**Elementary Mathematics**

**Spring Student Enrichment Packets**

**Answer Keys**

**Kindergarten - Grade 5**



**™**

**Prince George’s County Public Schools**

**Office of Academic Programs**

**Department of Curriculum and Instruction**

SPRING STUDENT ENRICHMENT PACKET

Grade Kindergarten Mathematics Answer Key

**1.**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Skirt** |  |  |  |  |  |  |  |
| **Shirt** |  |  |  |  |  |  |  |
| **Pants** |  |  |  |  |  |  |  |

How many skirts? **6**  How many shirts? **7** How many pants**? 4**

1. There are 3 more shirts than pants
2. 3 more pants are needed

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1. How many skirts, shirts and pants are there in all? **17**

**6 + 7 + 4 = 17**

1. Listen to your child count to 50 by **ones** and by **tens**.
2. 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
3. Write Gina’s favorite number. **15**

**Pictures will vary**.

1. Answers will vary. Write your favorite number between 11 and 19. **13**
2. Answers may vary.

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| --- | --- | --- | --- | --- |
|  **O** |  **O** |  **O** |  **O** |  **O** |
|  **O** |  **O** |  **O** |  **O** |  **O** |

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|  **O** |  **O** |  **O** |  |  |
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1. Answers will vary.

**Favorite Numbers**

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 My Number Gina’s Number

 13 15

SPRING STUDENT ENRICHMENT PACKET

Grade 1 Mathematics Answer Key

1. **Sample**

|  |
| --- |
| **Tally of Letters** |
| **Y** |  |
| **A** |  |
| **E** |  |
| **C** |  |

1. Which letter did Mr. Brown pull the most? **A**
2. The **Letter Y** was pulled how many times? **6**
3. Which two letters did Mr. Brown pull the same number of times? **Y and C**
4. **Letter Y**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **O** |  **O** |  **O** |  **O** |  **O** |
|  **O** |  |  |  |  |

  **Letter C**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **O** |  **O** |  **O** |  **O** |  **O** |
|  **O** |  |  |  |  |

1. Answers will vary.

|  |
| --- |
|  **6 + 6 = 12**   |

1. The difference is 4.

Mr. Brown is incorrect. Difference means to take away or subtract. The letter C was pulled 6 times. The letter A was pulled 10 times. 10 – 6 = 4 times.

1. **6 + 10 + 5 = 21**

|  |
| --- |
| **Letters Pulled** |
| **Y** | C:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].png |
| **A** | C:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].png |
| **E** | C:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].png |
| **C** | C:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].pngC:\Users\patric.morrison\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\VYLUV0QX\MC900441359[1].png |

 Key:  = 1pull

1. **Answers will vary**.

 How many letters were pulled in all? **27**

 Which letter was pulled the least? **Letter E**

SPRING STUDENT ENRICHMENT PACKET

Grade 2 Mathematics Answer Key

1. The first chart has a total of 35 people surveyed. The second chart has to show 50 people surveyed. He has to add 15 more people to the chart. (Where the 15 people are added may vary.)

![C:\Users\patric.morrison\Desktop\graph[1].bmp]()

1. **Answers will vary. Sample answers**:

How many more spins are needed for **Red** to equal the same number of spins **as Blue**? **4**

What is the sum of the spins for **Red**, **Pink,** and **Green**? **17**

Which color received the most spins? **Blue**

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| --- |
|  **Boxes of Cookies Sold** |
| **Rosa** | http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5 |
| **Betty** | http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5 |
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| http://t1.gstatic.com/images?q=tbn:ANd9GcRiokJ9KCLiyyRkgY_7MKqiWg0IdGjMKiTxw2X1_7XTBvwACkM5 **Each = 1 boxes** |

 **Key:**

1. How many boxes of cookies did the girls sell in all? **40 (boxes)**

1. **+ 12 + 15 = 40**
2. Which Girl Scout (s) sold an even number of boxes of cookies? **Betty** Write the number sentence on the line to show why it is an even number of boxes. **6+6=12**
3. Which two girls sold a total of 28 boxes of cookies? **Rosa and Sue**

    **13 + 15 = 28 boxes**

1. : Half of the cookies Betty sold were Thin Mints. How many boxes of Thin Mints? **6 boxes**

 **Sample answer:** “Half means two equal groups.  Two groups with 6 boxes of Thin Mints in each group 6 + 6 = 12."

1. How many boxes of cookies does Rosa need to sell to have a total of 30 boxes of cookies?  Write an equation with a symbol for the unknown to show your thinking. \_\_\_ + 13 = 30 or   30 - 13 = \_\_\_\_   **17 boxes of cookies.**
2. They will need 60 more boxes sold to equal 100. Answers will vary as to how many more each girl will sell.

SPRING STUDENT ENRICHMENT PACKET

Grade 3 Mathematics Answer Key

1. C
2. A
3. D
4. B and E
5. D 5

1. C 6
2. B 7
3. A) True B) True C) False D) True
4. 6 x ? = 54
5. **Content Answer (1pt.):** 48 ribs

**MP7**- Studentsdemonstrate knowledge of using structure, the operations of multiplication, to determine the number of ribs Nikki and her friends received with their order.

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 **Explanation may vary.**

 **Sample:** 8 x 6 = 48 ribs **OR**

8 x 6 = 48 ribs

**4**

**8**

SPRING STUDENT ENRICHMENT PACKET

Grade 4 Mathematics Answer Key

1. **C**
2. **D**
3. **C**
4. **B**
5. **D**
6. **D**
7. **A**
8. **B**
9. **A**
10. **B**
11. **B and C**
12. **A, B, and D**
13. **C and E**
14. **A, C, & E**
15. **C**
16. **Answers will vary.  Possible answer:  A digit in one place is 10 times as much as it represents in the place value to its right.  When you multiply 234 by 10 it becomes 2,340.  The 2 is now in the thousands place, so the value is 2,000 not 20,000. 20,000 is 10 times too many.**

SPRING STUDENT ENRICHMENT PACKET

Grade 5 Mathematics Answer Key

**1. B, 10**

**2. A, **

**3. C, 5**

**4. B, **

**5. D, 10**

**6. B and E**

**7. A**

**8. Mathematical Practice (MP4): Model with mathematics.**

 **Students are able to identify and construct equations that represent the amount cookies that each friend receive.**

 **Sample Answer:**

 **Jerry: 36 x ¼ = 9**

 **Gary: 36 x ½ = 18**

 **Terry: 36 x ¾ = 27**

 **Mathematical Practice (MP2): Reason abstractly and quantitatively**

**Students are able to make sense of the problem and relationship among the fractional amounts and the amount that each friend would receive. Students reason it is incorrect in stating that each friend will receive the fractional amount of cookies stated in problem 7. 9 + 18 + 27 = 45, which totals more than the 36 cookies that the friends would have to share**

**9. B and E**

**10. B**

**11. D**

**12. D**

**13. There are .28 or 28 hundredths shaded squares. 28/100 is where 28 represents the number of shaded squares out of the 100 (the total number of squares).**