SUMMER MATH REINFORCEMENT PACKET STUDENTS ENTERING SECOND GRADE

Our first graders had a busy year learning new math skills. Mastery of ALL these skills is extremely important in order to develop a solid math foundation. The second grade math program will add onto these second grade sills, so any time spent learning or reinforcing these concepts will be very beneficial to your child. Each year builds upon the previous year's skills in math. Any areas your child has difficulty with, you may want to give them additional practice. Student mastery of basic math skills is as important to success in future mathematical procedures and reasoning as learning the alphabet is to reading and writing.

Have your child complete one page (one side), three times a week of the math packet. Please return this completed packet in August to your second grade teacher. The room receiving the largest percentage of summer packets returned will win an extra recess at school. Your child will receive a prize and certificate for completing the packet. The biggest prize of all is being ready for second grade!

After your child has completed the math problems, and you feel your child is still struggling on a certain concept and needs further practice, you can have your child play games on some of the web sites listed on the next page, play games, or make up additional problems on your own for extra practice.

If you need another copy of the math packet, you can go to Brockway Elementary's website at www.brockway.k12.pa.us and print another copy.

Enjoy your summer!

REMINDER- PRACTICING ADDITION FACTS AND SUBTRACTION FACTS (UP TO 18-9) IS VERY IMPORTANT! THEY SHOULD BE AUTOMATIC WITHOUT THE USE OF COUNTERS, FINGERS, OR NUMBERLINES!

Sincerely,
Second Grade Teachers

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Summer Math Reinforcement Packet for Students Entering Second Grade

This packet is a review of skills from first grade that should be mastered before entering second grade. Mastering these skills will help students be able to build on the skills that will be learned in second grade. Have your child complete one or two pages a week. Completing this packet throughout the summer keeps students' skills sharp. Hope you have a great summer. ©

- 1. Represent and solve problems involving addition and subtraction within 20.
- 2. Understand and apply properties of operations and the relationship between addition and subtraction.
- 3. Use place-value concepts and properties of operations to add and subtract within 100.
- 4. Use place-value concepts to represent amounts of tens and ones and to compare two digit numbers.
- 5. Tell and write time to the nearest half hour using both analog and digital clocks.
- 6. Order lengths and measure them both indirectly and by repeating length units.
- 7. Use the understanding of fractions to partition shapes into halves and quarters.
- 8. Compose and distinguish between two- and three dimensional shapes based on their attributes.
- 9. Use and analyze graphs to interpret information.

FIRST GRADE GRADE LEVEL EXPECTATIONS IN MATHEMATICS

When entering second grade this is what is expected that your child should already know.

- 1. Read and write the numbers up to 110 by 1's, 2's, 5's, 10's. Also by starting with various numbers.
- 2. Comparing numbers up to 110 using such phrases as "same as", "more than", "greater than", "fewer than". Ex. 70 is one more than ____ (69). Also can put a set of numbers from least/smallest to greatest/largest.
- 3. Can state one more than, one less than, 10 more than, 10 less than, for any number given (up to 100).
- 4. Count backwards from any number between 0 and 100.
- 5. List addition facts for 2 through 10. Ex. 8 = 2 + 6 = 3 + 5 = 4 + 4.
- 6. Understanding the reverse relationship between adding and subtracting. Ex. If 8 + 3 = 11 then 11 3 = 8 and 11 8 = 3.
- 7. Knows answer to addition facts up to 10 + 10 and can state the answer within 2 4 seconds.
- 8. Knows all subtraction facts up to 10-9 and can state the answer within 2-4 seconds.
- 9. Can solve problems like +2 = 7 and 10 6.
- 10. Can measure objects with a ruler to the closest inch. Also can compare 2 or more objects using the words shorter, shortest, longer, longest, taller, tallest.
- 11. Tell time using a standard face clock by the hour and half hour.
- 12. Identify coins by name and value. Ex. Penny = 1 cent, quarter = 25 cents.
- 13. Count coins up to \$1.00.
- 14. Solve story problems using addition or subtraction of length, money and time.
- 15. Can describe where an object is located using such words as above, below, behind and in front of. Ex. Sally is in front of Bob.
- 16. Can continue a pattern using number, shape or size.

Excellent websites for fun learning and reinforcement of math skills:

www.wildmath.com Select "Play the game". Select addition or subtraction and grade. You can race to beat your time.

www.harcourtschool.com Click the red box, select math, select HSPMath, select Michigan, click on the "1" ball or "2" ball for a challenge. Select a game. Addition Surprise, Addition Bricks, E-lab Number Patterns are very good.

<u>www.aplusmath.com</u> go under "Flashcards" or "Game Room" on the left side of the screen. They can practice adding and subtracting.

<u>www.mathisfun.com</u> Select Money then select Money Master, click on the US flag, select simple. Or you can select numbers then Math Trainer for adding and subtracting. Back at home screen select games and pick a game to play.

www.eduplace.com Select your state – "Michigan" press submit. Select the student tab then click on the "mathematics" rectangle. Click in the center book "Houghton Mifflin Math 2007". Click on "Grade 1". Select any games. Extra Help and Extra Practice is good, also eGames.

www.illuminations.nctm.org Select activities then select grade level. Click on Search.

www.aaamath.com At the top pick "First" or "Second" for a challenge. Choose any of the activities like adding or subtracting then select "play" option toward the top of the screen. 20 Questions and countdown games are good ones.

www.funbrain.com Lots of fun games to choose from.

Other games and activities you can play:

- Number Dot to Dot books or coloring books with addition/subtraction problems to color by.
- Write the numbers 1 50 or to 100 on index cards or pieces of paper. One number on each card. You can play war. Divide cards up evening among all players. Cards are face down. Each player turns over their top card. Highest number takes all the cards. Keep playing until you are through all cards. Person with the most cards wins. Have all cards face down. Select 4 to 5 cards and put them in order from least to greatest or you can do largest to smallest.
- Using sidewalk chalk, have them write the numbers counting backwards from 20.
- Play a game while in the car or waiting in line.
 What number comes before 60?
 So is one more than ____? (49)
 What comes between 62 and 64?

 What number comes after 29?

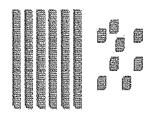
 39 is one less than ____? (40)
- Practice counting by 5's, 10's, or 2's. Have them write it in sidewalk chalk. Counting by 2's how many steps are from your bedroom to the bathroom? Etc..
- Take a deck of cards and remove the face cards (kings, queens, jacks). Aces are one. Divide the cards evenly among 2 players. Each player flips over a card. The first one to add the 2 numbers correctly wins the cards. After going through the pile of cards, the player with the most cards wins. You can do a subtraction version also.

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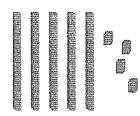
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Pam saw 11 turkeys. Then 4 turkeys flew away. How many turkeys



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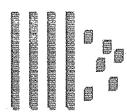
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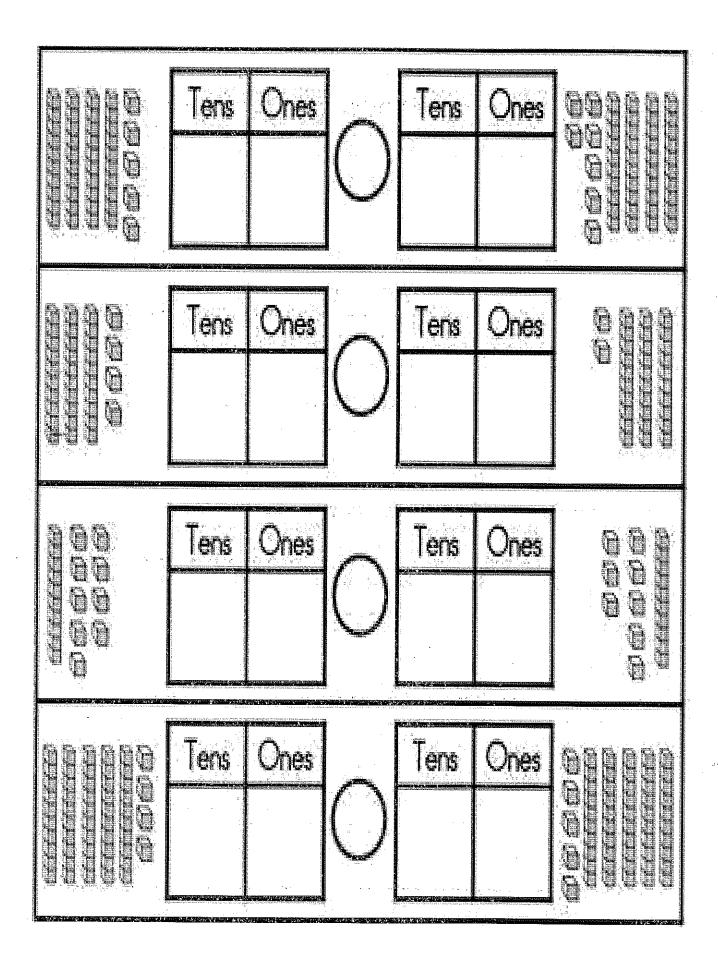
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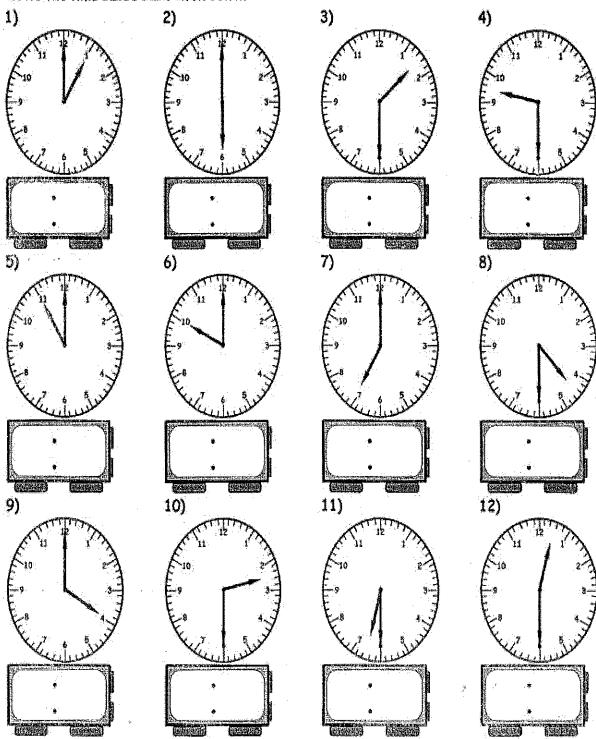


<u>Telling Time</u>

·Half Hour Worksheet 3

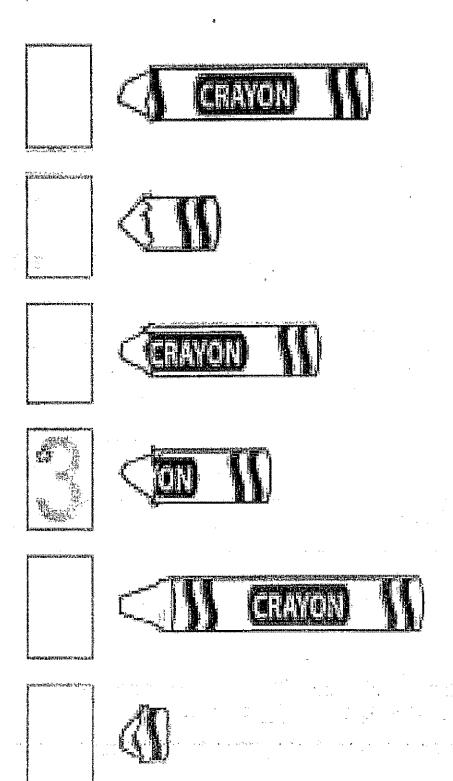


Write the time inside each clock below.

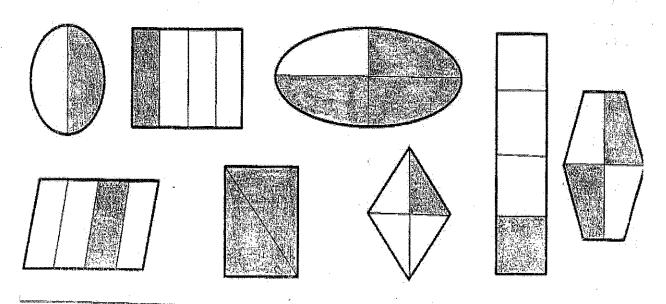


Comparing Lengths

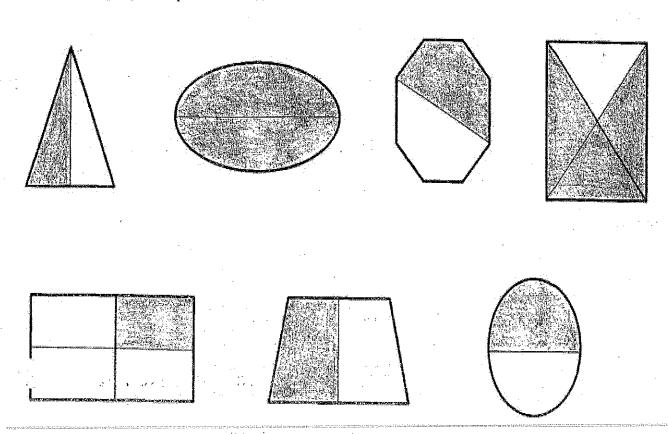
Number the objects from shortest to longest, starting by putting the number one next to the shortest object.



Circle the shapes that show 4.

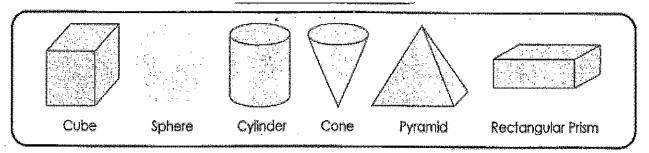


Circle the shapes that show 2.



Draw lines to divide each shape into fourths. There may be more than one way to divide each shape. Color one-fourth of each shape. Write the fraction to show the shaded part of each shape.

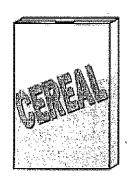
This 2D shape has 6 straight
sides and 6 corners.
It is a
This 2D shape has 4 straight
sides; 2 of them are long and 2
are shorter. It also has 4
corners.
It is a
This 2D shape has 3 straight
sides and 3 corners.
It is a
This 2D shape has 4 straight
sides which are all the same
length. It has 4 corners.
It is a
This 2D shape has no straight
sides, only one curved side. It
has no corners.
It is a
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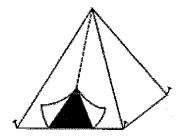


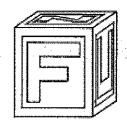
Write the name of the solid figure that each object looks like.

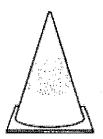




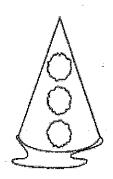














Entering Second Grade Summer Math Packet

First Name:	Last Name:
Second Grade Teacher:	
I have checked the work completed	Parent signature

1. Fill in the missing numbers:

1		3		5	6			9	10
11			14		16		18	19	
	22		24	25		27			30
31			34	35		37			40
	42	43		45	46		48		50
51	52		54		56			59	
61		63				67	68		70
		73		75		77		79	
	82	·			86	87		89	
	92		94		96		98		

2.	Skip count by	2's: 2, 4,	• "			
			2 2	7	 , ,	•

3. Skip count by 5's: 5, 10, _____, ____, ____, ____, ____

4. Find the sum:

5. List the value of each coin.









6. Fill in the blanks, skip count by 5's.

	10			35		
55			80			100

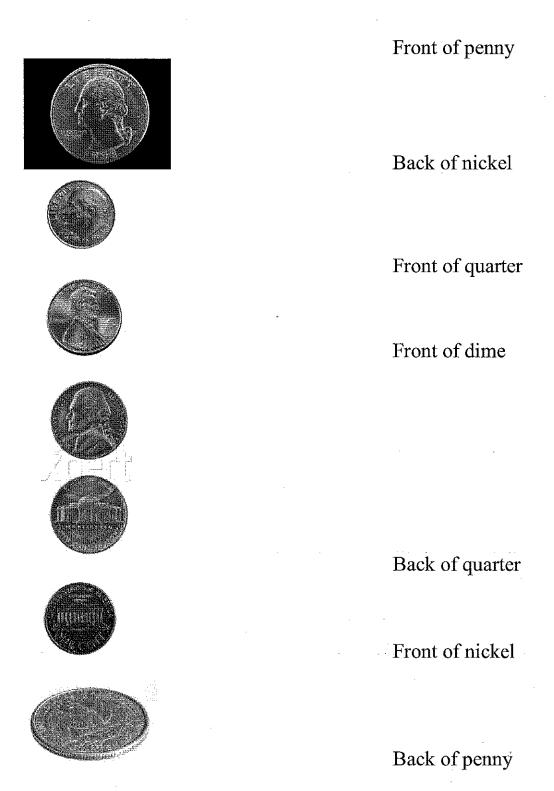
7. Write these numbers from smallest to largest: 21, 16, 35, 8.

A. 21, 35, 16, 8

B. 16, 21, 35, 8

C. 8, 16, 21, 35

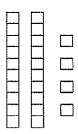
8. Draw a line to match the coin with its name:



9. Find the sum.

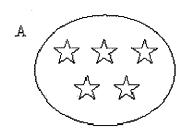
Select the one best answer for each question.

- 10. Which number is ONE MORE than 27?
 - A. 26
 - B. 28
 - C. 37
- 11. What number is represented by the following?



- A. 24
- B. 42
- C. 60
- 12. How can you make 8 cubes?
 - A. 2 cubes plus 5 cubes
 - B. 1 cube plus 8 cubes
 - C. 2 cubes plus 6 cubes

- 13. Sally and Ron are coming over at 2 o'clock to play and they have to go home at 5 o'clock. How many hours can you play together?
 - A. 2 hours
 - B. 3 hours
 - C. 5 hours
- 14. Which number fact makes 8?
 - A. 7 + 2
 - B.3 + 4
 - C.4 + 4
- 15. Which of these groups of stars has more stars in it?





- A. Group A
- B. Group B
- 16. Amanda looked at the night sky. She saw 12 stars. Then she saw 7 more. What number sentence shows how she counted the total number of stars she saw?

A.
$$12 - 7 = 5$$

B.
$$12 + 7 = 5$$

$$C. 12 + 7 = 19$$

17. Write the missing numbers. Skip count by 2.
8,,, 16
22,,, 30
54, 56,,, 64
18. Amanda had 12 crayons. Then Paul gave her 7 more. Make a drawing to show how you would solve this problem. Then circle your answer.
A. 5 B. 12 C. 19
19. Since $3 + 6 = 9$, then which subtraction is also correct?
A. $3-6=9$ B. $6-3=9$ C. $9-3=6$
20. Solve this problem using a drawing: 8 birds were sitting in a tree. 3 flew away. How many are left?
birds are left.
21. Find the difference.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$

22.	What is the unknown number in $_{_{_{_{_{_{_{_{_{_{_{_{_{_{_{1}}}}}}}}}$
A. 9 B. 7 C. 5	
23.	Write the missing numbers. Skip count by 5's.
25, _	,, 45
50, _	
35, _	,, 55
75, _	,,, 95
24. A. 4 B. 6 C. 16	
25.	Add 22 + 5 without using a calculator or fingers.
A. 2 B. 27 C. 29	
26.	Find the difference.
8 - <u>5</u>	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

- A. 2 hours
- B. 3 hours
- C. 4 hours

28. Write in the missing numbers. Skip count by 10's.

25, ____, ___, ___, ____

29. Find the sum:

30. Melissa had 22 stones. Her mother gave her 30 more stones. How many did she have altogether? Do not use a calculator.

- A. 25
- B. 32
- C. 52

31. Subtract 16 - 6 without using a calculator.

- A. 12
- B. 10
- C. 6

32. Look at the clock and tell what time it is.



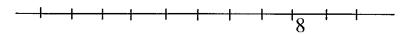
- A. 4:06
- B. 4:30
- C. 6:20

33. What time is it?



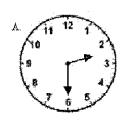
- A. 2 o'clock
- B. 10 o'clock
- C. 12 o'clock

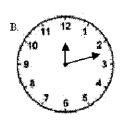
34. This number line shows only the number 8. Write the number 6 where it is supposed to be.

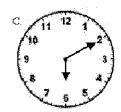


35. Fill in the blanks. Skip count by 5's.

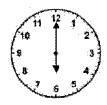
- 25, ____, ____, 50
- 60, _____, _____, 80
- 80, _____, _____, 100







- A. A B. B
- C. C
- 37. What time is it?



- A. 12:00
- B. 12:30
- C. 6:00
- 38. Find the difference:

Ask Mom or Dad for some coins to help with the following questions or draw the coins on paper.

- 39. Mike had 2 quarters in his pocket. He traded his 2 quarters with his friend Pam. They made an even trade. Mike got:
 - A. 25 pennies
 - B. 6 nickels
 - C. 5 dimes
- 40. 10 dimes are equal to:
 - A. 2 quarters
 - B. \$1.00
 - C. 10 cents
- 41. 1 dime is equal to:
 - A. 1 nickel
 - B. 3 nickels
 - C. 1 nickel and 5 pennies
- 42. How much money is this?







- A. 30 cents
- B. 35 cents
- C. 40 cents

43. Write these numbers from smallest to largest. 36, 12, 28, 7 How much money is this? 44. A. 5 cents B. 28 cents C. 53 cents 45. 23 is one more than _____ 46. is just before 12. Jack had 50 cents. He lost 2 dimes. How much money does 47. he have left? A. 48 cents B. 30 cents C. 20 cents 48. I bought candy for 20 cents and gum for 15 cents. How much money did I spend? A. 5 cents B. 35 cents

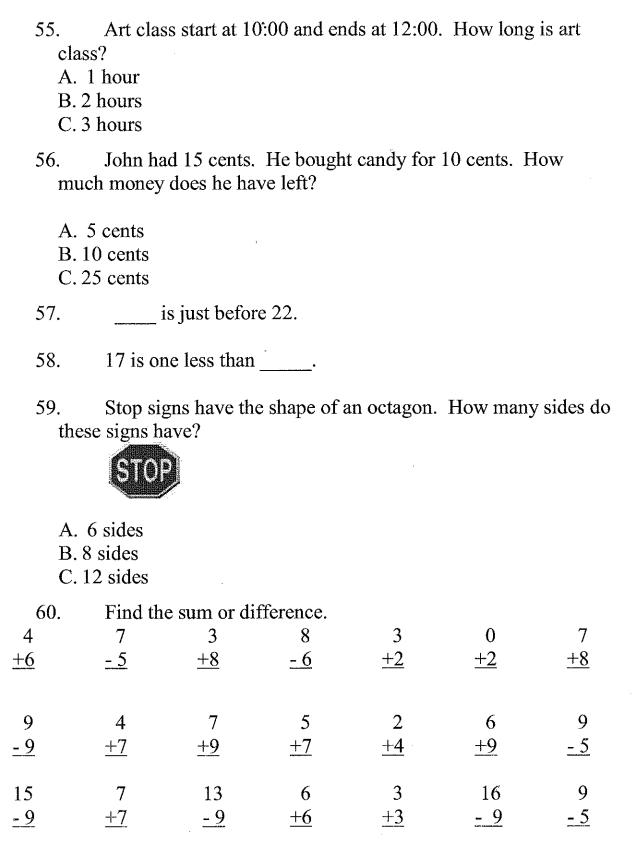
C. 30 cents

- A. 4 cents
- B. 30 cents
- C. 35 cents

50. Find the sum.

21

- 51. 16 is just after _____
- 52. is between 44 and 46.
- is one more than 18.
- 54. Fine the difference.



61. What shape is the tool below?
A. a square B. a rectangle C. a triangle
Which shape is the rectangle?
A C
63. 19 is just after
64 is just before 29.
What is the shape of a penny or dime?
A. A circle B. A square C. An oval
66. Draw a square. How many sides does a square have?
A. Three B. Four C. Five

67. Look at where the star and moon are located. Then choose which is correct.



- A. The moon is BEHIND the star.
- B. The moon is BELOW the star.
 - C. The moon is ABOVE the star.
- 68. Find the sum or difference.

69. Look at where the cat and toys are located. Then choose which is correct.





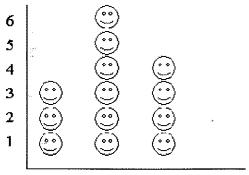
- A. The toys are to the right of the cat.
- B. The toys are to the left of the cat.
- C. The toys are above the cat.

4. ...

78.	Write in the missing numbers. Skip count by 5's.							
15,		,	, 4	40				
79.	Find the	difference	. .					
17 - 9	4 <u>- 4</u>	14 <u>- 6</u>	7 <u>- 6</u>	13 <u>- 8</u>	8 <u>- 4</u>	11 <u>- 2</u>		
	kers. Hov clown	v many clo stickers	ar stickers. wn stickers	does Kate	have?	n		
81.			write in the,,,,	_		12		
82. Wha	it is his far	vorite num		one that co	mes just be	fore 25		
83.	Write in		g numbers.	•	-			
84.		difference	<i>.</i>	9	,, 21			
12 - <u>8</u>	8 <u>- 8</u>	6 <u>- 2</u>	3 <u>- 0</u>	9 - 6	10 <u>- 6</u>	9 <u>- 5</u>		
9 - 7	8 - 3	10 <u>- 7</u>	9 - 3	10 <u>- 5</u>	1 <u>-1</u>	12 <u>-4</u>		

85. Look at the pictograph. What hair color did most children in Mrs. Moss' class have?

Hair Color in Mrs. Moss' Class



black brown blond

- A. black
- B. brown
- C. blond

86. Write > or <

$$9 \bigcirc 7$$

$$\bigcirc$$
 8

$$\supset$$

$$19 \bigcirc 31$$

$$\bigcirc$$
 21

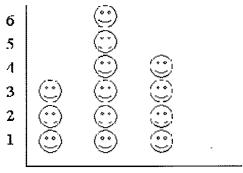
$$\supset$$
 11

59

$$\supset$$
 31

87. How much does 3 dimes equal?

Hair Color in Mrs. Moss' Class



black brown blond

A. 3

B. 4

C. 6

91. Find the sum or difference. Watch the signs.

- 92. 36 is one more than _____
- 93. _____ is just before 40.
- 94. _____ is one more than 28.
- 95. _____ is just after 22.
- 96. Find the sum or difference. Watch the signs.
- 9 4 16 5 2 13 8 +9 -2 -9 +7 +4 -9 -5
 - 97. What number is just after 29? _____
 - 98. _____ is just before 40.
 - 99. This number line shows only the number 5. Write the number 6 where it is supposed to be.



100. What number is 1 less than 56?

1.5

4			
1.			
1.			

103. Find the sum:

104. Show how you would solve this problem:

Steven had 7 toy cars. He wanted 13. How many more toy cars would Steven need to have 13 altogether?

Then choose 2 math sentences that could show how to solve this.

A.
$$7 + 6 = 13$$

B.
$$13 - 7 = 6$$

$$C.7 + 13 = 20$$

$$D.7 - 13 = 6$$

105. Find the sum or difference:

23

106. Finish the pattern.

107. Add 3 + 5 + 2. Write your answer here _____.

108. If 7 + 4 = 11, then what other subtraction problem would also be true?

A.
$$7 - 4 = 11$$

B.
$$11 - 4 = 7$$

$$C.4 - 7 = 11$$

109. If 14 - 6 = 8, then what other addition problem would also be true?

A.
$$14 + 8 = 6$$

B.
$$6 + 14 = 8$$

C.
$$8 + 6 = 14$$

110. Brent had 9 dollars. After Brent got paid 7 dollars for mowing a lawn, how much did he have?

dollars

111. Numbers... they are shady characters. You have to keep an eye on them! In the grid below, a secret message is hidden from your view. If you shade in all the "shady" odd numbers, you will be able to decode the message!



18	3	16	14	16	48	24	88	46	72	92
5	2	17	28	30	98	5	50	86	90	47
13	20	23	4	24	52	3	20	10	66	13
9	32	27	40	6	100	39	54	30	56	1
7	22	11	12	97	33	43	44	73	81	65
25	34	29	42	95	8	35	60	15	58	89
21	38	19	10	93	62	37	402	397	60	87
36	15	46	44	99	29	41	40	401	77	143

Congratulations!! You have completed the summer math packet. Turn this into your 2nd grade teacher to receive your prize.