**Grade 5**

**MATHEMATICS**

**WINTER STUDENT**

**ENRICHMENT PACKET**

  

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**Prince George’s County Public Schools**

**Office of Academic Programs**

**Department of Curriculum and Instruction**

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| **Directions and Notes****for Students and Parents** **Grades 1-5** |
| 1. Plan to work to complete the entire packet.
2. Find a quiet place to complete your work independently.
3. Read each problem carefully before selecting or writing your answer.
4. Check your work.

Thank you for helping your child succeed! |

**5.NF.3**

**1.** Help Lee figure out her score in some games she played with friends. Her score is always in between the lowest score and the highest score shown. Use only the cards below to determine her scores. \*Remember you can only use each card once.

|  |  |  |
| --- | --- | --- |
| **Lowest Score** | **Lee’s Score** | **Highest Score** |
| 4 | a. | 5.0 |
| 0.325 | b. | 0.35 |
| 0.35 | c. | 0.375 |
| 0.2 | d. | 0.225 |
|  | e. | 3.5 |
| ? | f. | ? |

3.521

2.751

0.221

0.365

0.349

 4

**Lee’s scores**

\***Bonus:** Lee is missing a score. What could it be? Lee’s missing score: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2.** Which score did you not give to Lee? What could be the lowest and highest score for that number? Explain why your answer is correct.

Score not given: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ High and Low numbers: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explanation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**5.NBT.3**

1. Place Lee’s 0.365 and 3.521 on the number line below. Make sure to label your number line.

Tell how you determined where to place the numbers.

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**5.G.3**

**4.** Classify each shape according to its sides and angles. All shapes must be placed in at least one box.

* If a shape is not a square, rectangle, rhombus, or parallelogram, then place it in the box labeled “Other.”
* If a shape meets the properties of more than one category, it must be placed into the boxes of all the types of shapes it can be classified as.





**\*\* What is another name for the category “other?” \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**5.NBT.6**

**5.-8.**

Use the digits below and what you know about division to write four 4-digit numbers that are

divisible by 2, 3, 5, and 9. You can only use a digit more than once if it is shown more than once.

\***Remember: You have to make four different numbers.**

0, 0, 0, 0, 1, 2, 2, 3, 4, 4, 5, 5, 6, 7, 7, 8

**5.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.NF.2**

**9**. Cathy has 3 cats: Sammy, Tikki, and Georgia.

 Cathy feeds them Cat Crunchies. Each day they eat the following:

* Sammy eats 1/2 of the box;
* Tikki eats 1/8 of the box; and
* Georgia eats 1/4 of the box.

 **a.** What fraction of a whole box do the cats eat in all each day? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Explain your solution using words, numbers, and or models. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 **b**. After eating, Cathy’s cats share a carton of milk.

* Sammy drinks 1/3 of the carton;
* Tikki drinks 5/12 of the carton; and
* Georgia drinks 1/6 of the carton.

What fraction of the carton of cat milk is left over? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain your solution using words, numbers, and or models.

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**5.NBT.6 SMP 7**

**10.** Jack has 100 football cards that he wants to put in a photo album. Each page in the album will

 hold eight cards.

**a.** How many pages in the album will have cards on them?

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**b.** Using the same information, how many pages will Jack completely fill with his cards?

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**c.** Jack spent $100 on eight packs of cards. How much did each pack cost?

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 **d.** Compare the three problems above that you completed for #10. How are they the same?

 How are they different?

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**\*\*Bonus\*\*** Create your own word problem and solution about an experience during the Winter Break. Don’t forget to include strategies for the solution.