

WHAT WE ARE LEARNING

Add and Subtract Whole Numbers

VOCABULARY

Here are the vocabulary words we use in class:

Exact answer The number determined by adding, subtracting, multiplying, or dividing a math problem is an exact answer.

Estimate An approximate number is an estimate. When a problem asks “about how many?” we estimate. When a problem asks for the exact number, we calculate to arrive at the answer.

Dear Family,

Your child is learning mental math strategies, estimation methods, and how to add and subtract whole numbers.

Mental Math Strategies

Break-Apart Strategy

Add. $62 + 38$

Since 62 has 6 tens and 2 ones, we can break apart the number by thinking $60 + 2$.

Since 38 has 3 tens and 8 ones, we can break apart the number by thinking $30 + 8$.

If we add the tens, $60 + 30 = 90$, and then add the ones, $8 + 2 = 10$, we arrive at the exact answer of 100 by adding the sums together.

Make-a-Ten Strategy

Subtract. $97 - 28$

Think: $28 + 2 = 30$

$97 - 30 = 67$

$67 + 2$ (which was added to make 30) = 69

Estimation Methods

Use Rounding

Round to the greatest place value.

$$\begin{array}{r} 31,768 \\ + 59,105 \\ \hline \end{array} \quad \begin{array}{r} 30,000 \\ + 60,000 \\ \hline 90,000 \end{array}$$

The estimate is 90,000.

Use Front-End Estimation

Add the value of the front digits.

$$\begin{array}{r} 31,768 \\ + 59,105 \\ \hline \end{array} \quad \begin{array}{r} 30,000 \\ + 50,000 \\ \hline 80,000 \end{array}$$

The estimate is 80,000.

Addition and Subtraction

Find a Sum

STEP 1	STEP 2	STEP 3	STEP 4
Add the ones. Regroup 17 ones as 1 ten and 7 ones.	Add the tens.	Add the hundreds.	Add the thousands.
$\begin{array}{r} ^1 \\ 6,379 \\ + 4,408 \\ \hline 7 \end{array}$	$\begin{array}{r} ^1 \\ 6,379 \\ + 4,408 \\ \hline 87 \end{array}$	$\begin{array}{r} ^1 \\ 6,379 \\ + 4,408 \\ \hline 787 \end{array}$	$\begin{array}{r} ^1 \\ 6,379 \\ + 4,408 \\ \hline 10,787 \end{array}$

Find a Difference

STEP 1	STEP 2	STEP 3	STEP 4
Regroup, 1 ten as 17 ones. Subtract the ones.	Subtract the tens.	Subtract the hundreds.	Subtract the thousands.
$\begin{array}{r} \boxed{7} \boxed{17} \\ 10,7\cancel{8}7 \\ - 4,408 \\ \hline 9 \end{array}$	$\begin{array}{r} \boxed{7} \boxed{17} \\ 10,7\cancel{8}7 \\ - 4,408 \\ \hline 79 \end{array}$	$\begin{array}{r} \boxed{7} \boxed{17} \\ 10,7\cancel{8}7 \\ - 4,408 \\ \hline 379 \end{array}$	$\begin{array}{r} \boxed{7} \boxed{17} \\ 10,7\cancel{8}7 \\ - 4,408 \\ \hline 6,379 \end{array}$

To help your child with estimating, play the estimating game included with these activities.

To help guide your child's thinking with the practice exercises, ask questions such as these as you work together:

- What is the problem asking you to do, estimate or find the exact answer?
- Can rounding help you?
- Which strategy might work best here?

Talking with your child about math will help him or her gain confidence and understanding.

Sincerely,

Add and Subtract Whole Numbers

Add or subtract mentally.

1. $29 + 42$ _____

2. $43 - 19$ _____

3. $58 + 24$ _____

4. $76 - 28$ _____

5. $54 + 37$ _____

6. $65 - 39$ _____

Estimate the sum or difference by using front-end estimation.

7.
$$\begin{array}{r} 8,763 \\ - 2,592 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 7,353 \\ - 2,509 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 48,793 \\ + 23,081 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 23,461 \\ + 56,128 \\ \hline \end{array}$$

Find the sum or difference. Estimate to check.

11.
$$\begin{array}{r} 2,536 \\ + 4,315 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 6,347 \\ - 2,103 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 5,812 \\ + 3,239 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 7,245 \\ - 5,329 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 8,351 \\ - 3,424 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 3,547 \\ + 1,263 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 4,586 \\ + 2,719 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 9,346 \\ - 7,158 \\ \hline \end{array}$$

Find the difference. Estimate to check.

19.
$$\begin{array}{r} 5,000 \\ - 3,210 \\ \hline \end{array}$$

20.
$$\begin{array}{r} 9,405 \\ - 1,514 \\ \hline \end{array}$$

21.
$$\begin{array}{r} 4,008 \\ - 2,230 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 6,000 \\ - 5,431 \\ \hline \end{array}$$

Use a pencil or calculator. Find the sum or difference.

23.
$$\begin{array}{r} 560,231 \\ + 276,248 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 600,000 \\ - 367,287 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 543,190 \\ + 287,326 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 743,087 \\ - 346,829 \\ \hline \end{array}$$



Have fun estimating! Take turns with your child.

1. The first player holds a paper clip or coin above the "Estimate to 100" grid and gently lets it drop onto one of the numbered boxes. The player uses that number and one other number on the grid as addends to estimate a sum of 100. For example, if the marker lands on 91, the player might select 12 as the second addend to estimate a sum of 100. If using front-end estimation, the player could also choose either 18 or 19.
2. After estimating, the player finds the exact sum by adding the two numbers.
3. For more of a challenge, move on to the "Estimate to 1,000" grid.
4. Later, estimate both sums and differences using the numbers in the boxes.

Estimate to 100

53	91	38	42
19	12	79	58
76	26	39	70
30	18	83	64

Estimate to 1,000

530	910	385	420
290	120	795	589
760	240	390	700
305	185	830	645