## Bi-Ready

## Grade 2 Mathematics

## Teacher At-Home Activity Packet

The At-Home Activity Packet includes 22 sets of practice problems that align to important math concepts that have likely been taught this year.

Since pace varies from classroom to classroom, feel free to select the pages that align with the topics your students have covered.

The At-Home Activity Packet includes instructions to the parent and can be printed and sent home.

This At-Home Activity Packet-Teacher Guide includes all the same practice sets as the Student version with the answers provided for your reference


## Grade 2 Math concepts covered in this packet



## Add.

$18+2=$
$36+4=$ $\qquad$

5 $7+3=$
$79+1=10$
$95+5=$ $\qquad$
10

11 $9+2=$ $\qquad$
$138+4=$ $\qquad$
$156+9=$ $\qquad$
(2) $8+3=$ $\qquad$
4. $6+8=$ $\qquad$
$67+5=$ $\qquad$
$89+6=$ $\qquad$
$105+8=$ $\qquad$
$122+9=$ $\qquad$
11
$144+8=$ $\qquad$
$166+7=$ $\qquad$

17 Which strategy did you use to solve problem 11? Explain.
Answers will vary. Possible answer: I made a 10 with $9+1$ and then added 1 more to get 11.

## Add.

$14+4=$ $\qquad$
3. $6+6=$ $\qquad$ $45+6=$ $\qquad$ 11
$57+7=$ $\qquad$ $68+7=$ $\qquad$
$88+9=$ $\qquad$
(7) $9+9=$ $\qquad$
9) $5+5=$ $\qquad$ $106+5=$ $\qquad$
$127+8=$ $\qquad$
2) $4+5=$ $\qquad$

## Complete each set of equations.

$12-3=9$
$3+9=12$
(3) $11-3=8$
$3+8=11$
2) $14-5=9$ $5+9=14$

4 $15-7=8$
$7+8=15$
5. $12-2=10$
$12-4=8$
(7) $16-6=10$
$16-9=7$
(6) $13-3=10$
$13-6=7$
$815-5=10$
$15-9=6$

9 In problem 6, how did you use your first answer to find your second answer?
Answers will vary. Possible answer: $13-3=10$. So, to find $13-6$, I needed to subtract 3 more from 10, and 3 less than 10 is 7 .

## Solving Take-Apart Word Problems

## Solve problems 1-6.

1 Hailey buys 9 potatoes. 4 potatoes are white. The rest are red. How many red potatoes are there? Show your work.
Student work will vary.

Solution $\qquad$ potatoes are red.

2 Levi has 17 pet fish. 7 of the fish are goldfish. The rest are mollies. How many fish are mollies? Show your work.
Student work will vary.

Solution $\qquad$ fish are mollies.

3 Ada wants to read 12 books over the summer. 5 books are stories about cats. The rest are stories about horses. How many books are stories about horses? Show your work.
Student work will vary.

Solution $\qquad$ books are stories about horses.

4 There are 16 chairs at a table. 7 students sit down. The rest of the chairs are empty. How many chairs are empty? Show your work.

## Student work will vary.

Solution $\qquad$ chairs are empty.

5 Luis sees 14 dogs at the dog park. 6 of the dogs are small dogs. The rest of the dogs are big dogs. How many dogs are big? Show your work.

Student work will vary.

Solution $\qquad$ dogs are big.

6 Sadie has 20 crayons. She finds 8 crayons in her desk. The rest of the crayons are in her crayon box. How many crayons are in Sadie's crayon box? Show your work.
Student work will vary.

Solution $\square$ crayons are in the crayon box.

7 Which strategy did you use to solve problem 6? Explain why.
Answers will vary.

## Solve problems 1-6. Show your work.

1 There are 4 fewer cats than dogs. There are 2 cats. How many dogs are there?

6 dogs

3 Anna has 7 baskets and some flowers. She has 5 fewer baskets than flowers. How many flowers does Anna have?

Anna has 12 flowers.

5 There are 9 apples. There are 6 fewer apples than oranges. How many oranges are there?

15 oranges

2 Trevor sees 8 red birds. He sees 5 more red birds than blue birds. How many blue birds does Trevor see?

Trevor sees _ 3 blue birds.

4 There are 14 coats and some hats. There are 6 more coats than hats. How many hats are there?
$\qquad$ hats

6 Brynne has 13 books. She has 8 more books than games. How many games does Brynne have?

Brynne has_5_games.

## Solve problems 1-6. Show your work.

1 Jack has 9 flowers to plant. He plants 2 flowers before lunch. Then he plants 3 more after lunch. How many flowers does Jack have left to plant?

Jack has $\qquad$ flowers left to plant.

3 Bella paints 6 pictures on Monday and 8 pictures on Wednesday. Then she paints 3 more pictures on Friday. How many pictures does Bella paint this week?

Bella paints $\qquad$ pictures this week.

5 Lucas has 5 crayons. His sister gives him 6 more. Then he gives 4 to a friend. How many crayons does Lucas have now?

2 There are 8 girls at the park. First, 5 girls go home. Then 6 more girls come to the park. How many girls are at the park now?

There are $\qquad$ girls at the park.

4 Ali puts 12 books in a box. She takes 4 books out of the box. Then she puts 6 books in the box. How many books are in the box now?

There are $\qquad$ books in the box.

6 Miss Brady puts 15 pencils in her desk. Then she takes out 9 pencils. After school she puts 5 pencils back in her desk. How many pencils are in Miss Brady's desk now?

There are $\qquad$ pencils in the desk.

Lucas has $\qquad$ crayons.

## Ways to Model Word Problems

## Solve problems 1-6. Show your work.

1 Tony has 37 building blocks. Then he buys more blocks. Now he has 51 blocks. How many blocks does Tony buy?

Tony buys $\qquad$ blocks.

3 Jen has some buttons. She gets 23 more buttons from her mom. Now she has 65 buttons. How many buttons did Jen have to begin with?

Jen had $\qquad$ buttons to begin with.

5 Ayanna reads 26 pages of her book at school. Later she reads more pages at home. Now she has read 54 pages. How many pages does Ayanna read at home?

Ayanna reads $\qquad$ pages at home.

2 There are some chairs in the art room. Mrs. Lopez brings in 16 more chairs. Now there are 42 chairs. How many chairs were in the room at the start?

There were $\qquad$ 26 the room at the start.

4 Colby packs 31 boxes in one day. He packs 12 boxes in the morning and some boxes after lunch. How many boxes does Colby pack after lunch?

Colby packs $\qquad$ 19 boxes after lunch.

6 The camp has some tents. Campers set up 42 more tents. Now the camp has 60 tents. How many tents did the camp have to begin with?

The camp had $\qquad$ tents to begin with.

## Different Ways to Show Addition

Find the sums and missing addends.

1. $30+7+50+3=$ $\qquad$ 2. $37+53=$ $\qquad$
(3) $20+8+40+2=$ $\qquad$ 4. $28+42=$ $\qquad$
2. $60+6+10+4=$ $\qquad$ (6) $66+14=$ $\qquad$
(7) $40+5+40+5=$ $\qquad$ $845+$ $\qquad$ $=90$
$930+9+20+1=\underline{60}$
10 $\square$ $+21=60$
$1120+4+60+6=$ $\qquad$ $1224+$ $\qquad$ $=90$
$1340+3+30+7=\xrightarrow{80}$
14 $\square$ $+37=80$

15 How does the information in problem 9 help you solve problem 10? Answers may vary. Sample answer: I know the sums of problems 9 and 10 are 60. problem 10 has the addend 21 as does problem $9(20+1)$, so I know that by adding the first two addends of Problem 9, I will get the missing addend in problem 10.

## Subtracting by Adding Up

## Teacher Packet

## Subtract.

Possible solutions:

$$
\begin{array}{rl}
1 & 50-29=? \\
\frac{29+20}{49+1} & =4 \\
\frac{49}{20+1} & =21 \\
\frac{21}{50-29=}
\end{array}
$$

$271-45=?$
$\frac{45}{50}+\frac{5}{20}=\frac{50}{70}$
$\frac{70}{70}+\frac{71}{}$
$\underline{5}+\underline{20}+\underline{1}=\underline{26}$
$71-45=\underline{26}$
(3) $80-41=$ ?

$$
\begin{aligned}
& \frac{41}{71}+\frac{30}{9}=\frac{71}{80} \\
& \frac{30}{80-41}+\frac{9}{89}=\frac{39}{8}
\end{aligned}
$$

$543-28=$ ?
$\frac{28}{30}+\frac{2}{10}=30$
$\frac{40}{40}+\frac{3}{2}+\frac{43}{10}+3$ $43-28=\underline{15}$
$4 \quad 63-28=$ ?
$\underline{28}+\underline{30}=\underline{58}$
$\underline{58}+\underline{2}=\underline{60}$
$\underline{60}+\underline{3}=\underline{63}$
$\underline{30}+\underline{2}+\underline{35}$
$63-28=35$
$695-65=$ ?
$\underline{65}+\underline{30}=\underline{95}$ $95-65=\underline{30}$
$765-39=$ ?
$\frac{39}{59}+\frac{20}{1}=\frac{59}{60}$
$\frac{60}{20}+\frac{5}{20}+\square$
$65-39=\underline{26}$
$975-28=$ ?
$\frac{28}{68}+\frac{40}{2}=\frac{68}{70}$
$\frac{70}{\frac{70}{40}+\frac{5}{2}}=\underline{75}$
$75-28=\boxed{47}$
$847-15=$ ?
$\underline{15}+\underline{5}=\underline{20}$
$\underline{20}+\underline{20}=\underline{40}$
$\underline{40}+\underline{7}=\underline{47}$
$\underline{5}+20+7=32$
$47-15=\underline{32}$
$1054-12=$ ?

$54-12=\underline{42}$

13 How did you decide what to add first? Then how did you get the answer?
Answers will vary. Possible answer: I either added enough to get up to the next tens number or I added a number of tens to the first number. Then I kept adding more until I reached the number I was subtracting from. I combined all the parts I added to get the difference.

## Circle all the problems where you can regroup a ten to help subtract. Then solve the circled problems.

1
32
248
357
463
$\begin{array}{r}-16 \\ \hline 16\end{array}$
$5 \begin{array}{r}76 \\ -26 \\ \hline\end{array}$
$5 \begin{array}{r}76 \\ -26 \\ \hline\end{array}$
$-15$
$-25$
$-39$
24


738
$-28$
(8) $\begin{array}{r}53 \\ -44 \\ \hline 9\end{array}$
(9) 42
$-25$
17
1096
$-40$
11
92
$-56$

1265
$-23$

13

| 86 |  |  |
| ---: | ---: | ---: |
| -19 |  |  |
| 67 | 14 | 59 |
| -33 |  |  |

(15) 77
(16) $\begin{array}{r}62 \\ -\quad 27 \\ \hline 35\end{array}$

17 How did you know which problems to circle?
Answers will vary.
Possible answer: I look at the ones place. If the digit in the ones place in the top number is less than the digit in the ones place in the bottom number, I need to regroup a ten.

18 Check one of your answers by solving it using a different strategy. Show your work.
Answers will vary.

## Solve.

1 $35+\xrightarrow{10}=45$
$35+\ldots 20=55$
$35+\ldots 25=60$
(3) $42+\frac{10}{}=52$
$42+\ldots 40=82$
$42+\ldots 45=87$
$5 \begin{aligned} 26+\ldots & =36 \\ 26+\ldots 40 & =66 \\ 26+\ldots 43 & =69\end{aligned}$
$\qquad$
$739+\quad 1=40$
$39+\ldots=70$
$39+\ldots=75$
$944+\quad 10=54$
$44+\ldots 20=64$
$44+\ldots 23=67$
2) $24+\underline{10}=34$
$24+\ldots 40=64$
$24+\ldots 44=68$
$451+\quad 10=61$
$51+\underline{20}=71$
$51+\ldots 25=76$
$658+\ldots=60$
$58+\ldots=70$
$58+\ldots=71$
$827+\ldots=30$
$27+\ldots 33=60$
$27+\ldots 38=65$
$1069+\ldots=70$ $69+\ldots 21=90$
$69+\ldots 24=93$

Strategies to Find a
$1133+10=43$
$33+\quad 40=73$
$33+\underset{ }{43}=76$
$1326+$ $\qquad$ $=70$
$32+$ $\qquad$ $=61$
$49+$ $\qquad$ $=95$
$1562+$ $\qquad$ $=85$
$41+$ $\qquad$ $=96$
$53+$ $\qquad$ $=77$

$$
1248+2=50
$$

$$
48+\frac{32}{}=80
$$

$$
48+\ldots 37=85
$$

$$
1457+\frac{26}{}=83
$$

$34+$ $\qquad$ $=67$
$28+\ldots 25=53$

$$
16 \begin{aligned}
19+\frac{56}{4} & =75 \\
43+\ldots 44 & =87
\end{aligned}
$$

17 Explain how the strategy to solve problem 5 is different from the strategy used to solve problem 6.
Answers may vary. Possible answer: To solve problem 5, I first added tens then added on the ones. To solve problem 6, I first added ones to the nearest ten then added tens.

18 Explain the strategy you used to solve the first part of problem 14.
Answers may vary. Possible answer: First l added 3 to 57 to get to the nearest ten, 60 . Then I added 20 to 60 which equals 80 . Finally, I added 3 to get to 83 .
So $\mathbf{3}+\mathbf{2 0}+\mathbf{3}=\mathbf{2 6}$.

## Finding the Value of Three-Digit Numbers

The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.

1 $300+50+1=$ $\qquad$

3 $400+20+6=426$

5 $600+40+2=\underline{642}$
2. 2 hundreds +6 tens +7 ones $=$ 267
(4) $400+60+2=462$

65 hundreds +1 ten +3 ones $=$ 513

73 hundreds +7 tens +5 ones $=$ 375
$8500+20+6=\underline{526}$

9 $200+8=$ $\qquad$ 102 hundreds +8 tens +0 ones $=$ 280

126 hundreds +0 tens +7 ones $=$ 607
$13400+70+6=\underline{476}$

153 hundreds +2 tens +3 ones $=$ 323
163 hundreds +3 tens +2 ones $=$ 332
$\qquad$

142 hundreds +3 tens +3 ones $=$ 233

Answers:

| 233 | 607 | 476 | 323 | 267 | 671 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 426 | 513 | 526 | 208 | 642 | 462 |
| 332 | 375 | 280 | 351 |  |  |

## Writing Three-Digit Numbers

## Write the number using only digits.

1 one hundred sixty-four
164

2 six hundred fifty-two $\qquad$
652

3 three hundred twelve
312

4 two hundred sixty-one
261

5 two hundred five
205

6 five hundred nineteen
519

Write the number using only digits.
$7100+10+6$
116
$8500+4$
504
9) $300+40+5$

345
$10300+50+4$
354
$11400+60$
460
$12500+40$

## Write the number as a sum of hundreds, tens, and ones. Then write the number using words.

13522 $\qquad$ $+$ $\qquad$ $+$ $\qquad$

## five hundred twenty-two

$14435 \quad 400+30+{ }^{3}+$
four hundred thirty-five

15218 $\qquad$
200 $+$ $\qquad$ $+$ $\qquad$
two hundred eighteen

16310 $\qquad$ 300 $+$ $\qquad$

## three hundred ten

17 Explain how problem 8 is the same and different from problem 12. Answers will vary. Possible answer: Both 504 and 540 have 5 hundreds, but 504 has 0 tens and 4 ones and 540 has 4 tens and 0 ones.

## Ways to Compare Three-Digit Numbers

## Compare the numbers in each problem two different ways.

1 Compare 250 and 200.
$\frac{200}{250}>\frac{250}{200}$ and

3 Compare 346 and 325.
$\frac{325}{346}>\frac{346}{325}$ and

5 Compare 424 and 453.
$\frac{424}{453}>4453$ and

7 Compare 637 and 682.
$\frac{637}{682}>6 \frac{682}{637}$ and

9 Compare 531 and 513.
$\frac{513}{531}>\frac{531}{513}$ and

11 Compare 468 and 486.

| 468 |
| :--- |$>\frac{486}{486}$ and

2 Compare 170 and 180.
$\frac{170}{180}>180$ and

4 Compare 235 and 261.
$\frac{235}{261}>\frac{261}{235}$ and

6 Compare 833 and 824.
$\frac{824}{833}>8-833$ and

8 Compare 362 and 326.
$\frac{326}{362}>\frac{362}{326}$ and

10 Compare 714 and 741.
$\frac{714}{741} \gg \frac{741}{714}$ and

12 Compare 967 and 959.

| 959 |
| :--- |$<\frac{967}{967}>959$ and

13 What strategies did you use to compare the numbers?
Answers will vary.

## Adding and Regrouping Ones

The answers are mixed up at the bottom of the page.
Cross out the answers as you complete the problems.
$1 \begin{array}{r}635 \\ +321 \\ \hline 956\end{array}$
$4 \begin{array}{r}825 \\ +\quad 166 \\ \hline 991\end{array}$
7) $\begin{array}{r}772 \\ +\quad 109 \\ \hline 881\end{array}$
$10 \begin{array}{r}225 \\ +\quad 224 \\ \hline 449\end{array}$

13273

$$
\frac{+211}{484}
$$

11
$\begin{array}{r}548 \\ +406 \\ \hline 954\end{array}$

14728
$\begin{array}{r}+253 \\ \hline 981\end{array}$
12475
$\begin{array}{r}+515 \\ \hline 990\end{array}$
$15 \begin{array}{r}627 \\ +263 \\ \hline 890\end{array}$
$9 \quad 483$
$6 \quad 246$
$\begin{array}{r}246 \\ +348 \\ \hline 594\end{array}$

$$
\frac{+314}{661}
$$

$8 \quad 347$
$3 \quad 336$
$\begin{array}{r}+123 \\ \hline 459\end{array}$
$5 \quad 512$
$\begin{array}{r}+336 \\ \hline 848\end{array}$
$\begin{array}{r}+208 \\ \hline 691\end{array}$

## Adding and Regrouping Tens

Look at the hundreds digits in each problem. Circle those that will have a sum greater than 500. Then find the exact sums of only the problems you circled.

(1) | 435 |
| ---: |
| +283 |
| 718 |

$2 \quad 205$
$+113$
(3) $\begin{array}{r}586 \\ +\quad 130 \\ \hline 716\end{array}$

7152
$\begin{array}{r}+169 \\ \hline\end{array}$
5) $\begin{array}{r}186 \\ +175 \\ \hline\end{array}$
11145
12347
$+239$

| +133 |
| :--- |

$\begin{array}{r}+262 \\ \hline 743\end{array}$
$8 \begin{array}{r}214 \\ +225 \\ \hline\end{array}$

(10) 481


16 How do you know that $361+283$ is greater than 500 without finding the sum?
Answers will vary. Possible answer: I know the sum will be greater than 500 because I can see that three hundreds plus two hundreds is already five hundreds. The sum of the tens and ones will make the total sum greater than 500.

Circle all the problems where you must regroup a ten to subtract the ones. Then find the differences of only the problems you circled.

(1) | 875 |
| ---: |
| -646 |
| 229 |

4345
$-224$

$-156$
318

## 11

$\begin{array}{r}619 \\ -308 \\ \hline\end{array}$


15375
$-163$

16 How can you tell by looking at the problem if you need to regroup a ten to subtract the ones?
Answers will vary. Possible answer: When I look at the ones place, if the ones digit in the top number is less than the ones digit in the bottom number, then I will need to regroup.

The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.
$1 \begin{array}{r}816 \\ -432 \\ \hline 384\end{array}$

4448
$\begin{array}{r}-160 \\ \hline 288\end{array}$
$7 \quad 628$
$\begin{array}{r}-236 \\ \hline 392\end{array}$
8961
$\begin{array}{r}-470 \\ \hline 491\end{array}$
11835
$\begin{array}{r}-285 \\ \hline 550\end{array}$
12624
$-382$

193
$13 \quad 329$
$\begin{array}{r}-170 \\ \hline 159\end{array}$
$14 \begin{array}{r}465 \\ -195 \\ \hline 270\end{array}$
$15 \quad 519$ $\begin{array}{r}-378 \\ \hline 141\end{array}$

Answers:

| 193 | 242 | 191 | 384 | 272 |
| :--- | :--- | :--- | :--- | :--- |
| 364 | 271 | 491 | 288 | 392 |
| 183 | 141 | 550 | 159 | 270 |

## Adding Four Two-Digit Numbers

Find the sum. Show your work.
$1 \underbrace{29+34+21}_{\underline{50+70}}+36$
2) $45+38+62+15$

160
3) $17+36+43+74$

170
$455+49+71+15$

190

5 $32+24+68+46$

170
$627+19+33+81$
$732+13+29+35$

109
$853+74+13+44$
$\qquad$
$924+12+74+68$

178
$1092+37+71+14$
$-214$

11 Explain how you found the answer to problem 8.
Answers will vary. Possible answer: I broke each number into tens and ones. Then I added the ones: $3+4+3+4=14$. Next, $I$ added the tens: $50+70+10+40=170$. Finally, I added $170+14$ to get 184 .

1 Use a ruler to measure the length of the piece of tape in inches.
$\square$
What is the length of the tape? $\qquad$ inches

2 Use a ruler to measure the length of the pencil in inches.


What is the length of the pencil? $\qquad$ inches

3 Use a ruler to measure the length of the shoe in centimeters.


What is the length of the shoe? $\qquad$ centimeters

4 Use a ruler to measure the length of the fish in centimeters.


What is the length of the fish? $\qquad$ centimeters

## Measuring in Inches

5 Use a ruler to measure the length of the string in both inches and centimeters.

What is the length of the string in inches? $\qquad$ inches
What is the length of the string in centimeters? $\qquad$ centimeters

6 Use a ruler to measure the length of the rectangle in both inches and centimeters.
$\square$
What is the length of the rectangle in inches? $\qquad$ inches

What is the length of the rectangle in centimeters? $\qquad$ centimeters

7 For problem 6, did you write different numbers for the length in inches and the length in centimeters? Explain.
Yes. Answers will vary. Possible answer: The length of the rectangle is 4 inches and 10 centimeters long. Centimeters are smaller units than inches, so when you measure something in inches and centimeters, there are more centimeters than inches.

1 Circle the objects that are easier to measure with an inch ruler. Underline the objects that are easier to measure with a yardstick.


2 Circle the objects that are easier to measure with an inch ruler. Underline the objects that are easier to measure with a yardstick.


3 What is the length of the rectangle to the nearest inch?


The rectangle is about $\qquad$ inches long.

4 What is the length of the baseball bat to the nearest foot?


The baseball bat is about $\qquad$ feet long.

5 What is the length of the branch to the nearest foot?


The branch is about $\qquad$ foot long.

1 Circle the objects that are easier to measure with a centimeter ruler. Underline the objects that are easier to measure with a meter stick.


2 Circle the objects that are easier to measure with a centimeter ruler. Underline the objects that are easier to measure with a meter stick.


3 What is the length of the tape to the nearest centimeter?


The tape is about $\qquad$ centimeters long.

4 What is the length of the bench to the nearest meter?


The bench is about $\qquad$ meter long.

5 What is the length of the rectangle to the nearest centimeter?


The rectangle is about $\qquad$ centimeters long.

