



# 2<sup>nd</sup> Grade Math



To Proficiency and  
Beyond!

Name:

Date:

What 3-digit number is being represented? Sticks are 10's and dots are 1's.



Use flats, sticks and dots to represent the following numbers.

362

251

Name:

Date:

Grade 2 Mathematics Homework • Decomposing and comparing 3-digit numbers

Complete the expanded form below. What could you write in the blank to make the expression true?.

$$300 + \underline{\hspace{2cm}} + \underline{7} > 300 + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

Which expression represents 552 in expanded form by place value?

- A.  $499 + 1 + 50 + 2$
- B.  $500 + 50 + 2$
- C.  $300 + 200 + 25 + 25 + 2$
- A. None of the Above

Use what you know to make a list of three numbers that could be represented by the expanded form below.

$$600 + \underline{\hspace{2cm}} + 3$$

---

---

---

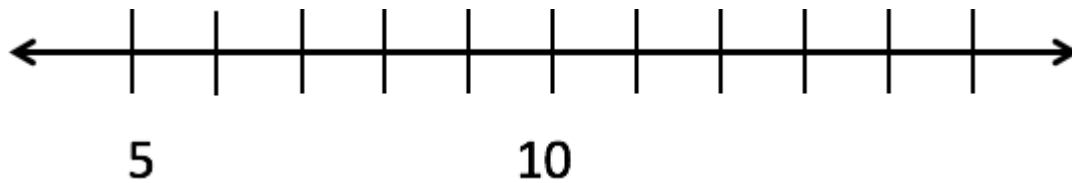
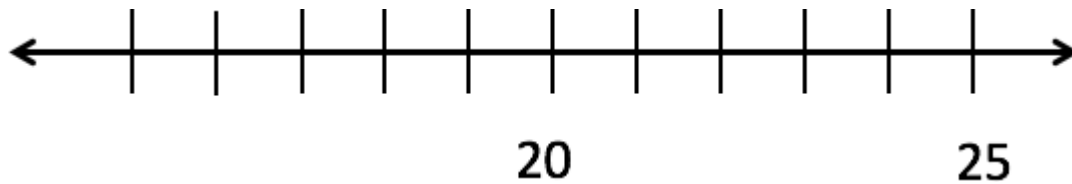
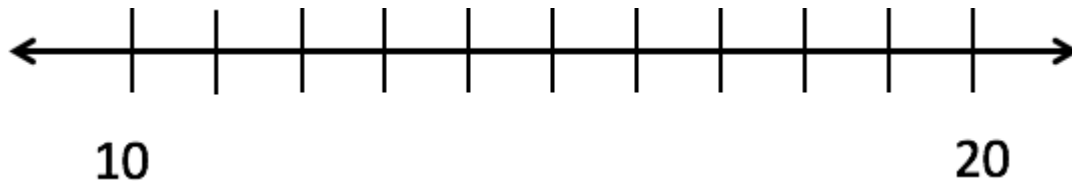
Of the numbers that you listed above, which one is greater? Use expanded form to show how you know.

Name:

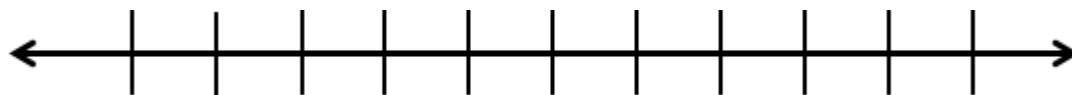
Date:

### Grade 2 Mathematics Homework • Represent Numbers to 100 on a Number Line

Place 15 on each of the number lines below.



Create your own number line below and place 15 on it. Label the endpoints.



Name:

Date:

## Grade 2 Mathematics Homework • Compare two three-digit numbers

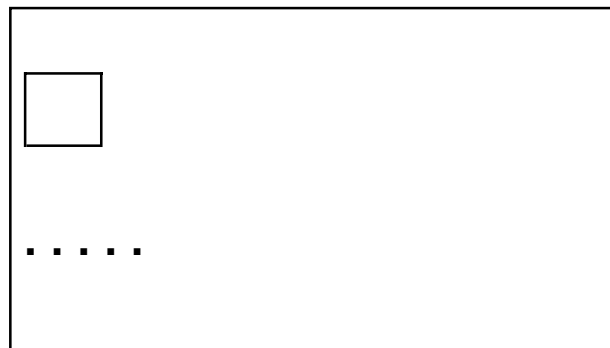
How many more **hundreds** does 600 have than 200? \_\_\_\_\_

How many more **tens** does 78 have than 58? \_\_\_\_\_

The number represented below is 143. How can you change this representation to show 251? Show your new number inside the box.



The number represented below is 105. How can you change this representation to show 236? Show your new number inside the box.

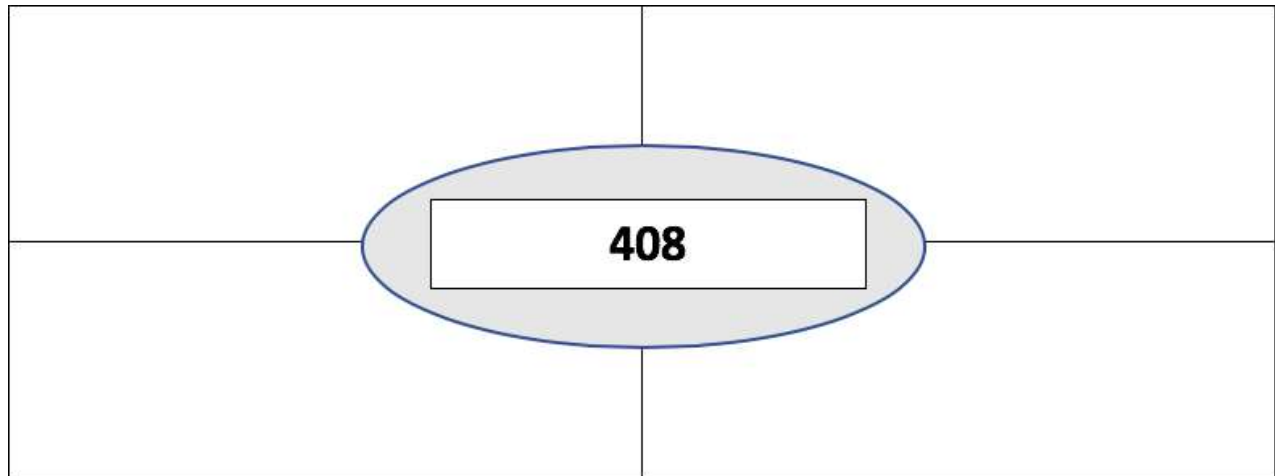


Name:

Date:

## Grade 2 Mathematics Homework • Decomposing and comparing 3-digit numbers

Decompose 408 in 4 different ways.



Which expression represents 378?

- A.  $370 + 4 + 2 + 2$
- B.  $200 + 100 + 60 + 10 + 8$
- C.  $300 + 70 + 8$
- D. All of the Above

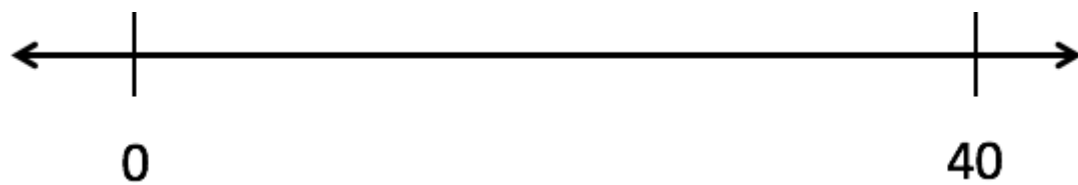
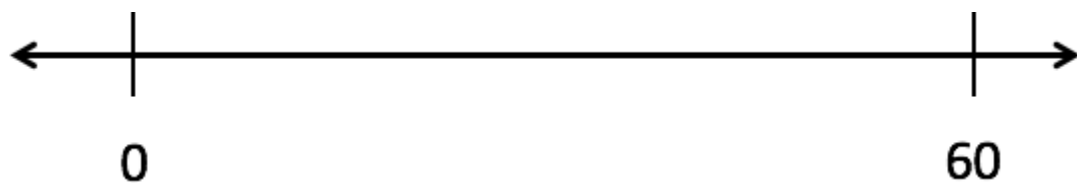
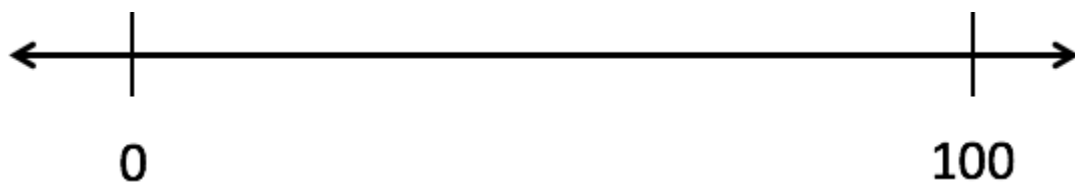
How would you decompose 378 in order to compare it to 408? Show your work below.

Which number is greater 378 or 408? Use your model above to explain your answer.

Name:

Date:

Place 30 on each of the number lines below.



Did you place 30 on the same spot on each number line? Explain.

Name:

Date:

## Grade 2 Mathematics Homework

### Skip Counting by Different Intervals on a Hundred Chart

Start with 0. Skip count by 2.

Start with 0. Skip count by 5. Put a triangle around each number.

Start with 0. Skip count by 10. Put a circle around each number.

0	1	2	3	4	5	6	7	8	9



--	--	--	--	--	--	--	--	--	--

Name:

Date:

## Grade 2 Mathematics Homework • Skip Counting by Different Intervals

Complete the skip counts.

You can use a hundred chart or a calculator to help if needed.

Start with 0. Skip count by 5.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

Start with 0. Skip count by 10.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

Start with 0. Skip count by 100.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,

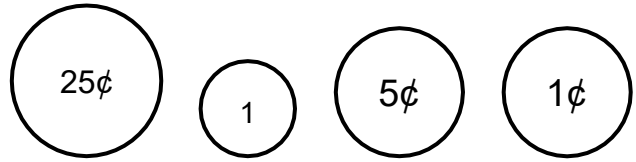
Rico starts with 0 and skip counts by 2. What are some numbers we will say?

## Hundred Chart

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99

Grade 2 Mathematics Homework • Skip Count with Like Coins to \$1.00

Find the amount of money each person has. Use skip counting or the coins to help if needed.



Connie has 18 pennies. How much money does she have?

Connie has 4 quarters. How much money does she have?

Connie has 9 dimes. How much money does she have?

Connie has 16 nickels. How much money does she have?

Grade 2 Mathematics Homework - Skip Counting by Different Intervals on a Hundred Chart

Start with 7. Skip count by 5s.

Start with 28. Skip count by 10.

Start with 44. Skip count by 2 to 70. Put a circle around each number.

0	1	2	3	4	5	6	7	8	9

1. Mrs. Hope's class saw 36 butterflies in the garden. Some of the butterflies flew away. Now there are 19 butterflies in the garden. How many butterflies flew away?

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

2. At recess 30 children lined up to jump rope. 9 children joined them. 4 children left to get a drink of water. How many children were left in the line?

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

**3.** Allen has cats and dogs. He has 16 pets. If he has at least 10 cats, how many cats and dogs could he have?

**Find two different possible combinations.  
Use words, numbers or pictures to explain your reasoning.  
Write a number sentence for each combination.**

**Combination 1**

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

**Combination 2**

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

**4.** At the park Jun saw 32 animals. She saw 12 dogs, 15 squirrels, and some frogs. How many frogs did Jun see?



**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

5. Tara's mother wanted to make a blackberry pie. On Monday morning Tara picked some blackberries from the bush. In the afternoon she picked 40 more blackberries and then she had 76 blackberries in all. How many blackberries did Tara pick in the morning?

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

6. Sam has 43 crayons. Nate has 91 crayons. George has 70 crayons. How many fewer crayons does Sam have than Nate? How many fewer crayons does George have than Nate?

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

Complete the following: (1 point each)

7. \_\_\_\_\_ + 6 = 9

8. \_\_\_\_\_ + 6 = 11

9. \_\_\_\_\_ + 6 = 13

10. \_\_\_\_\_ + 6 = 15

11. What pattern do you notice with the above problems?

---

12. Mona Elementary School is collecting Box Tops for Education to purchase new P.E. equipment. The school had a contest to see which grade could collect the most Box Tops in one week. You have been asked to find out which grade is the winner of the contest. Below you will find the amount of Box Tops that each class in each grade collected. (6 points)

<b>Grade</b>	<b>Class A Number of Box Tops</b>	<b>Class B Number of Box Tops</b>	<b>Grade Total</b>
Kindergarten	15	25	
1	36	41	
2	47	22	
3	21	37	
4	52	60	
5	19	35	

Bonus Question: How many box tops did the entire school collect all together?

Show your work:

**13.** Recycling and Bottle Collection: The 2nd grade at Salem Elementary collected plastic bottles for the recycling program. During the first week, they collected 63 bottles and 22 newspapers. During the second week they collected 49 bottles and during the third week they collected 32 bottles and 15 newspapers. How many bottles did the 2nd grade collect during the first 2 weeks?

**Write an equation that represents this problem. Use a symbol for the unknown number.**

Solve the problem.  
Use words, numbers or pictures to explain your reasoning.

$$\begin{array}{r} 1 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +0 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +6 \\ \hline \end{array}$$

$\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ -6 \\ \hline \end{array}$
--	---	---	---	---	---

$\begin{array}{r} 9 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -3 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -9 \\ \hline \end{array}$
--	--	--	---	---	---

$\begin{array}{r} 7 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -0 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ -10 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ -5 \\ \hline \end{array}$
--	--	--	--	--	---

$\begin{array}{r} 11 \\ -9 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ -3 \\ \hline \end{array}$
---	---	---	--	---	--

$\begin{array}{r} 16 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 17 \\ -8 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -7 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ -2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ -6 \\ \hline \end{array}$
---	---	---	---	--	---

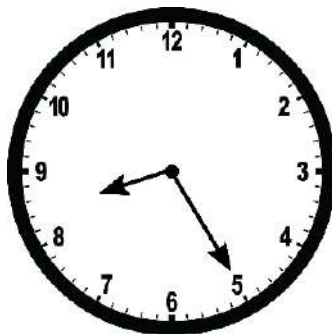
1. Which number is 10 less than 704?

- A 604
- B 694
- C 714
- D 794

2. How many hundreds, tens, and ones are in 571?

- A 5 hundreds, 1 ten, 7 ones
- B 5 hundreds, 7 tens, 0 ones
- C 5 hundreds, 7 tens, 1 one
- D 5 hundreds, 71 tens, 0 ones

3. A gym opens in the morning at the time shown on the clock.



What time does the gym open?

- A 8:25 p.m.
  - B 8:25 a.m.
  - C 5:40 p.m.
  - D 5:40 a.m.
-

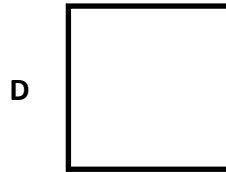
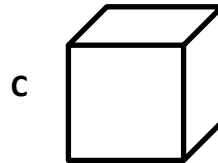
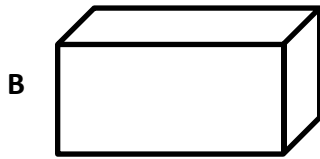
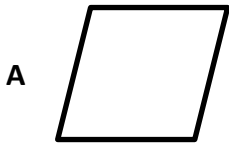


4. Claire, Jalen, and Lisa are playing a game. Claire scores 26 points, Jalen scores 22 points, and Lisa scores 17 points.

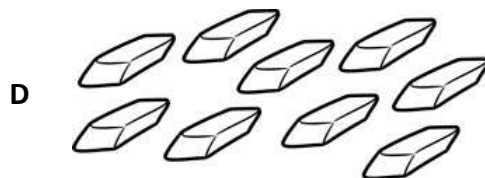
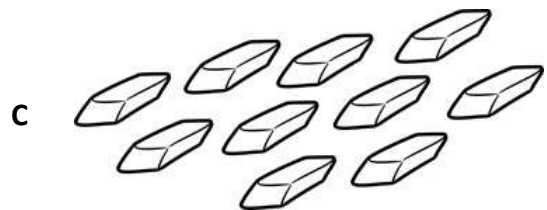
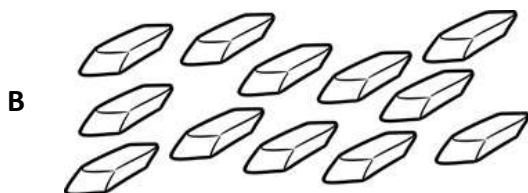
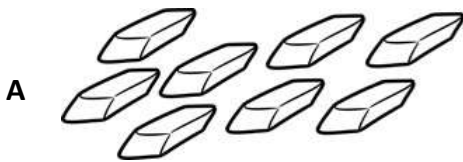
Which number sentence shows how many points Claire, Jalen, and Lisa score altogether?

- A  $26 + 22 + 17 = 65$
- B  $26 + 22 + 17 = 55$
- C  $26 + 22 - 17 = 31$
- D  $26 - 22 + 17 = 21$

5. Which shape is a cube?



6. Which group has an odd number of erasers?



7. Nancy has 65 crayons. She gives 26 crayons to Cedric.

How many crayons does Nancy have now?

- A 31 crayons
- B 39 crayons
- C 41 crayons
- D 49 crayons

8. Which statement is correct, and why?

- A  $685 < 699$  because 8 ones is less than 9 ones.
- B  $685 < 699$  because 5 ones is less than 9 ones.
- C  $369 > 355$  because 9 tens is greater than 5 tens.
- D  $369 > 355$  because 6 tens is greater than 5 tens.

9. Amy and Marco are at an ice cream shop. Marco has 5 coins to buy his ice cream, as shown.



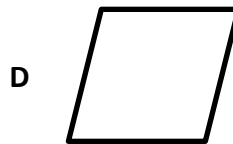
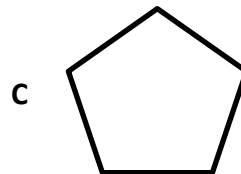
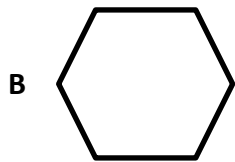
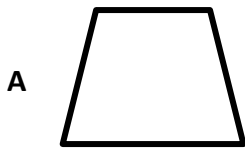
Marco orders a waffle cone that costs 80¢. Does Marco have enough money to buy the waffle cone, and why?

- A No. Marco does not have enough to buy the waffle cone because he has only 70¢.
- B No. Marco does not have enough to buy the waffle cone because he has only 75¢.
- C Yes. Marco has enough to buy the waffle cone because he has 80¢.
- D Yes. Marco has enough to buy the waffle cone because he has 85¢.

10. What is  $91 - 26$ ?

- A 65
- B 67
- C 75
- D 77

11. Which shape is a hexagon?



12. A student is adding  $9 + 7$ . First, the student changes the 9 into 10.

What should the student do next to find the answer?

- A Add 6 to 10.
- B Add 7 to 10.
- C Subtract 6 from 10.
- D Subtract 7 from 10.

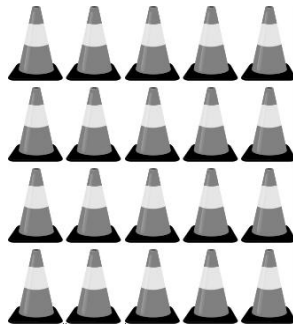
13. Which expression has a sum of 81?

- A  $18 + 32 + 16 + 25$
- B  $21 + 16 + 30 + 24$
- C  $26 + 15 + 22 + 18$
- D  $31 + 18 + 14 + 19$

14. Which number sentence can be used to find  $254 + 458$ ?

- A 6 hundreds + 10 tens + 12 ones = 712
- B 6 hundreds + 10 tens + 12 ones = 702
- C 6 hundreds + 10 tens + 2 ones = 712
- D 6 hundreds + 10 tens + 2 ones = 702

15. The picture shows an arrangement of cones.



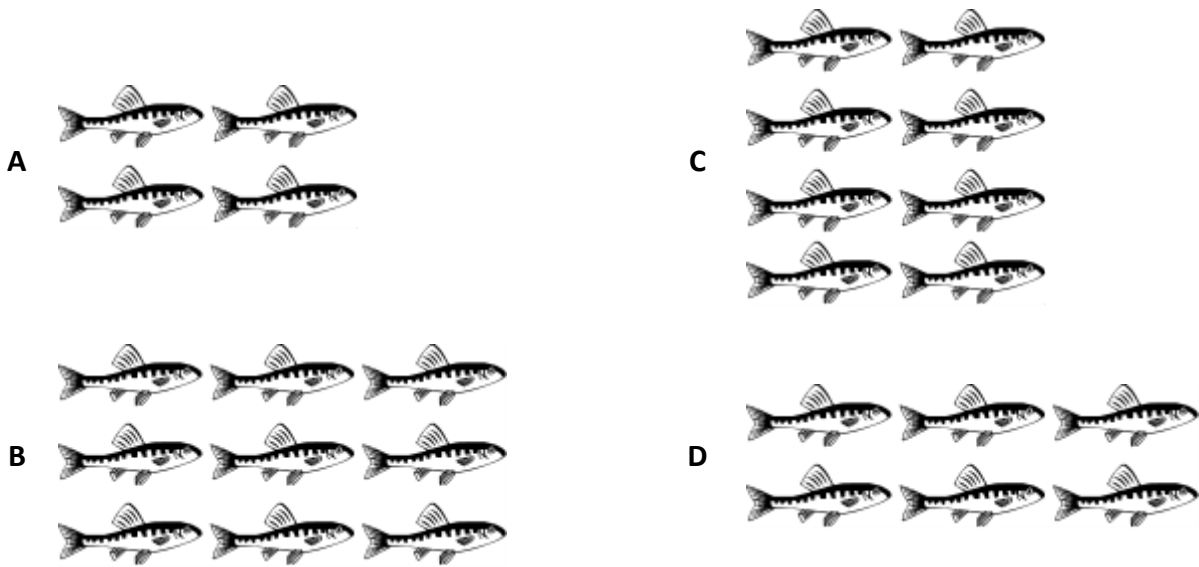
Which equation can be used to find the total number of cones?

- A  $4 + 5 = 20$
- B  $4 + 4 + 4 + 4 = 20$
- C  $5 + 5 + 5 + 5 = 20$
- D  $5 + 5 + 5 + 5 + 5 = 20$

16. A pencil costs 77¢. Which set of coins is *exactly* enough to buy the pencil?



17. Which group of fish can be represented as  $2 + 2 + 2$ ?



18. The calendar shows a full year.

January							February							March							April												
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S						
			1	2	3	4							1												1				1	2	3	4	5
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8	6	7	8	9	10	11	12						
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15	13	14	15	16	17	18	19						
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22	20	21	22	23	24	25	26						
26	27	28	29	30	31	23	24	25	26	27	28	23	24	25	26	27	28	29	27	28	29	30											
													30	31																			

May							June							July							August						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	5						1	2
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
25	26	27	28	29	30	31	29	30	27	28	29	30	31	24	25	26	27	28	29	30	31						

September							October							November							December								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
										1	2	3	4							1				1	2	3	4	5	6
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13		
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20		
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27		
28	29	30	26	27	28	29	30	31	23	24	25	26	27	28	29	28	29	30	31										

Which month comes *directly* before May?

- A April
- B January
- C June
- D September

19. What is  $42 + 38$ ?

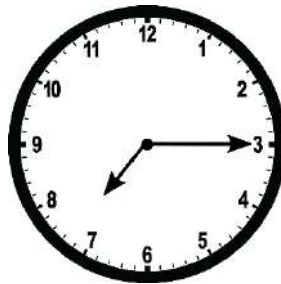
- A 70
- B 76
- C 80
- D 86

20. Which statement is correct?

- A 10 is an even number because  $10 = 5 + 5$ .
- B 11 is an even number because  $11 = 6 + 5$ .
- C 14 is an odd number because  $14 = 7 + 7$ .
- D 17 is an odd number because  $17 = 9 + 9$ .

Use the information given to answer questions 21-22.

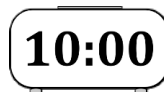
A football game starts at the time shown on the clock.



21. What time does the football game start?

- A 3:00
- B 3:35
- C 7:15
- D 7:30

22. The clock shows the time of night that the football game ends.



What time of night does the football game end?

- A one o'clock a.m.
- B one o'clock p.m.
- C ten o'clock a.m.
- D ten o'clock p.m.

23. The table shows the number of students in three 2<sup>nd</sup> grade classes.

Teacher	Number of Students
Ms. Jones	24
Mr. Adams	19
Mrs. Smith	18

How many students are in all three classes?

- A 71 students
- B 61 students
- C 51 students
- D 41 students

24. Which number is 100 more than 515?

- A 415
- B 505
- C 525
- D 615

25. Which set of numbers skip counts by 10s?

- A 473, 484, 495
- B 520, 525, 530
- C 688, 698, 708
- D 763, 863, 963



26. Which model shows  $476 - 234$ ?

A

B

C

D

27. Which comparison is correct?

- A  $344 > 411$
- B  $479 < 492$
- C  $650 = 605$
- D  $851 < 799$

28. If 10 is added to the number 490, which sentence will be true?

- A The digit in the hundreds place will become a 3.
- B The digit in the ones place will become a 1.
- C The digit in the tens place will become a 0.
- D The digit in the tens place will become a 1.

29. John has 22 toy cars. Nina has 7 more cars than John. Chuck has 2 fewer cars than Nina.

$$22 + 7 - 2 = \triangle$$

How many toy cars,  $\triangle$ , does Chuck have?

- A 17 toy cars
- B 27 toy cars
- C 29 toy cars
- D 31 toy cars

Use the information given to answer questions 30-31.

Ashley, Carl, Maya, and Jordan are taking a math test. They are asked to write the number 746 in word form. The table shows what each student writes.

Ashley	seven hundred forty-six
Carl	seven hundred forty sixty
Maya	seventy-four hundred six
Jordan	seventy hundred forty-six

30. Which student writes 746 in word form *correctly*?

- A Ashley
- B Carl
- C Maya
- D Jordan

31. What is 746 in expanded form?

- A  $7 + 4 + 6$
- B  $70 + 40 + 6$
- C  $700 + 4 + 6$
- D  $700 + 40 + 6$

32. A student is using the chart to solve  $578 - 243$ .

100s	10s	1s
500 -200	70 - <input type="text"/>	<input type="text"/> -3

What is the answer to the subtraction problem?

- A 335
- B 345
- C 367
- D 373

33. Which shape always has four equal sides and four equal angles?

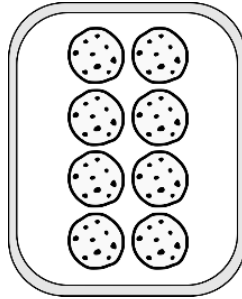
- A hexagon
- B pentagon
- C rectangle
- D square

34. A student is asked to find the sum of  $297 + 613$ . Which expression can the student use to find the answer?

- A  $800 + 10$
- B  $800 + 10 + 10$
- C  $800 + 100$
- D  $800 + 100 + 10$



35. The total number of cookies on a tray can be found by using the equation  $2 + 2 + 2 + 2 = 8$ .



Which is another way to arrange the same number of cookies on the tray?

- A Arrange the cookies into 2 rows with 2 cookies in each row.
- B Arrange the cookies into 2 rows with 4 cookies in each row.
- C Arrange the cookies into 3 rows with 5 cookies in each row.
- D Arrange the cookies into 4 rows with 4 cookies in each row.

# Math Fact Fluency 2<sup>nd</sup> Grade

## Mental Math

### 1. MAKE TEN BY IDENTIFYING THE MISSING PART (4 minutes)

**Materials:** (S) Personal white boards

**Note:** Students need this skill as they add 8 and 6 using the ten and subsequently add 18 and 6 or 80 and 60.

**Directions:**

**T:** If I say 9, you say 1, because 9 needs 1 to be 10.

**T:** Wait for the signal, 5.

**S:** 5.

Continue with the following possible sequence: 8, 2, 9, and 1.

**T:** This time I'll say a number and you write the addition sentence to make ten on your personal white board.

**T:** 0. Get ready. Show me your board.

**S:**  $0 + 10 = 10$ .

**T:** 10. Get ready. Show me your board.

**S:**  $10 + 0 = 10$ .

Continue with the following possible sequence: 3, 7, 6, and 4.

**T:** Turn and explain to your partner what pattern you noticed that helped you solve the problems.

**S:** First, you said 0 and the answer was  $0 + 10 = 10$ ; next, you said 10 and the answer was  $10 + 0 = 10$ . The numbers switched places!

## 2. PAIRS TO MAKE TEN WITH NUMBER SENTENCES (2 minutes)

**Materials:** (S) Personal white boards

**Note:** This is a foundational skill for mastery of sums and differences to 20.

**Directions:**

**T:** I'll say a number and you write the addition sentence to make 10 on your personal white board.

**T:** 5. Get ready. Show me your board.

**S:** (Show  $5 + 5 = 10$ .)

**T:** 8. Get ready. Show me your board.

**S:** (Show  $8 + 2 = 10$ .)

Continue w/ the following possible sequence: 9, 1, 0, 10, 6, 4, 7, and 3.

**T:** What pattern did you notice that helped you solve the problems?

**S:** You can just switch the numbers around! → If you say 8 and the answer is  $8 + 2 = 10$ , then I know that when you say 2 the answer will be  $2 + 8 = 10$ . → The numbers can switch places!

[EngageNY, Module 1, Lesson 3](#)

### 3. TAKE FROM TEN (5 minutes)

**Materials:** (S) Personal white boards

**Note:** Take from Ten develops the automaticity necessary to subtract fluently from the ten when subtracting from the teens.

**Directions:**

**T:** When I say 1, you say 9, because the game is to take the number I say from 10. Ready? 2.

**S:** 8.

Continue with the following sequence: 3, 6, 5, and 9.

**T:** This time, after you say how many are left, write the number sentence on your personal white board. 5.

**S:** 5.

**S:** (Write the number sentence on their boards.)

**T:** Show the number sentence.

**S:** (Show  $10 - 5 = 5$ .)

Continue with the following possible sequence: 7, 8, 6, 9, and 4.

[EngageNY, Module 1, Lesson 4](#)

## 4. MAKE A TEN TO ADD (6 minutes)

**Note:** Reviewing making ten allows students to add within the teens during the lesson and see the distinction.

**Directions:**

**T:** Let's make ten to add. I say  $9 + 2$ , and you say  $9 + 2 = 10 + 1$ . Ready?  
 $9 + 2$ .

**S:**  $9 + 2 = 10 + 1$ .

**T:** Answer?

**S:** 11.

**T:**  $9 + 5$ .

**S:**  $9 + 5 = 10 + 4$

**T:** Answer?

**S:** 14.

Continue with the following possible sequence:  $9 + 7$ ;  $9 + 6$ ;  $9 + 8$ ;  $8 + 3$ ;  $8 + 7$ ;  $7 + 4$ ; and  $7 + 6$ .

[EngageNY, Module 1, Lesson 4](#)



## 5. TAKE FROM 20 (4 minutes)

Materials: (S) Personal white boards

Note: This exercise will give students practice with making ten and applying it to multiples of 10.

Directions:

T: Take the number I say from 10. I say 1, you say 9. Then write the number sentence and wait for my signal to show it.

T: 7.

S: 3. (Write number sentence.)

T: Show your personal white boards.

S: (Show  $10 - 7 = 3$ .)

Continue with the following possible sequence: 8, 6, and 9.

T: This time instead of taking from 10, let's take from 20. Ready? 1.

S: 19. (Write number sentence.)

T: Show your personal white board.

S: (Show  $20 - 1 = 19$ .)

Continue w/ the following possible sequence: 3, 2, 5, 0, 6, 8, 7, and 9.

[EngageNY, Module 1, Lesson 6](#)

## 6. TAKE FROM 20 (5 minutes)

**Materials:** (S) Personal white boards

**Note:** Students use personal white boards to see the connection between taking from ten and taking from a multiple of ten.

**Directions:**

**T:** I say 2, you say 8, to take the number I say from 10. Then, write the number sentence. Get ready.

**T:** 6.

**S:** 4. (Write number sentence.)

**T:** Show your board.

**S:** (Show  $10 - 6 = 4$ .)

Continue with the following possible sequence: 7, 9, and 5.

**T:** This time instead of taking from 10, let's take from 20. Ready?

**T:** 1.

**S:** 19. (Write number sentence.)

**T:** Show your board.

**S:** (Show  $20 - 1 = 19$ .)

Continue with the following possible sequence: 5, 6, 8, and 3.

[EngageNY, Module 1, Lesson 7](#)

## 7. TWO MORE (2 minutes)

**Note:** Students are eased into crossing multiples of ten by asking for just 2 more.

**Directions:**

**T:** For every number I say, you will say what number is 2 more. If I say 2, you say 4. Ready? 3.

**S:** 5.

Continue with the following possible sequence: 6, 9, 8, 18, 38, 58, 78, 9, 19, 39, 59, and 79.

[EngageNY, Module 1, Lesson 7](#)

## 8. TAKE FROM 20 (3 minutes)

**Materials:** (S) Personal white boards

**Note:** Students use personal white boards to see the connection between taking from ten and taking from a multiple of ten. As students show comprehension of the skill, practice orally without the personal boards.

**Directions:**

**T:** I say 3, you say 7, to take the number I say from 10. Write the number sentence and wait for my signal to show it.

**T:** 8.

**S:** 2. (Write number sentence.)

**T:** Show your personal boards.

**S:** (Show  $10 - 8 = 2$ .)

Continue with the following possible sequence: 4, 5, and 9.

**T:** This time instead of taking from 10, let's take from 20. Ready? 1.

**S:** 19. (Write number sentence.)

**T:** Show your personal board.

**S:** (Show  $20 - 1 = 19$ .)

Continue w/ the following possible sequence: 3, 2, 5, 0, 6, 8, 7, and 9.

[EngageNY, Module 1, Lesson 8](#)

## 9. BREAK APART & PUT TOGETHER BY PLACE VALUE (2 minutes)

**Note:** Students remember the relevance of their ten plus facts to larger numbers.

### **Directions:**

**T:** When I say  $10 + 5$ , you say 15. Ready?

**S:** 15.

**T:**  $10 + 2$ .

**S:** 12.

Continue with the following possible sequence:  $10 + 9$ ,  $10 + 4$ ,  $20 + 4$ ,  $50 + 4$ ,  $30 + 8$ , and  $70 + 8$ .

**T:** How are  $10 + 4$  and  $50 + 4$  the same? How are they different?

**T:** How is knowing that helpful?

**S:** (Share.)

**T:** Now, when I say 13, you say  $10 + 3$ .

**T:** 13.

**S:**  $10 + 3$ .

Continue with the following possible sequence: 17, 11, 16, 18, 28, 78, 14, 34, and 94.

[EngageNY, Module 1, Lesson 3](#)

# 10. SUBTRACT 1 FROM MULTIPLES OF 10

## (3 minutes)

**Materials:** (T) Drawings on the board should be sufficient

### **Directions:**

6. MORE/LESS (4 minutes)

Note: Practice with giving 1 or 10 more (or less) prepares students to add and subtract 1 and 10 fluently.

Directions:

T: For every number I say, you say a number that is 1 more. When I say 5, you say 6. Ready?

T: 5.

S: 6.

T: 8.

S: 9.

Continue with the following possible sequence: 9, 16, 19, 28, 38, 39, 44, 49, 54, and 60.

T: Now for every number I say, you say a number that is 10 more.

When I say 50, you say 60. Ready?

T: 50.

S: 60.

T: 10.

S: 20.

Continue with the following possible sequence: 80, 40, 20, 21, 28, 30, 35, 45, and 56.

T: Let's try saying 1 less for every number I say. When I say 6, you say 5. Ready?

T: 6.

S: 5.

T: 9.

S: 8.

Continue with the following possible sequence: 11, 14, 19, 20, 30, 31, 51, and 50.

T: Now for every number I say, you say a number that is 10 less. When I say 50, you say 40. Ready?

T: 50.

S: 40.

T: 30.

S: 20.

Continue with the following possible sequence: 80, 70, 60, 61, 41, 46, 48, 28, and 18.

[EngageNY, Module 4, Lesson 1](#)

# 11. CHORAL COUNTING

## (Time Varies)

**Materials:** chart paper, marker, base-ten blocks

**Note:** Teachers may want to devote an entire lesson to introducing this activity. After that, modify the activity to a short amount of practice each time, removing supports as students' counting skills improve.

### Directions:

- The teacher will begin by asking a student volunteer to show 3 using base-ten blocks. The teacher will then record 3 on the chart.
- The teacher will then ask how students can show the number that is 10 more and invite another student volunteer to build 10 more with cubes. Student may add 10 individual units or a ten stick. The goal is for students to move from counting ten units to counting one unit of 10, and to connect the concrete representations of the numbers with abstract oral counting. The teacher will then record 13 on the chart.
- The teacher should continue this process, asking students "What's 10 more than \_\_\_?" and have student volunteers show 10 more with the base-ten blocks. At some point, a student will likely use a ten stick instead of ten ones; when this happens, the teacher can help the students see this is a more efficient strategy. If no students add a ten stick, the teacher can help them make this transition.
- The goal of writing the numbers on the chart paper as shown below is to record the numbers in a way that makes the "Add ten" pattern visible for students by recording 10 numbers in a row. Students may see patterns of 10 as they look across and hundreds as they look down

3	13	23	33	43	53	63	73	83	93
103	113	123	133	143	153	163	173	183	193
203	213	223	233	243	253	263	273	283	293



# 12. COUNTING WITH ONES, TENS, AND HUNDREDS: 0 TO 1,000

## (4 minutes)

**Materials:** (T) Bundle of 1 hundred, 1 ten, and a single straw

### **Directions:**

**T:** Let's count by ones, tens, and hundreds. I'll hold bundles to show you what to count by. A bundle of 100 means count by hundreds, a bundle of 10 means count by tens, and a single straw means count by ones. (Create visual support by writing the numbers on the board as students count.)

**T:** Let's start at 0. Ready? (Hold up a bundle of 10 until students count to 130.)

**S:** 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130.

**T:** (Hold up a bundle of 100 until students count to 630.)

**S:** 230, 330, 430, 530, 630.

**T:** (Hold up a bundle of 10 until students count to 690.)

**S:** 640, 650, 660, 670, 680, 690.

**T:** (Hold up a single one until students count to 702.)

**S:** 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702.

**T:** (Isolate the numbers 698–702 by drawing a box around them.)

Partner A, count these numbers up and down as fast as you can to Partner B, and then switch. If you both finish before one minute is up, try it again and see if you get faster!

# 13. SKIP-COUNT BY TENS: UP AND DOWN CROSSING 100 (2 minutes)

## Directions:

**T:** Let's skip-count by tens starting at 60.

**T:** Ready? (Rhythmically point up until a change is desired. Show a closed hand and then point down. Continue, mixing it up.)

**S:** 60, 70, 80, 90, 100, 110, 120, 130, 140. (Switch direction.) 130, 120, 110, 100, 90. (Switch direction.) 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220. (Switch direction.) 210, 200, 190, 180.

[EngageNY, Module 3, Lesson 1](#)

# 14. MIXED COUNTING WITH ONES, TENS, AND HUNDREDS FROM 1,000 TO 0

## (5 minutes)

**Materials:** (T) Bundle of one hundred, one ten, and a single stick

### **Directions:**

**T:** Let's play Mixed Counting using what we know about counting by ones, tens, and hundreds. I'll hold bundles to show you what to count by. A bundle of 100 means count by hundreds, a bundle of 10 means count by tens, and a single stick means count by ones.

**T:** Let's start at 1,000 and count down. Ready? (Hold up a bundle of 10 until students count to 940. If necessary, create visual support with the difficult language of these numbers by writing them on the board as students count.)

**S:** 990, 980, 970, 960, 950, 940.

**T:** (Hold up a bundle of 100 until students count to 540.)

**S:** 840, 740, 640, 540.

**T:** (Hold up a bundle of 10 until students count to 500.)

**S:** 530, 520, 510, 500.

**T:** (Hold up a single one until students count to 495.)

**S:** 499, 498, 497, 496, 495.

**T:** (Hold up a ten until students count to 465.)

**S:** 485, 475, 465.

Continue, varying practice counting with ones, tens, and hundreds down to zero.