**Preparation for 6.RP.3c**

Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.

**Let’s be creative!** It’s now your turn to make your personalized quilt. You can make any design to represent your personality. In addition to the color blue, you must choose three other colors when designing your quilt.

Be sure to fill in the table describing your quilt. Make sure you **show all work** to receive full credit.

**Use this example to help you:**



**Your grade will come from the following:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Levels** | **Mathematical Precision** | **Presentation** | **Evidence and Reasoning** |
| **Above & Beyond****4** | You are able to properly and accurately determine the percent, decimal and fraction for each group. You found an efficient way to provide a proper visual for each group.  | You go above and beyond what is required of you. You put in outstanding effort and show great understanding of the topic. Your project is very neat.  | You are able to explain how you have reached your answer and solved the given problem. You actively participate in the correct manner and are attentive and thorough throughout the entire process.  |
| **At the Top****3** | You are able to accurately determine the percent, decimal and fractions within each group. You have found an efficient way to organize each group together.  | You put in the right amount of effort. And have met the appropriate standards. Your project is neat. | You are able to explain how you have reached your answer and solved the given problem. You participate appropriately throughout the entire process.  |
| **On My Way****2** | You made a few errors when properly grouping and organize percent, fractions and decimals. | You are on your way so don’t give up! There is somewhat of an understanding, but the topic is not clear. Your project is not neatly presented.  | You are able to explain how you have reached some of your answers. You do not participate enough. |
| **Not Yet****1** | You did not set up appropriate groups for percent, decimals and fractions.  | You are not there yet. It looks like you did not apply yourself, like I know you can.Your project is not neatly presented. | You did not explain what you did or how you came about your reasoning through words, descriptors or pictures.  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Quilt



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Color** | **Number** | **Fraction** | **Decimal** | **Percent** |
| **Blue** |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**PART 2:**

The students listed below made their own quilt. The pictures are not shown, but important data is displayed. **Fill the data** table appropriately using the space provided to **show work.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Blue | Total Squares | Fraction | Decimal | Percent |
| Aliya | 14 | 20 |  |  |  |
| Benito |  | 36 | ½ |  |  |
| Cassie | 18 | 25 |  |  | 72% |
| Dylan | 24 |  | $$\frac{3}{5}$$ | 0.6 |  |

Compare your use of blue in your quilt to the table shown above by answering this question:

1. Which student’s quilt has a greater fractional amount of blue than yours? How do you know?

**PART 3:**

Critical Mathematical Thinking (Number Sense):

1. How would you decide whether $\frac{3}{5} $or 59% is greater?

Show work:

Explain.

1. Which one doesn’t belong with the other three? Explain your reasoning.



Show work:

Explain.