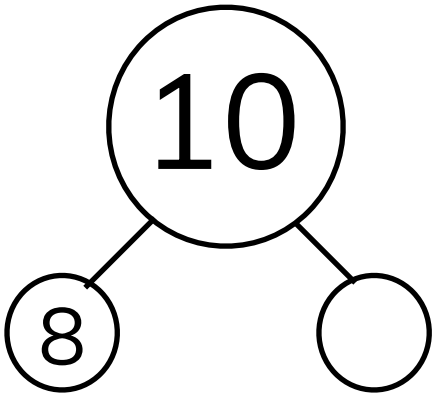
Step 14 Math in Real Life

1. Jen wants 10 blueberries. She has 8. How many more does she need?

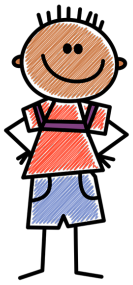


1	2	3	4	5	6	7	8	9	10

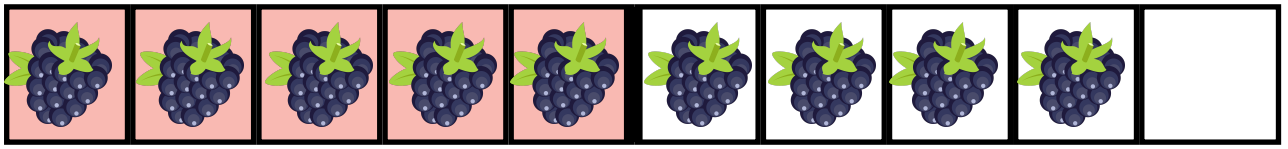


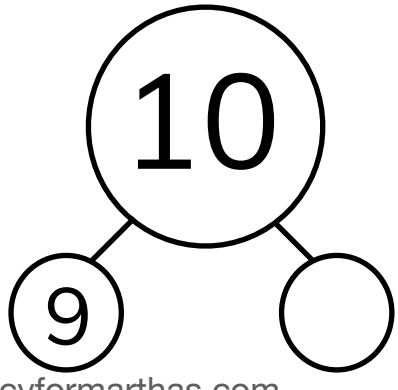


2. Tim wants 10 blackberries. He has 9. How many more does he need?



1	2	3	4	5	6	7	8	9	10



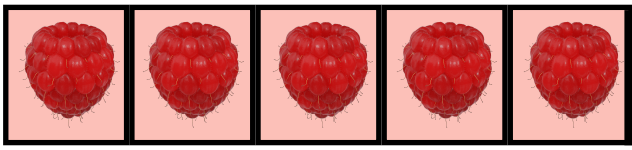


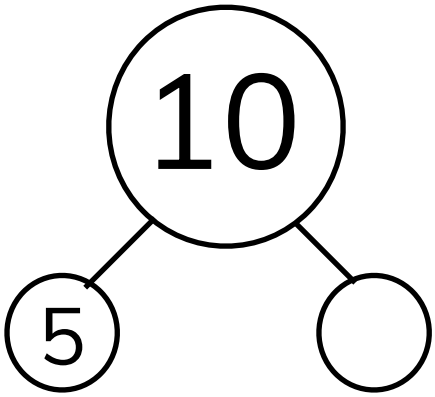
Step 14 Math in Real Life

1. Jen wants 10 raspberries. She has 5. How many more does she need?

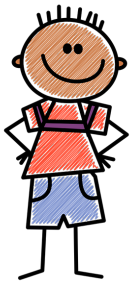


1	2	3	4	5	6	7	8	9	10

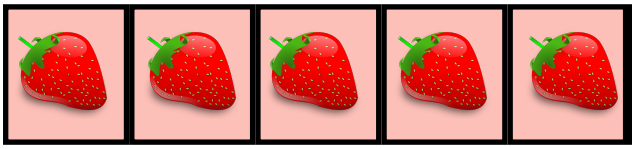


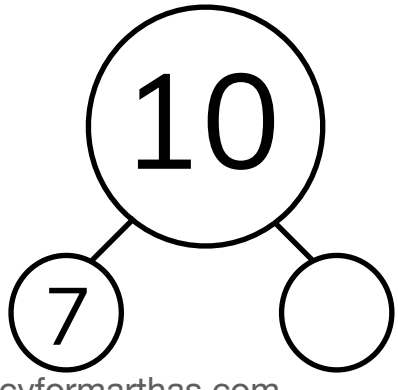


2. Tim wants 10 strawberries. He has 7. How many more does he need?



1	2	3	4	5	6	7	8	9	10





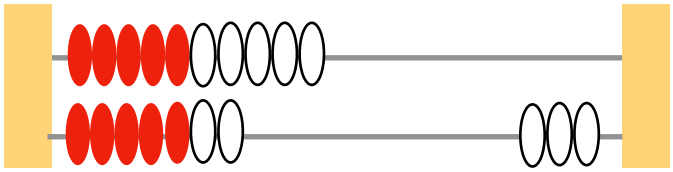
Step 15: Concept of Enough and Finding the Missing Addend

Daily review:
- Practice adding the addition facts within ten on the rekenrek..
- Practice the doubles facts by memory
- Practice +1 and +2 facts by counting on (without the rekenrek)

Materials:
- two rekenreks
- paper and markers

Lessons:

1. **Number Bonds and Commutativity**
   - Line up ten beads on the top row of the rekenrek. Line seven beads on the bottom row.



Say: ***I have ten on the top row. I want ten on the bottom row also. Did I put enough beads?***

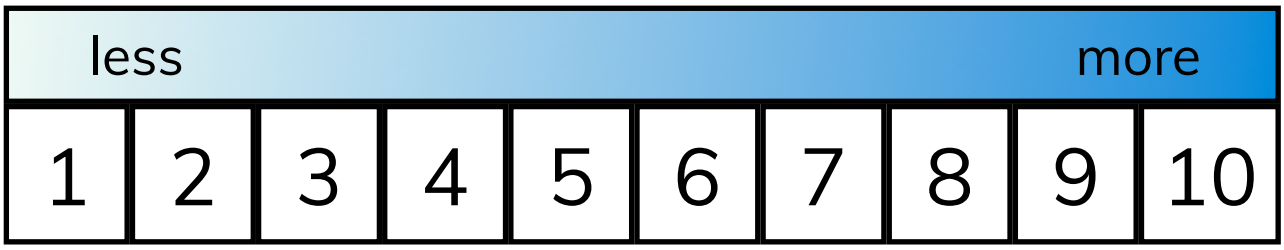
   - Help your student see that there are not **enough** beads on the second row. Say: ***How many should I add?***
   - Write: 7+ ____ = 10. Then say: ***Yes, we need to add three.*** Write in the 3.
     - Repeat this process for the following: (Be sure the emphasize the concept of ***enough*** or ***not enough***)
       - 6+_____=10
       - 5+_____=10
       - 8+ _____ = 10

   - Say: ***Let's do this to build numbers other than ten.***
     - Repeat the process for the following:
       - 6+_____=8
       - 5+_____=9
       - 4+ _____= 8

2. Together, use the rekenrek to complete **Step 15 worksheets**.

Tip: Play shopping. Put prices on toys. Give your child some pennies. Use the ten frame to line up and count the coins. Help your child determine if he has enough coins to buy what he wants.

Review: Addition Facts within 10



4 + 3 =	6 + 2 =
2 + 7 =	4 + 5 =
4 + 6 =	3 + 6 =
9 + 1 =	2 + 8 =
2 + 5 =	0 + 10 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

4 + 3 =	6 + 2 =
2 + 7 =	4 + 5 =
4 + 6 =	3 + 6 =
9 + 1 =	2 + 8 =
2 + 5 =	0 + 10 =

Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

Review: +1/+2 Addition Facts by Counting On

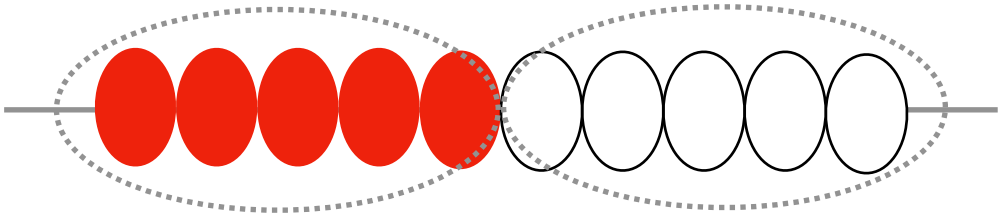
1	2	3	4	5	6	7	8	9	10

4 + 1 =	3 + 1 =
6 + 2 =	5 + 2 =
9 + 1 =	7 + 1 =
7 + 2 =	1 + 2 =
2 + 1 =	0 + 1 =

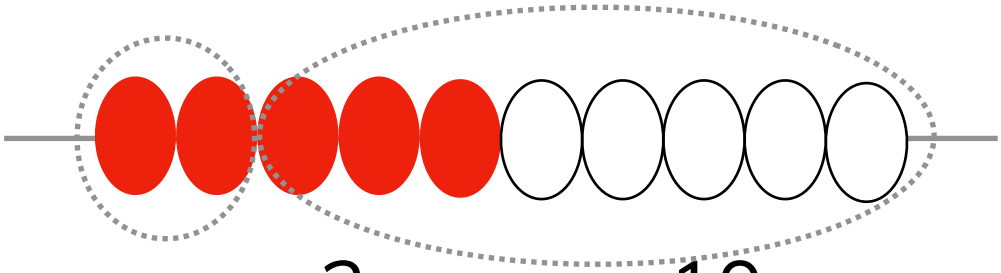
Step 15a

Make ten on the rekenrek

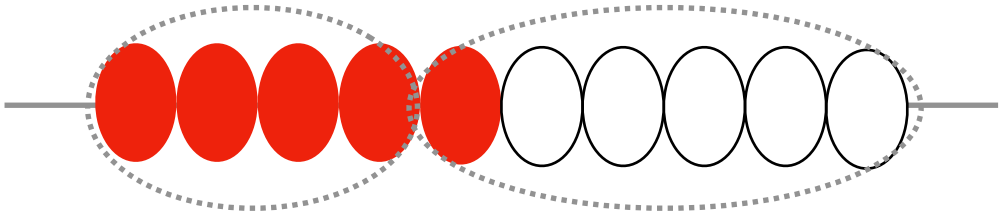
1. Circle the beads to show how to make ten.



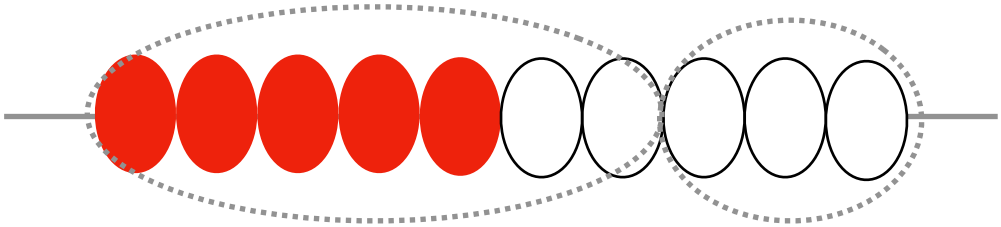
5 + ___ = 10



2 + ___ = 10



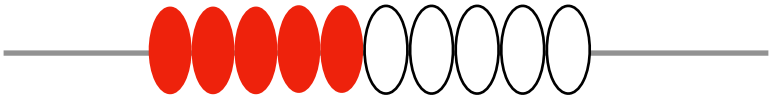
4 + ___ = 10



7 + ___ = 10

Step 15b: What Makes 10?

Use the rekenrek to solve for the missing number.

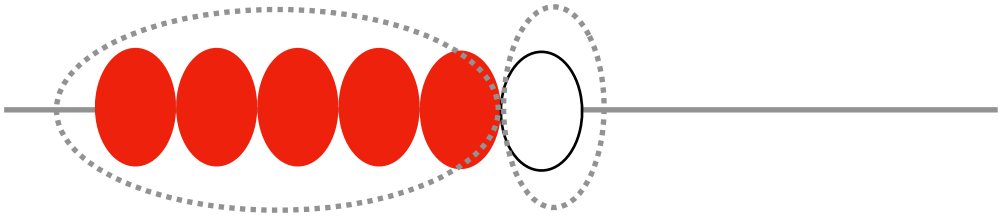


1 + ___ = 10	9 + ___ = 10
2 + ___ = 10	8 + ___ = 10
3 + ___ = 10	7 + ___ = 10
4 + ___ = 10	6 + ___ = 10
5 + ___ = 10	5 + ___ = 10

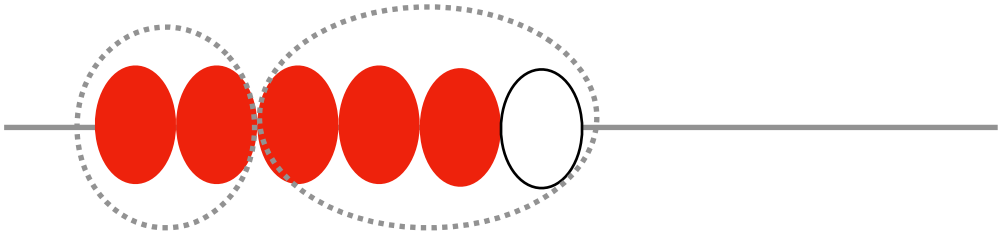
Step 15c

Make six and seven

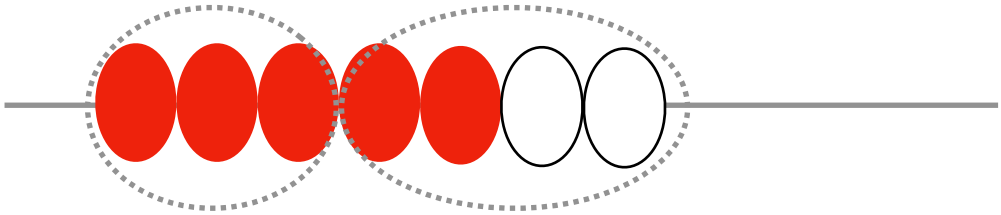
1. Circle the beads to show how to make six or seven.



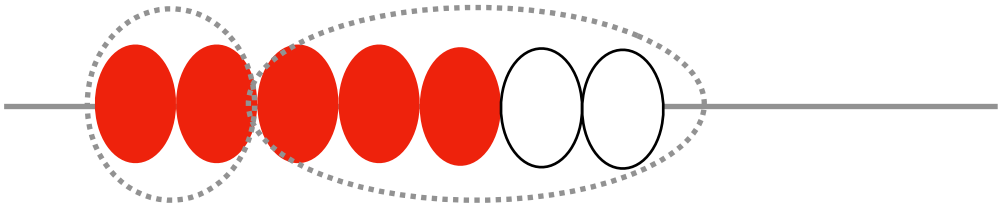
5 + ___ = 6



2 + ___ = 6



3 + ___ =7



2+ ___ =7

Step 15d Find the missing addend.

Use the rekenrek to solve for the missing number.



1 + ___ = 6

2 + ___ = 6

3 + ___ = 6



1 + ___ = 7

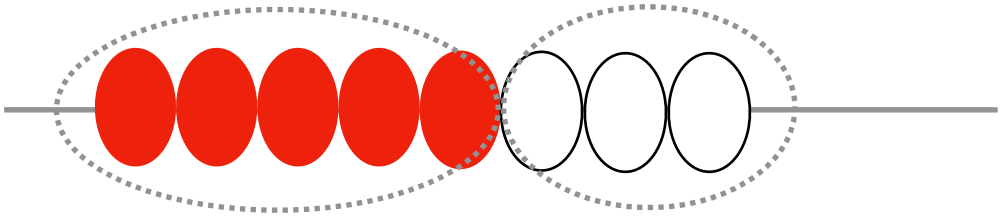
2 + ___ = 7

3 + ___= 7

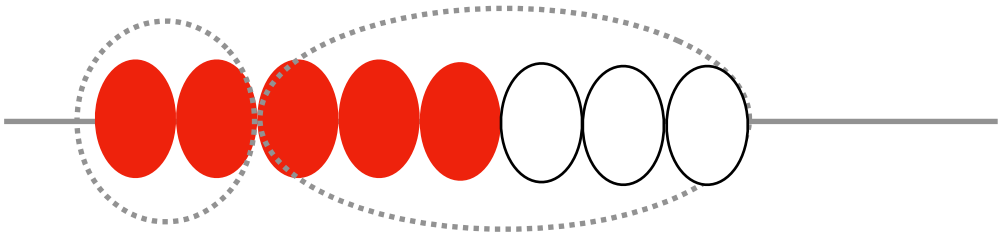
Step 15e

Make eight and nine

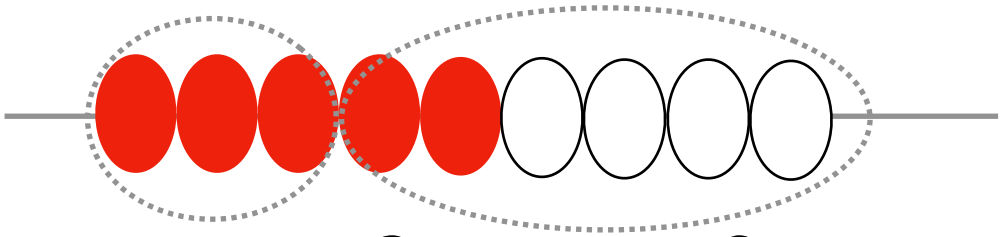
1. Circle the beads to show how to make eight or nine.



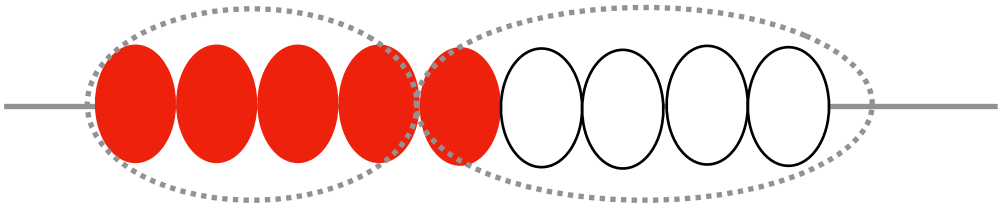
5 + ___ = 8



2 + ___ = 8



3 + ___ = 9



4 + ___ = 9

Step 15c Find the missing addend.

Use the rekenrek to solve for the missing number.



1 + ___ = 8

2 + ___ = 8

3 + ___ = 8

4 + ___ = 8



1 + ___ = 9

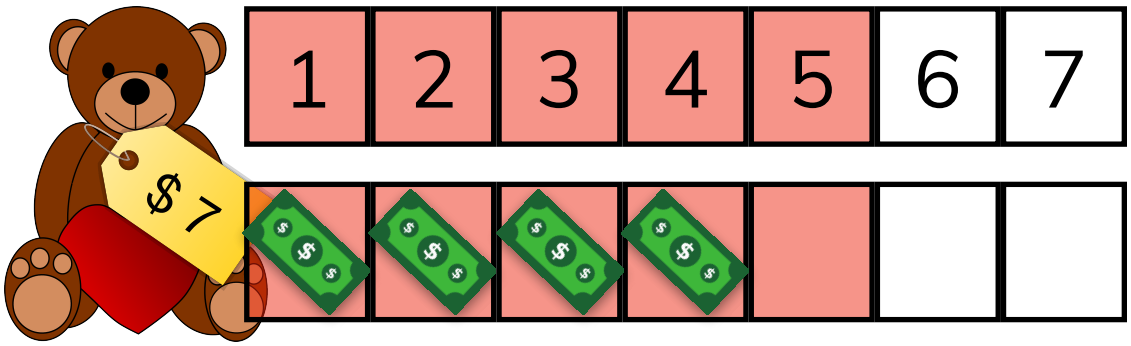
2 + ___ = 9

3 + ___ = 9

4 + ___ = 9

Step 15 Math in Real Life

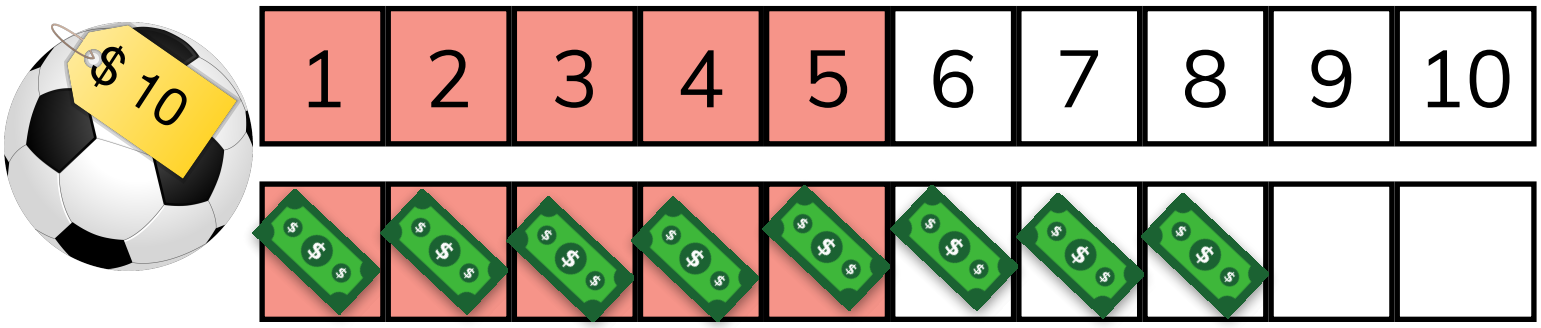
1. Molly wants to buy a toy. It costs 7 dollars.



Does she have enough dollars? Yes or No

How many more dollars does she need? ☐

2. Ted wants to buy a ball. It costs 10 dollars.

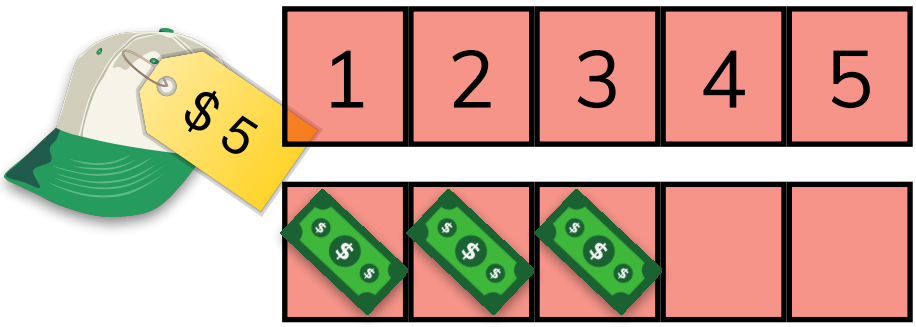


Does he have enough dollars? Yes or No

How many more dollars does he need? ☐

Step 15 Math in Real Life

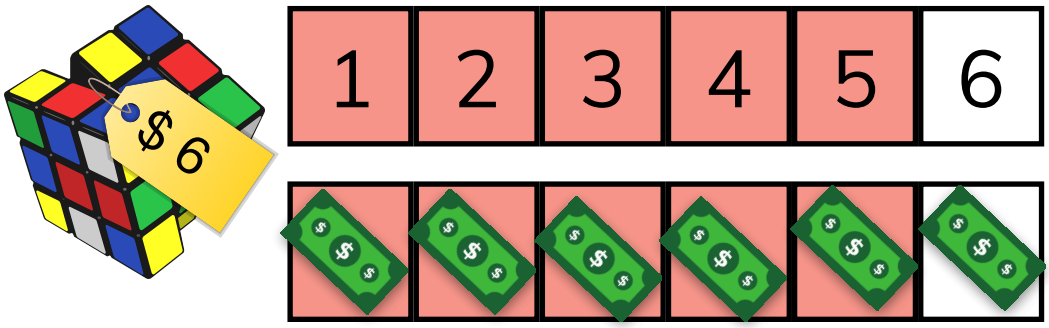
1. Dad wants to buy a hat. It costs 5 dollars.



Does he have enough dollars? Yes or No

How many more dollars does he need? ☐

2. Tom wants to buy a toy. It costs 6 dollars.



Does he have enough dollars? Yes or No

How many more dollars does he need? ☐

Step 16: Reviewing Strategies for Addition

Daily review:
- Practice adding the addition facts within ten on the rekenrek..
- Practice the doubles facts by memory and "What Makes Ten?" worksheet

Materials:
- two rekenreks
- paper and markers
- more/less number line or "Go with Green" number line.

Lessons:

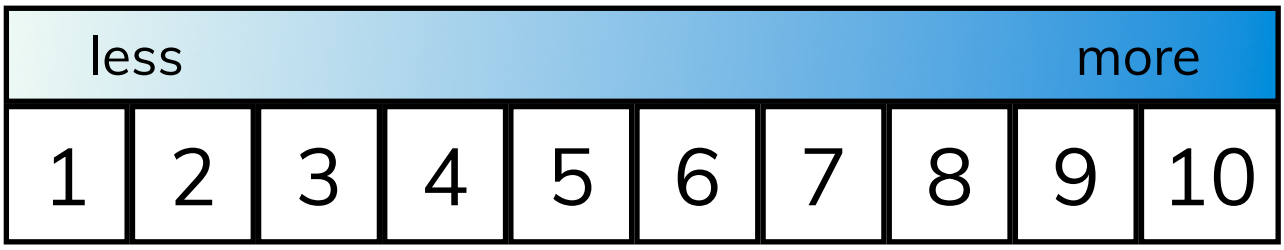
1. Review Adding the Greater Number First:
- Say: ***Today, we are going to review the different strategies for adding. The most important way is to add the greater number first.***
- On a piece of paper write: 3+6 =___. Say: ***Remember, with addition we can start with either number first. We can start with three or six. It is always faster if we start with the greater number. Let's look at our number line and see which is greater…three or six.*** Help your student point to three and six on the number line and determine which one is greater.
- Say: ***Six is greater so let's start with that.*** Together, add 6+3 on the rekenrek.
- Alternatively, you can use the method: *Slide the beads, which is greater?, Count on* (as taught in lesson 8b).
- Repeat with 4+5 and 7+3.

2. **Review Adding by counting on +1 or +2 from a number.**
- Say: ***When you're adding 1 or 2, you don't need a rekenrek. You can just count on.***
- On a piece of paper write: 2 + 5 =____. Say: ***Here we are adding two. So we can count on two more from five***. (Point to a number line if necessary). ***Five…. six, seven. Two plus five is …. seven!***
- Repeat with 1 + 8, 4 + 1, and 6 + 2.

3. Review Adding Doubles.
- Say: ***By now, you know most of the doubles facts by memory. When you see a doubles fact, see if you can answer it by memory. If you can't, it's okay to use the rekenrek until you have it memorized. Let's try some doubles.*** Practice the following: 1+1, 2+2, 3+3, 4+4, 5+5.

Tip: If having to decide which strategy to use is confusing or overwhelming, have your student practice mixed facts within ten with *just* the strategy taught in lesson 8b.

Review: Addition Facts within 10



4 + 3 =	6 + 2 =
2 + 7 =	4 + 4=
4 + 6 =	3 + 6 =
9 + 1 =	2 + 8 =
2 + 5 =	0 + 10 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

4 + 3 =	6 + 2 =
2 + 7 =	4 + 4 =
4 + 6 =	3 + 6 =
9 + 1 =	2 + 8 =
2 + 5 =	0 + 10 =

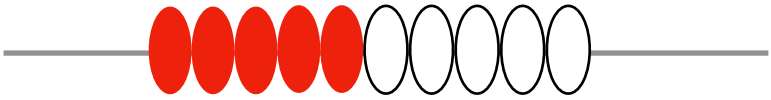
Review: Doubles Facts within 10

1	2	3	4	5	6	7	8	9	10

1 + 1 =	4 + 4 =
2 + 2 =	3 + 3=
3 + 3 =	5 + 5 =
4 + 4 =	1 + 1 =
5 + 5 =	2 + 2 =

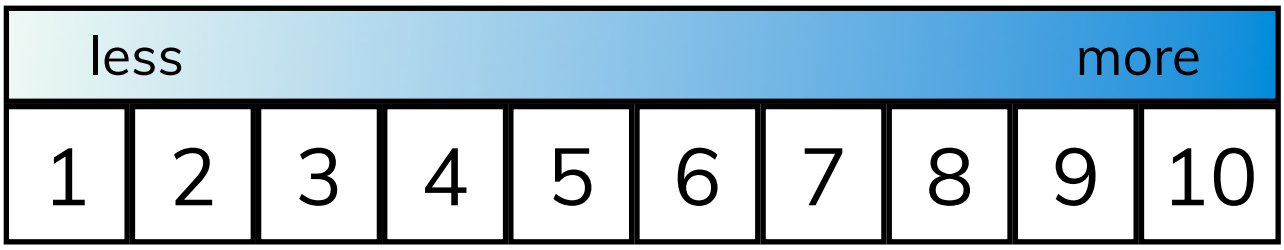
Review: What Makes 10?

Use the rekenrek to solve for the missing number.



1 + ___ = 10	9 + ___ = 10
2 + ___ = 10	8 + ___ = 10
3 + ___ = 10	7 + ___ = 10
4 + ___ = 10	6 + ___ = 10
5 + ___ = 10	5 + ___ = 10

Step 16 Review: Addition Facts within 10



5 + 3 =	7 + 2 =
2 + 8 =	3 + 6 =
3 + 7 =	4 + 5 =
6 + 3 =	1 + 7 =
1 + 9 =	0 + 5 =

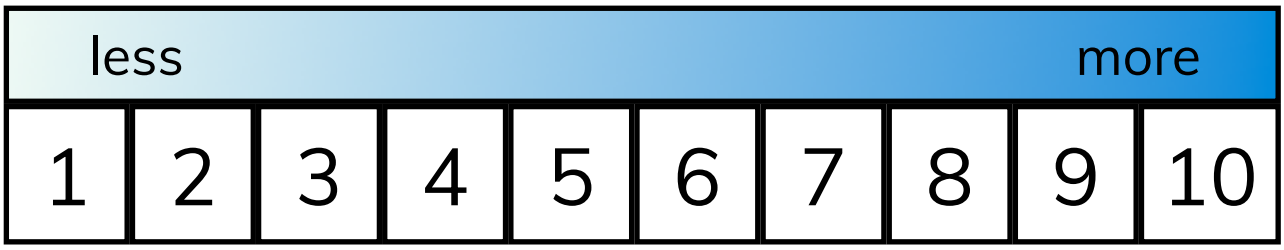
Step 16 Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

5 + 3 =	7 + 2 =
2 + 8 =	3 + 6 =
3 + 7 =	4 + 5 =
6 + 3 =	1 + 7 =
1 + 9 =	0 + 5 =

Review: Addition Facts within 10



6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Addition Facts within 10



Slide the beads.
Which is more?
Count on.

6 + 4 =	6 + 2 =
3 + 7 =	4 + 3 =
8 + 2 =	2 + 5 =
5 + 3 =	1 + 6 =
1 + 9 =	0 + 7 =

Review: Addition Facts within 10

less									more
1	2	3	4	5	6	7	8	9	10

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Review: Addition Facts within 10



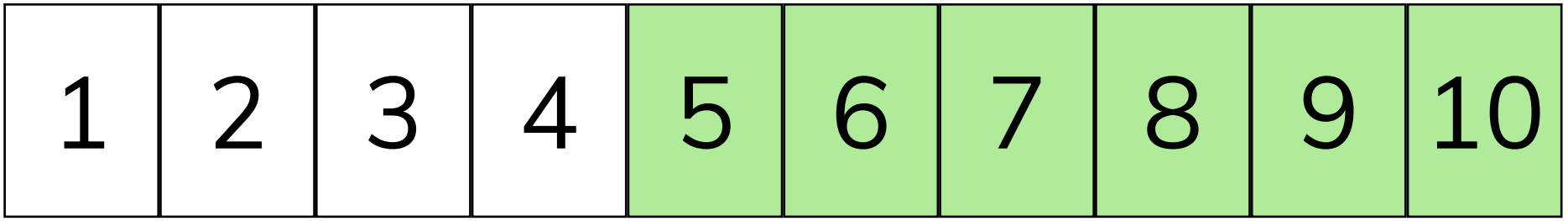
Slide the beads.
Which is more?
Count on.

4 + 2 =	6 + 3 =
2 + 6 =	4 + 5 =
4 + 5 =	3 + 7 =
8 + 1 =	2 + 8 =
2 + 4 =	0 + 9 =

Appendix

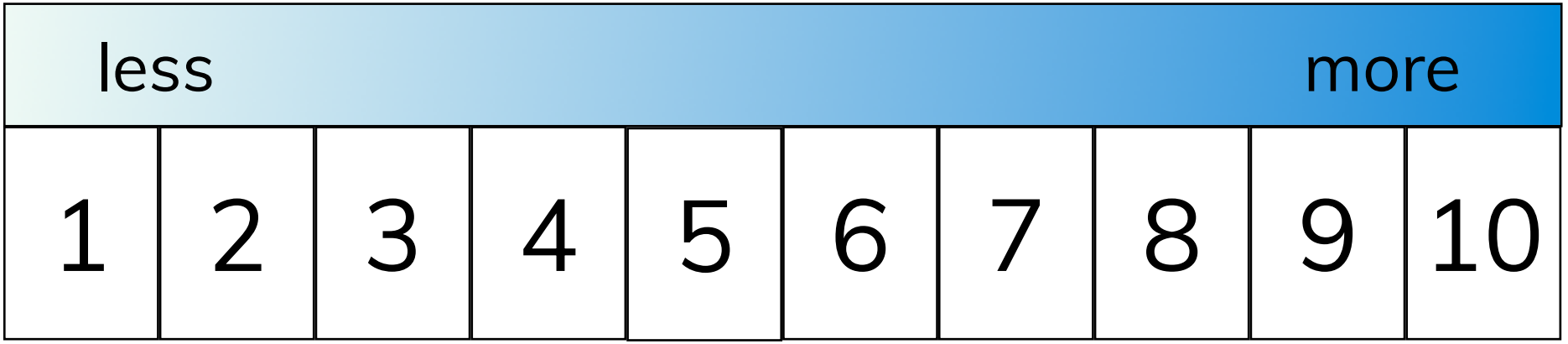
print the number line and rekenrek cards on cardstock

Go with Green number line

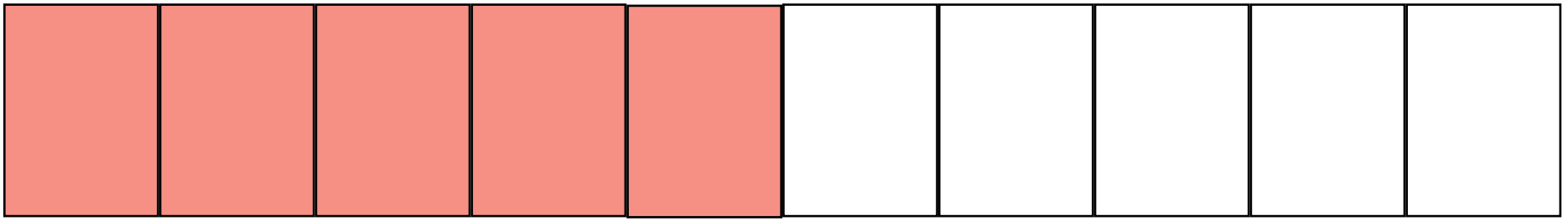


Rekenrek Addition

more/less number line



ten frame

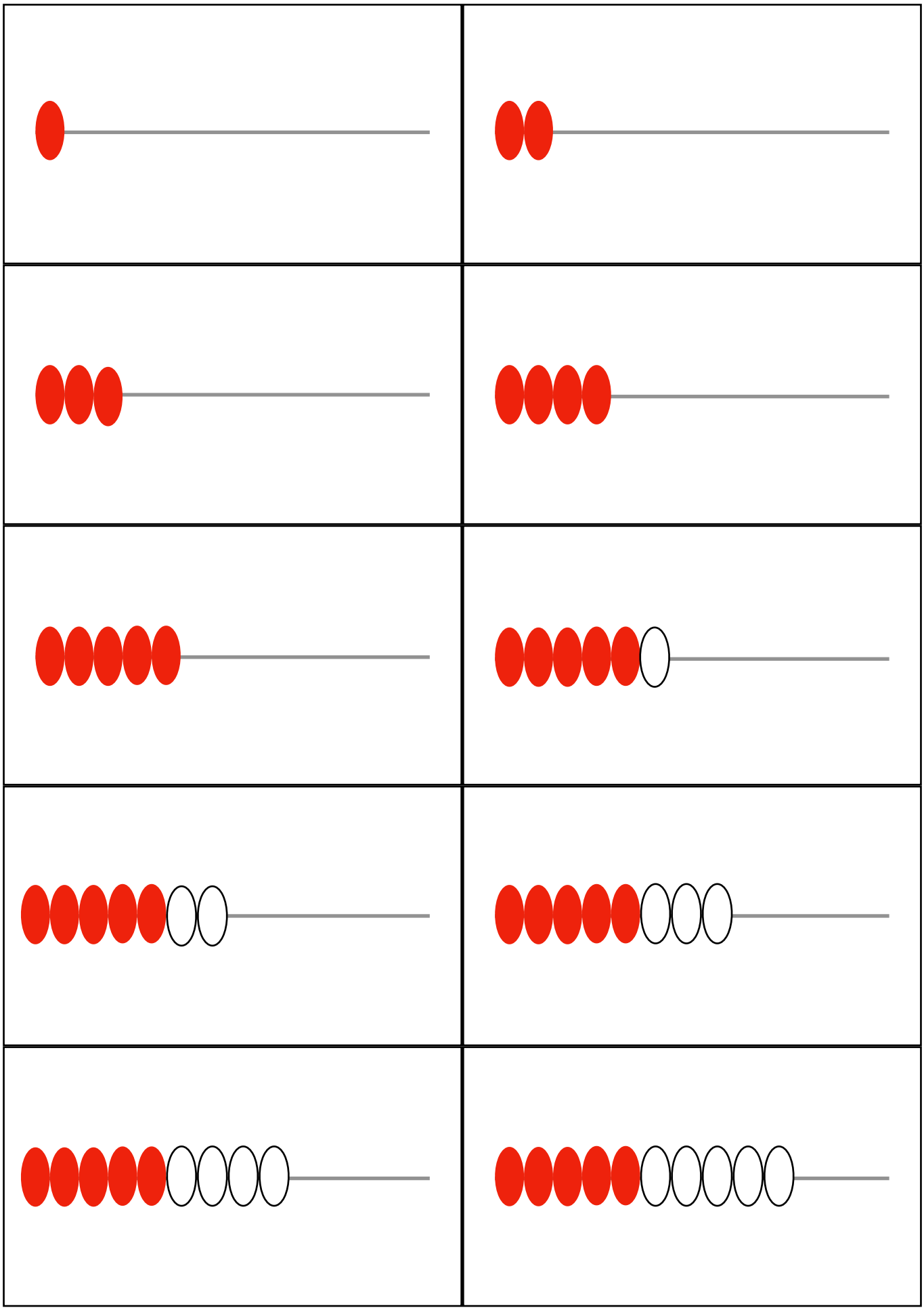


Level 1

10	
9	
8	
7	
6	
5	
4	
3	
2	
1	

10	
9	
8	
7	
6	
5	
4	
3	
2	
1	

print this page and the next on card stock double sided

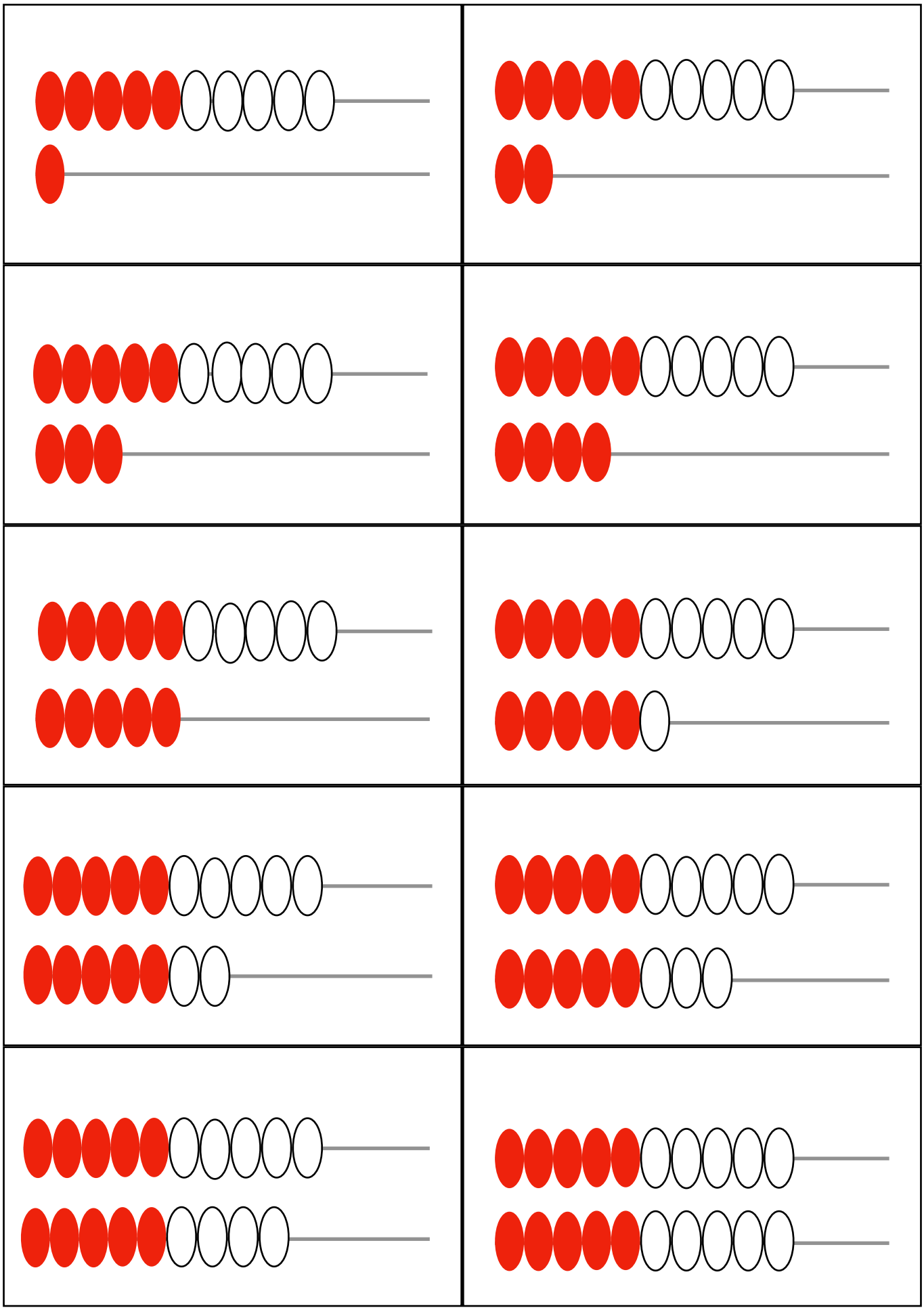


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2	1
4	3
6	5
8	7
10	9

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12	11
14	13
16	15
18	17
20	19

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More Addition Materials at MercyforMarthas.com:

Spring-Themed Picture Addition cards
Winter-Themed Picture Addition cards
Picture Addition with Commutativity cards
Number line Addition within Ten Worksheets

Also look for:

Learning to Add with a Rekenrek Level 2
Learning to Subtract with a Rekenrek Level 1