Strategies for Addition - Year 1

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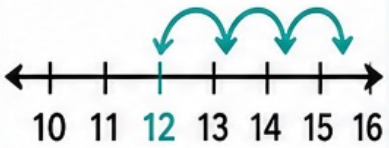
Addition Strategy Toolbox

1 Count On

Start with the bigger number:

12 + 3 →

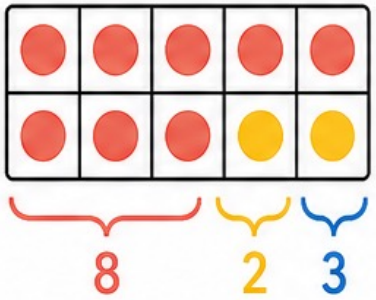
13, 14, 15



2 Make Ten

8 + 5 =

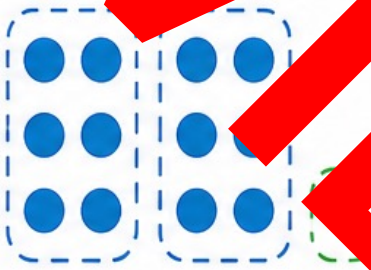
8 + 2 + 3 = 13



3 Doubles & Near Doubles

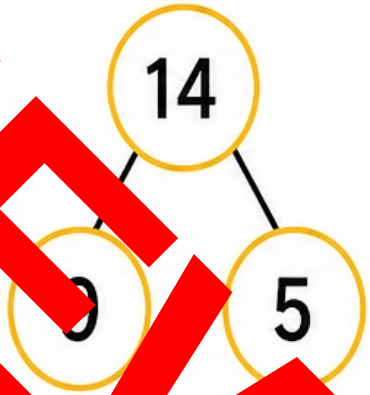
6 + =

6 + 6 + 1 =



4 Part-Part-Whole

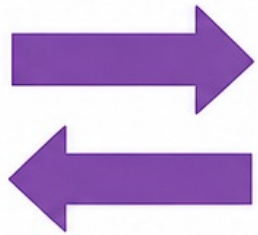
9 and 5 make 14



5 Swap Addends

3 + 11 =

11 + 3

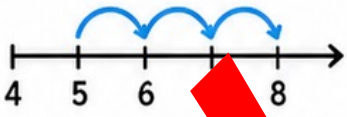


Choose a strategy. Show your thinking. Che your answer.

My Addition Strategy Steps

1. Read the numbers.
2. Choose a strategy.
3. Show your thinking.
4. Check the total.

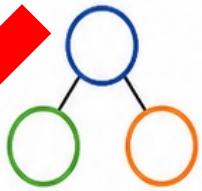
- Count On



- Make Ten

- Double or Near Double

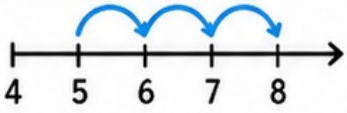
- Part-Part-Whole



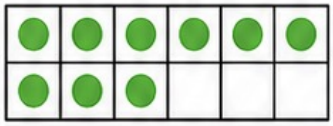
My Addition Strategy Steps

1. Read the numbers.
2. Choose a strategy.
3. Show your thinking.
4. Check the total.

- Count On

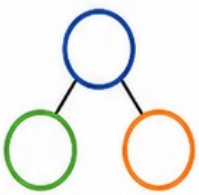


- Make Ten



- Double or Near Double

- Part-Part-Whole




Count-On Garden Trail
Start at the bigger number.
Count on the smaller number.
START
1
2
4
PICK A CARD
5
6
7
8
PICK A CARD
9
10
14
13
15
16
PICK A CARD
17
18
FINISH
PREVIEW

Count-On Garden Trail Cards

Pick a card. Say the bigger number, count on, then move the total.

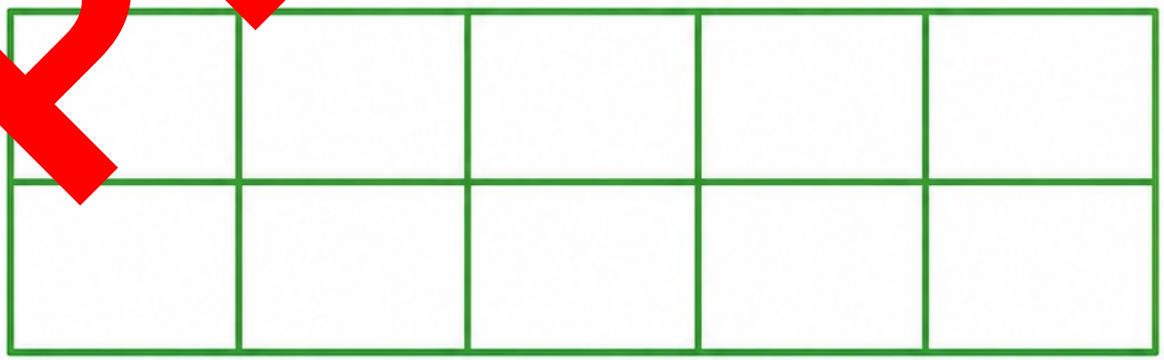
7 + 2	4 + 9	11 + 3
2 + 15	6 + 5	13 + 4
8 + 3	5 + 12	14 + 2
9 + 6	10 + 5	1 + 18

Make Ten Rainbow Match

1. Cut out the number cards.
2. Turn the cards face down.
3. Find two numbers that make 10.
4. Say the fact and keep the pair.

My pair ___ + ___ = 10

Check it on the ten frame.



Make Ten Rainbow Match Cards

Part-Part-Whole Picnic

Pick [illegible] Split counters between the two plates in two different ways.

PART

PART

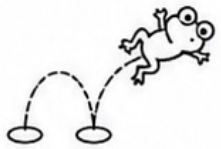
___ + ___ = ___ ___ + ___ = ___

Part-Part-Whole Picnic Cards

Pick a whole. Show two different partitions on the picnic mat.

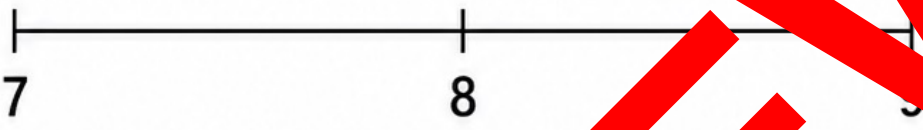
Count On from the Bigger Number — Page 1

Name: _____ Date: _____



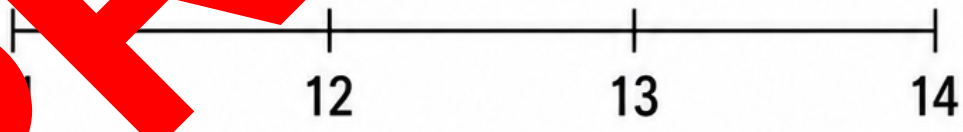
Circle the bigger number. Start there and count on. Draw the hops.

1. 7 + 2 = ___

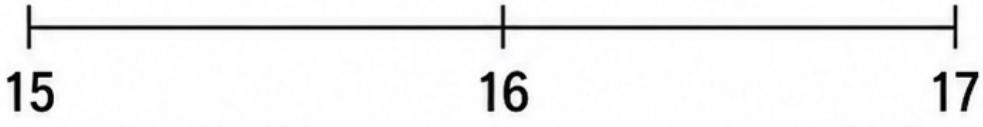


2. 4 + 9 = ___

3. 11 + 3 = ___

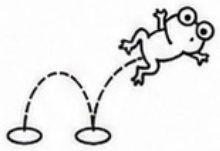


4. 2 + 15 = ___



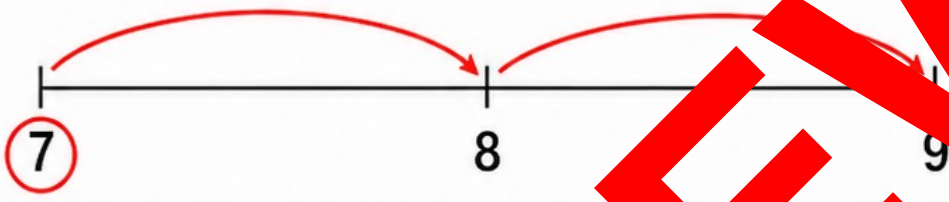
Count On from the Bigger Number — Page 1

Name: ANSWERS Date: _____



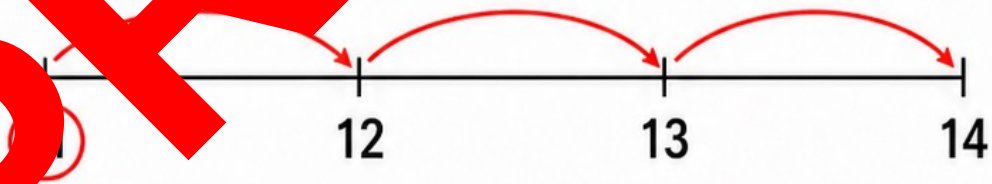
Circle the bigger number. Start there and count on. Draw the hops.

1. 7 + 2 = 9

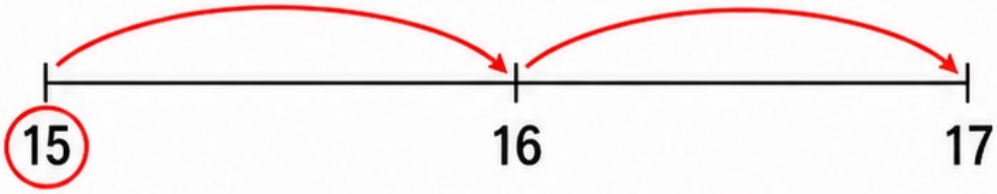


2. 4 + 9 = 13

3. 11 + 3 = 14

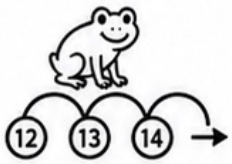


4. 2 + 15 = 17



Count On from the Bigger Number – Page 2

Name: _____ Date: _____



Swap if it helps. Write the start number, hops and answer.

Equation	Start	Hops	Answer
3 + 8			
12 + 4			
5 + 9			
14 + 2			
6 + 7			
1 + 18			

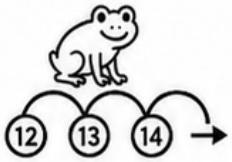
Why is it helpful to start with the bigger number?

_____

_____

Count On from the Bigger Number – Page 2

Name: ANSWERS Date: _____



Swap if it helps. Write the start number, hops and answer.

Equation	Start	Hops	Answer
3 + 8	8	3	11
12 + 4	12	4	16
5 + 9	9	5	14
14 + 2	14	2	16
6 + 7	7	6	13
1 + 18	18	1	19

Why is it helpful to start with the bigger number?

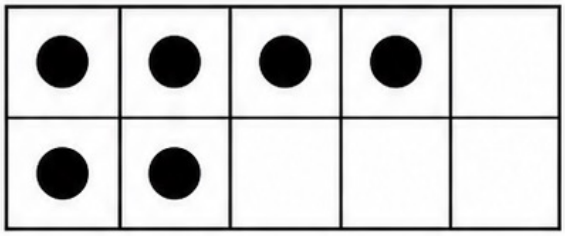
It uses fewer counts.

Make Ten with Ten Frames – Page 1

Name: _____ Date: _____

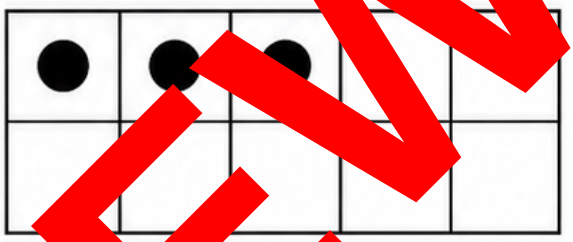
Use each ten frame. Write the missing part.

1.



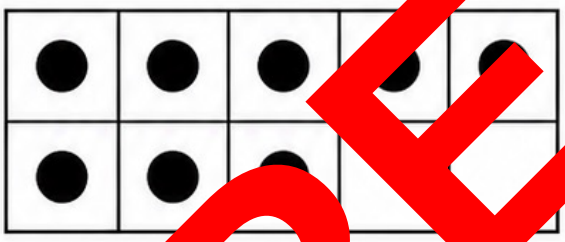
6 + ____ = 10

2.



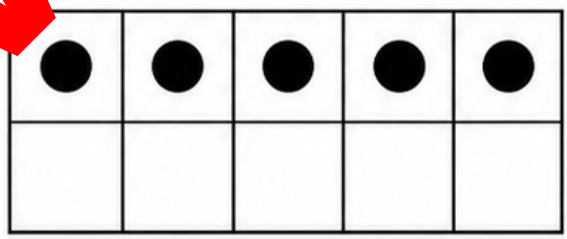
____ + 3 = 10

3.



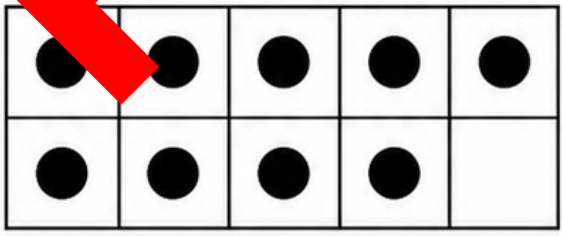
8 + ____ = 10

4.



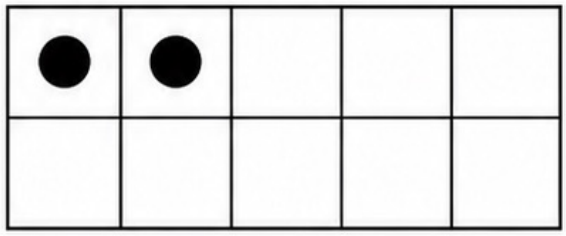
____ + 5 = 10

5.



9 + ____ = 10

6.



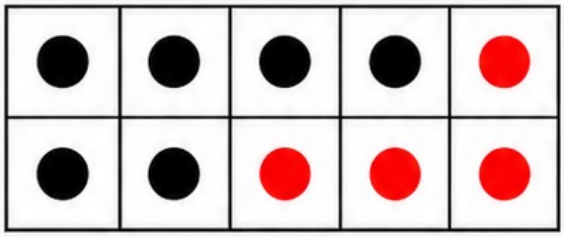
____ + 2 = 10

Make Ten with Ten Frames – Page 1

Name: ANSWERS Date: _____

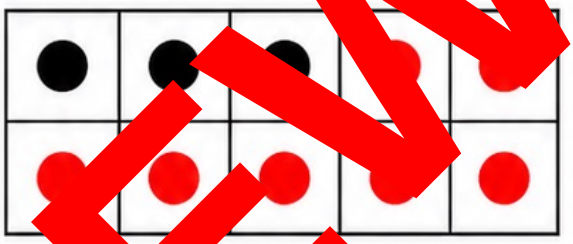
Use each ten frame. Write the missing part.

1.



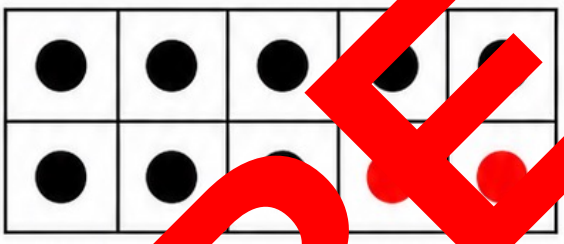
6 + 4 = 10

2.



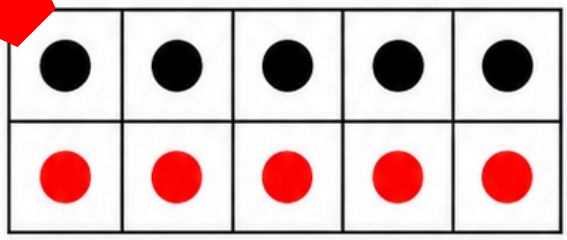
7 + 3 = 10

3.



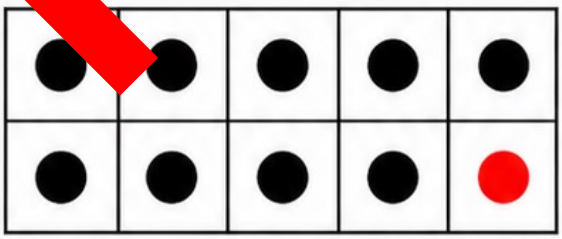
8 + 2 = 10

4.



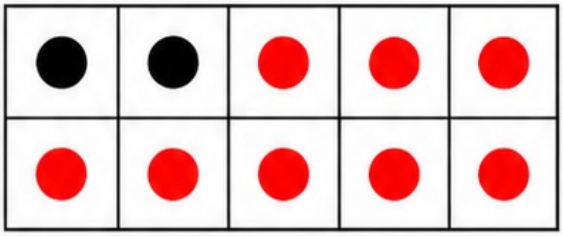
5 + 5 = 10

5.



9 + 1 = 10

6.



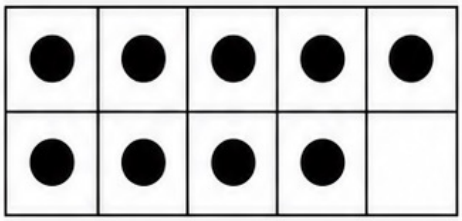
8 + 2 = 10

Make Ten with Ten Frames — Page 2

Name: _____ Date: _____

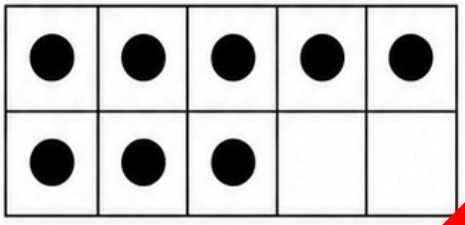
Split the second addend. Make 10, then add what is left.

1.



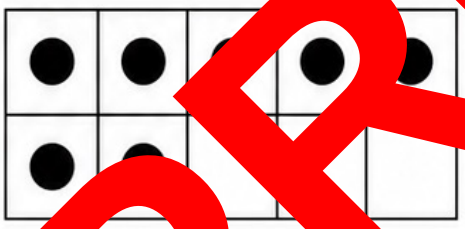
9 + 4 = 9 + ___ + ___ = ___

2.



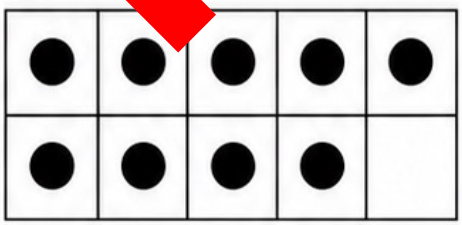
8 + 5 = 8 + ___ + ___ = ___

3.



7 + 6 = 7 + ___ + ___ = ___

4.



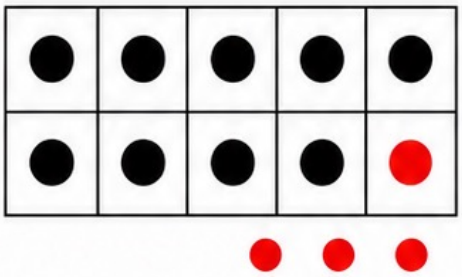
9 + 7 = 9 + ___ + ___ = ___

Make Ten with Ten Frames — Page 2

Name: ANSWERS Date: _____

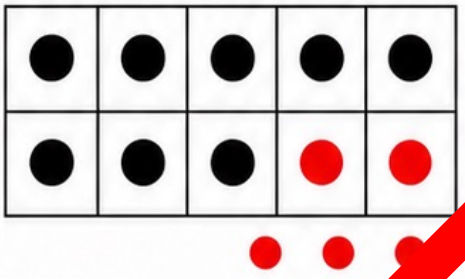
Split the second addend. Make 10, then add what is left.

1.



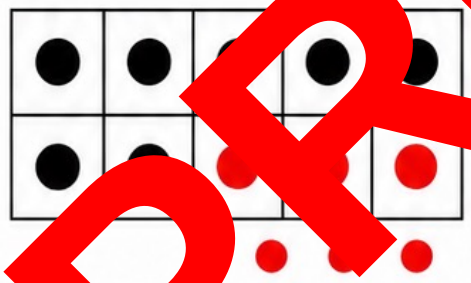
9 + 4 = 9 + 1 + 3 = 13

2.



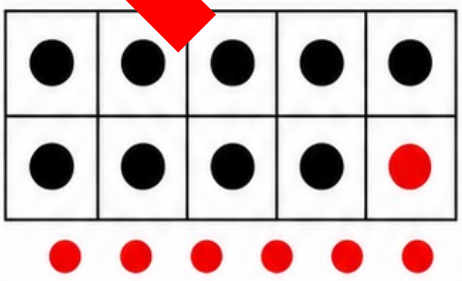
8 + 5 = 8 + 2 + 3 = 13

3.



7 + 6 = 7 + 3 + 3 = 13

4.



9 + 7 = 9 + 1 + 6 = 16

Doubles and Near Doubles

Name: _____ Date: _____

Solve the doubles. Then use a double to solve each near double.

Doubles

2 + 2 = ___	4 + 4 = ___	5 + 5 = ___	7 + 7 = ___

Near Doubles

4 + 5 = 4 + 4 + ___ = ___	6 + 7 = 6 + 6 + ___ = ___	8 + 7 = 7 + 7 + ___ = ___	9 + 8 = 8 + 8 + ___ = ___

Doubles and Near Doubles

Name: ANSWERS Date: _____

Solve the doubles. Then use a double to solve each near double.

Doubles

2 + 2 = 4	4 + 4 = 8	5 + 5 = 10	7 + 7 = 14

Near Doubles

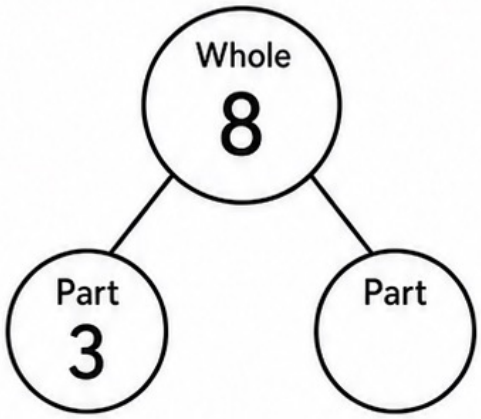
4 + 5 = 9	6 + 7 = 6 + 6 + 1 = 13	8 + 7 = 7 + 7 + 1 = 15	9 + 8 = 8 + 8 + 1 = 17
4 + 4 + 1	6 + 6 + 1	7 + 7 + 1	8 + 8 + 1

Part–Part–Whole Builders — Page 1

Name: _____ Date: _____

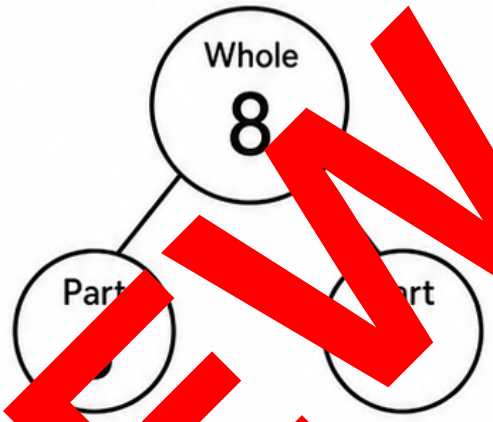
Find the missing part. Complete the equation.

1.



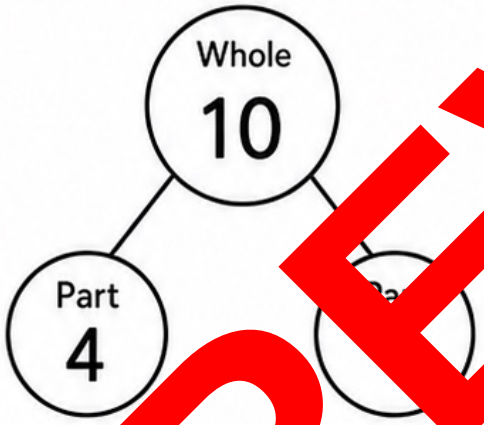
3 + ___ = 8

2.



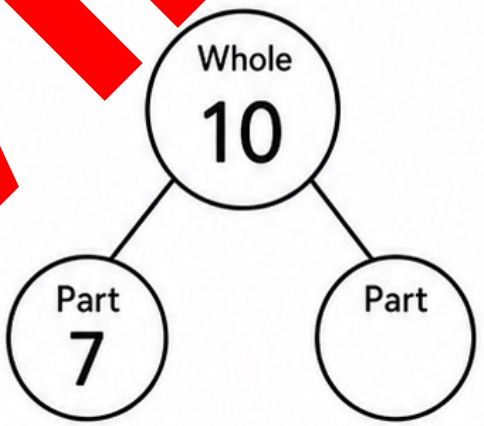
+ ___ = 8

3.



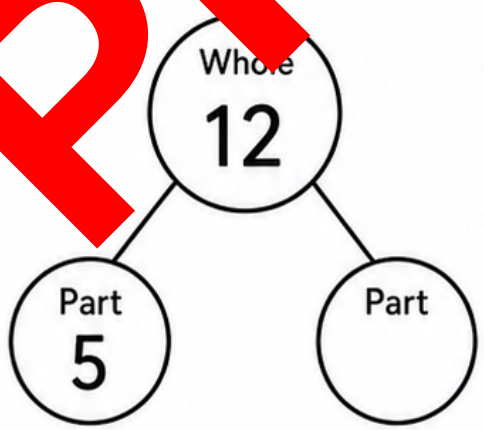
4 ___ 10

4.



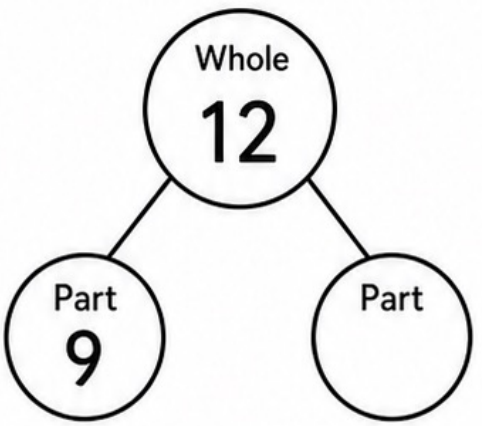
7 + ___ = 10

5.



5 + ___ = 12

6.



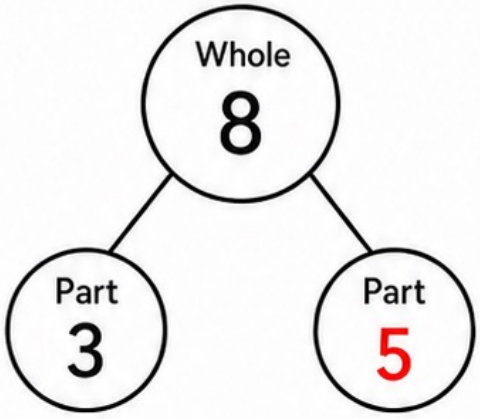
9 + ___ = 12

Part–Part–Whole Builders — Page 1

Name: ANSWERS Date: _____

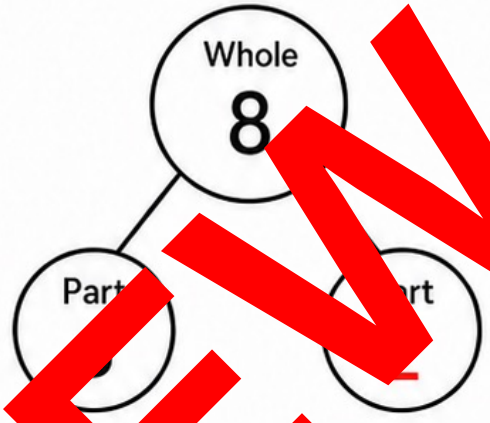
Find the missing part. Complete the equation.

1.



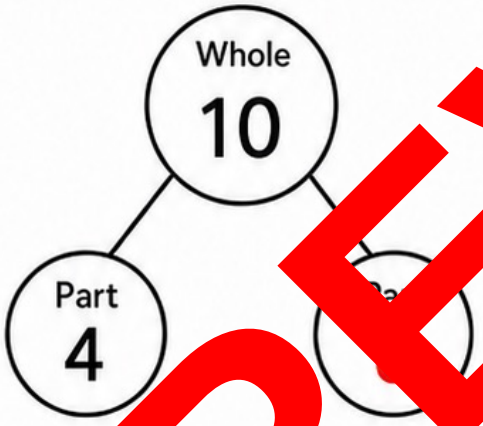
3 + 5 = 8

2.



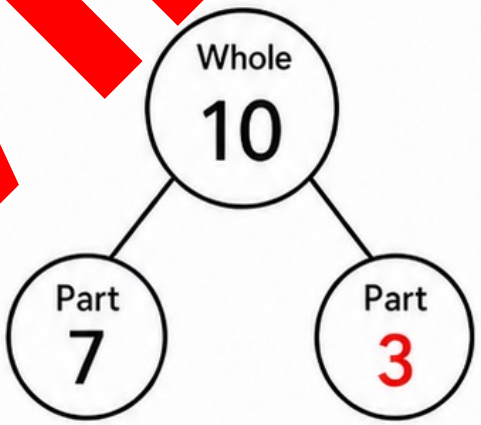
+ = 8

3.



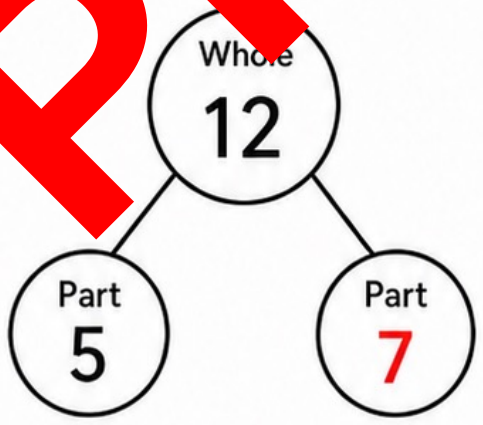
4 10

4.



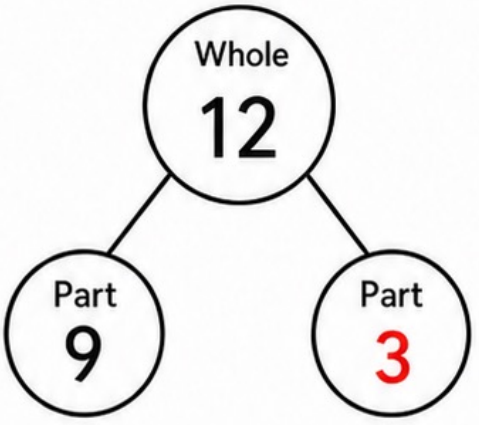
7 + 3 = 10

5.



5 + 7 = 12

6.



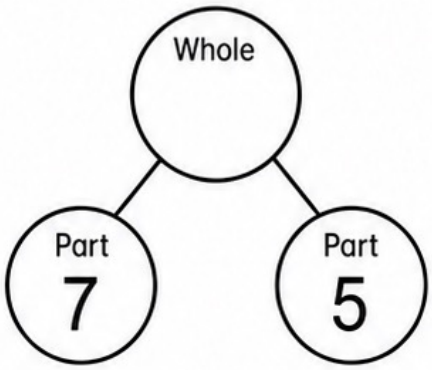
9 + 3 = 12

Part–Part–Whole Builders — Page 2

Name: _____ Date: _____

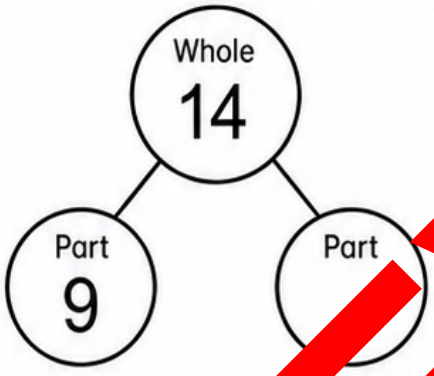
Use the parts and wholes to complete each number sentence.

1.



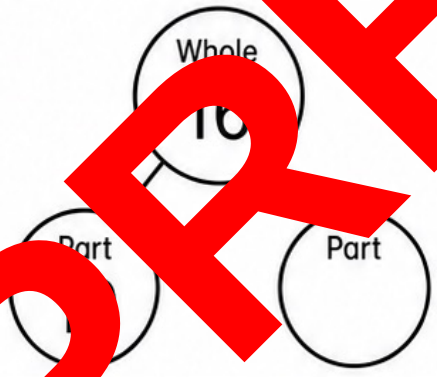
7 + 5 = ___

2.



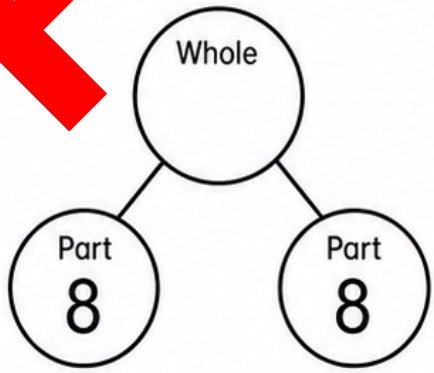
9 + ___ = 14

3.



10 + ___ = 16

4.



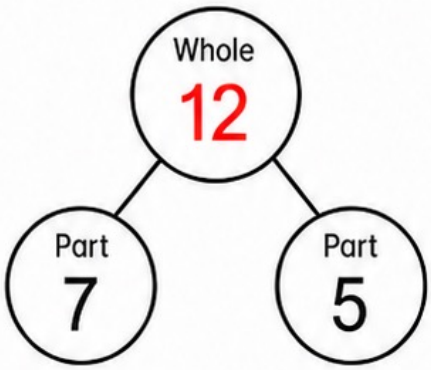
8 + 8 = ___

Part–Part–Whole Builders — Page 2

Name: ANSWERS Date: _____

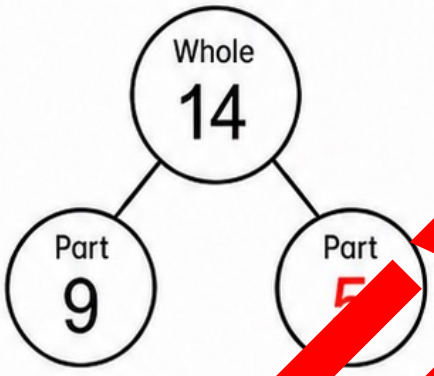
Use the parts and wholes to complete each number sentence.

1.



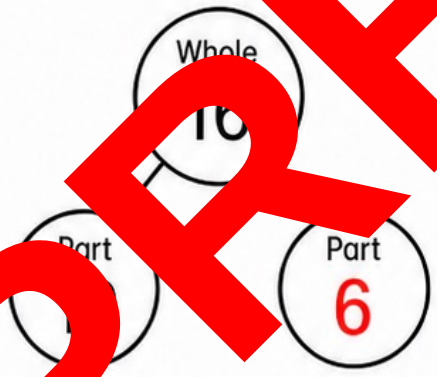
7 + 5 = 12

2.



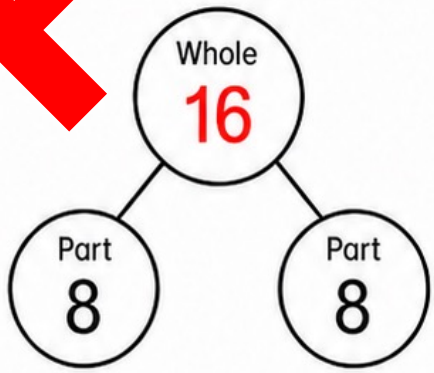
9 + 5 = 14

3.



10 + 6 = 16

4.



8 + 8 = 16

Addition Stories: Choose and Explain — Page 1

Name: _____ Date: _____

Draw or show a strategy. Write an equation and the answer.

1. Mia has 8 shells. She finds 3 more.
   How many shells now?

Equation: _____ Answer: _____

2. Noah has 6 blue blocks and 7 green blo
   How many blocks altogether?

Equation: _____ Answer: _____

3. There are 9 h a fe Fiv ore land.
   How man rds a there?

E ti Answer: _____

4. A jar lds 10 red buttons and 4 yellow buttons.
   How many buttons are there?

Equation: _____ Answer: _____

Addition Stories: Choose and Explain — Page 1

Name: ANSWERS Date: _____

Draw or show a strategy. Write an equation and the answer.

1. Mia has 8 shells. She finds 3 more.
   How many shells now?

Equation: 8 + 3 = 11 Answer: 11 [illegible]s

2. Noah has 6 blue blocks and 7 green bloc[illegible]
   How many blocks altogether?

6 + 6 1

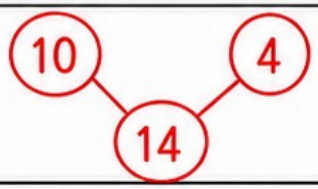
Equation: 6 + 7 = [illegible] Answer: 13 blocks

3. There are 9 bi[illegible] a fe[illegible] Fiv[illegible]nore land.
   How many[illegible]rds a[illegible] there?

9 + 1 + 4

E[illegible]ti[illegible] 9 + 5 = 14 Answer: 14 birds

4. A jar h[illegible]lds 10 red buttons and 4 yellow buttons.
   How many buttons are there?



Equation: 10 + 4 = 14 Answer: 14 buttons

Addition Stories: Choose and Explain — Page 2

Name: _____ Date: _____

Choose a strategy, solve and explain.

1. 15 + 2 = ___

☐ Count On ☐ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: _____

2. 9 + 6 = ___

☐ Count On ☐ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: _____

3. 7 + 7 = ___

☐ Count On ☐ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: _____

4. 8 + 5 = ___

☐ Count On ☐ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: _____

Addition Stories: Choose and Explain — Page 2

Name: ANSWERS Date: _____

Choose a strategy, solve and explain.

1. 15 + 2 = 17

☑ Count On ☐ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: 15, 16, 17

2. 9 + 6 = 15

☐ Count On ☑ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: 9 + 1 + 5

3. 7 + 7 = 14

☐ Count On ☐ Make Ten ☑ Double / Near Double ☐ Part–Part–Whole

Explain: double 7

4. 8 + 5 = 13

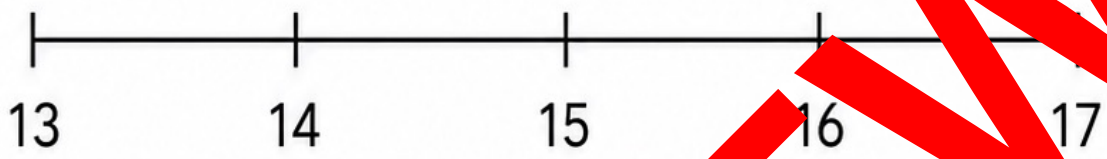
☐ Count On ☑ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

Explain: 8 + 2 + 3

Addition Strategy Check — Page 1

Name: _____ Date: _____

1. Count on: 13 + 4 = ___



2. Make ten: 8 + 6 = 8 + ___ + ___ = ___

3. Double: 7 + 7 = ___

4. Near double: 8 + 8 = 7 + 7 + ___ = ___

5. Circle the most efficient strategy for 16 + 2:

Count On	Make Ten	Double

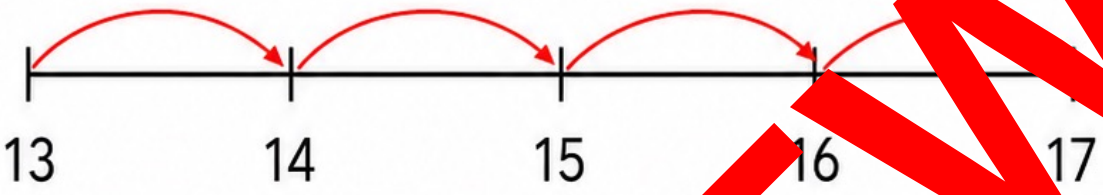
6. True or false: 4 + 9 = 9 + 4

◯ True ◯ False

Addition Strategy Check — Page 1

Name: ANSWERS Date: _____

1. Count on: 13 + 4 = 17



2. Make ten: 8 + 6 = 8 + ___ + ___ = ___

3. Double: 7 + 7 = ___

4. Near double: 8 + 8 = 7 + 7 + 1 = 15

5. Circle the most efficient strategy for 16 + 2:

Count On	Make Ten	Double

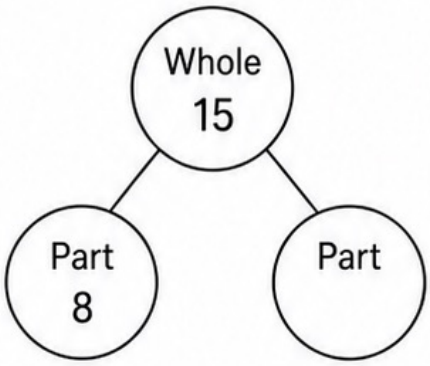
6. True or false: 4 + 9 = 9 + 4

○ True ○ False

Addition Strategy Check — Page 2

Name: _____ Date: _____

1.



8 + ___ = 15

2. Show two different ways to partition 12:

___ + ___ = 12

___ + ___ = 12

3. Luca has 9 marbles and gets [illegible]. How [illegible]ny marbles does he have?

Answe[illegible] _____

4. [illegible]e an[illegible]ow a strategy for 9 + 7.

☐ [illegible]nt On ☐ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

5. Explain how you know 6 + 6 = 12.

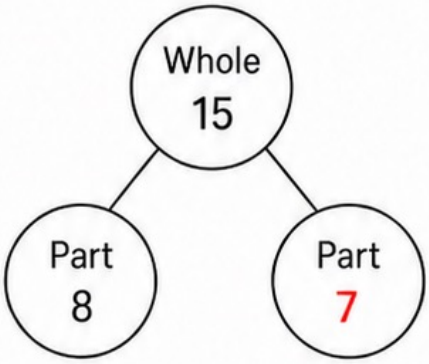
_____

_____

Addition Strategy Check — Page 2

Name: ANSWERS Date: _____

1.



8 + 7 = 15

2. Show two different ways to partition 12:

10 + 2 = 12

7 + 5 = 12

3. Luca has 9 marbles and gets 7 more. How many marbles does he have?

9 + 1 + 6 = 16

Answer: 16 marbles

4. Choose and show a strategy for 9 + 7.

☐ Count On ☑ Make Ten ☐ Double / Near Double ☐ Part–Part–Whole

9 + 1 + 6 = 16

5. Explain how you know 6 + 6 = 12.

It is double 6.

Addition Strategy Check Rubric

Student: _____ **Date:** _____

Skill	BEGINNING	DEVELOPING	ACHIEVING	CONFIDENT	EXCEEDING
Models addition within 20	Needs support	Models some examples	Models most accurately	Models accurately	Models flexibly
Counts on	Recounts all	Starts larger with prompts	Counts on accurately	Chooses it efficiently	Explains efficiency
Uses make ten / doubles	Not yet	Uses one with help	Uses a strategy	Selects efficiently	Connects strategies
Uses part–part–whole	Identifies some parts	Completes with help	Partitions accurately	Finds two ways	Compares partitions
Chooses and explains	Names a strategy	Gives a reason with help	Chooses and explains	Explains why it fits	Compares two strategies

Teacher notes:

_____

_____

_____

_____

Strategies for Addition

Learning Goa

We are learning to add numbers within 20.

I can:

- choose a helpful strategy.
- show how my strategy work
- check whether my answ akes sens

Our Strategy To[illegible]

- Count on from the bigger number.
- Swap the addends to make counting easier.
- Make ten or bridge through ten.
- Use doubles and near doubles.
- Build a part–part–whole mod[illegible]partition a number.

Count On

Start with the bigger number. Say it, th[illegible]ount o[illegible]smalle[illegible]number.

3

Start at 12: 13, [illegible]

12 + 3 = 15

Count On: Try It

4 + 13 is easier when you start at 13.

Start at 4

Start at 13: 14, 15, 16, 17

Now try: 7 + 11 and 9 + 6

Swap the Adde[illegible]

Addends can change places and [illegible] total s[illegible]he sam[illegible].

[illegible]14 + 3

Both equ[illegible]

Cho[illegible]e ord[illegible]at makes your strategy easier.

Make Ten

Ten is a friendly [illegible]mber.

7 nee[illegible] make [illegible]

7 + 3 = 1[illegible]

Knowing [illegible]mbers [illegible]en helps us solve harder additions.

Bridge Through

Solve 8 + 5 by splitting into 2 a

10

10 + 3 = 1

So, 8 + 5 = 13.

Use a Ten Fra

For 6 + 7, move 4 from the 7 t the first ame.

= 10

3 are

10 + 3 = 13

So, 6 + 13.

Use a Doubl

A double has two eq adden

12

Quick do e facts us useful totals to build from.

Use a Near Dou le

6 + 7 is one more th double

12

12 + 1 = 1

So, 6 + 7 13.

Part-Part-Wh[illegible]

The addends are the parts. T[illegible]otal is t[illegible]ole.

Part [illegible]5 = Wh[illegible]4

A part–part–whole [illegible]del helps us see how the numbers belong together.

Partition a Num

Break one addend int lpful p

5

Split 5 into 1

9 + 1 4 = 10 + 4 = 14

Show It Different Ways

8 + 6 = 14

Count on: start at 8 and count on 6.

Make ten: 8 + 2 + 4 = 14.

Near double: 7 + 7 = 14.

Different strategies can lea[illegible]e total.

Choose an Efficient Strategy

Look for:

- a bigger addend to count on from.
- a partner that makes ten.
- a double or near double.
- a helpful way to partition.

Which strategy would you use for 9 + 4? Why?

Guided Practi

Solve each addition. Nam[illegible]our str[illegible]

8 + 6

7 + 7

Choose one addi[illegible]nd sho[illegible]second strategy that proves the same total.

Review

1. Notice the numbers.
2. Choose a helpful strategy.
3. Solve and check.

Tell a partner: Which strate[illegible]eels easiest for you? When would you use it?

Well Done!

Strategies for Addition Quiz

Question 1

True or Fa

For 4 + 13, it is hel tart at 1 nd count on 4.

Answer I

True

Starting at th... numbe... efficient:

13, 14, 15, ...

..., 4 + 13 = 17.

Question 2

What is 12

A. 14

B. 15

C. 16

D. 17

Answer 2

B. 15

Start [illegible] count [illegible]3:

13, 14, [illegible]

Question 3

Short answ

What number if added t o make 10?

Answer 3

3

– 10.

Question 4

To bridge through ten for 8 + [illegible]ow can [illegible]split?

[illegible]nd 4

B. 2 a[illegible]

C. 3 and 3

D. 5 and 5

Answer 4

B. 2 and

8 + 2 n 10 + 3 3.

Question 5

True or Fa

6 + ouble fa

Answer 5

True

The two addend[illegible]ual, so e[illegible] is a double.

6 + 6 =

Question 6

Use a near double t lve 6 + 7

B. 13

C. 14

D. 15

Answer 6

B. 13

Double 6 is 12, 1 more makes 13.

Question

Short answ

The ... are 9 and

What is the ...?

Answer 7

14

9 + 5 = [illegible] whole [illegible]14.

Question 8

Which addition is equal to 3 + 15 and easier for counting on?

A. 12

B. 15

C. 15 − 3

D. 18 + 3

Answer 8

B. 15 + 3

Swapping the addends keeps the sum the same and lets us count on from 15.

Question 4

Short answ

Mia has 8 red c s and 4 ? counters.

How many nters does ltogether?

Answer 9

12 counte

= 12.

Question 10

Which is an efficient str[illegible]y for 9

A. Cou[illegible]object [illegible]n 1

[illegible]. Bridge thr[illegible]ar

C. Subtract 6

D. Guess

Answer 10

B. Bridge throu ten

Sp 1 and

+ 1 + 5 = 1 15

Well Done!