|  |  |
| --- | --- |
| **CRA Assessment Template** | |
| **BIG IDEA/FOCUS:** Students will use their understanding of percent, ratios, and proportions to solve consumer application problems. All problems focus on percentages less than 100. Questions ask students to find part of a whole, whole given part, and percent given parts. This is to determine which area may provide more difficulty. | |
| **PLANNING** | |
| **STANDARDS** | |
| What standards will the  assessment address? | **8. 4** The student will solve practical problems involving consumer applications.  \* In 7th grade, students solve single-step and multi-step practical problems, using proportional reasoning.  \* In 6th grade, students represent relationships between quantities using ratios. |
| **Expectations** | |
| What do you think students already know about this topic? | * Determining part and whole within a word problem. * Determining ratio equivalency * Using the standard algorithm for solving proportional problems (students were strictly taught this in 6th and 7th grade) * How to use a double number line * Representing a number as a percent. A percent is a number per 100 and can also be represented as a decimal. |
| What kind of models would you expect students to use? | * Ratio tables/double number lines * Use of counters or cubes * Drawing pictures * Algorithm – Cross Multiplication |
| Where might they have difficulty? | * Partitioning the whole into equal parts as described in the   word problem   * Appropriately using a ratio table or double number line * Determine whole when given two parts * Understanding 42 is a part because it is 60% not 100% * Understanding how to use the standard algorithm and setting proportions up correctly. |

|  |  |
| --- | --- |
| **ADMINISTERING THE ASSESSMENT**  Students will rotate to three different stations in groups formed by the teacher. Teacher will assign students a starting point and tell students when to rotate. Each group will consist of 6 students. | |
| **Concrete Station** | |
| Problem | The bakery made 30 cupcakes, 40% of the the cupcakes were vanilla. How many cupcakes were vanilla? |
| Materials | Tiles, Counters, Cubes , Blue index card, Problem |
| How will you record student work? | * Student will draw a picture of their model on a blue index   card   * Teacher will take a picture of students’ model. |
| **Representational Station** | |
| Problem | A bakery took an order for chocolate and vanilla cupcakes. The customer wanted 12 vanilla cupcakes and 8 chocolate cupcakes. What percent of the cupcakes were vanilla? |
| Materials | Pencil, Green index card, Problem |
| How will you record student work? | Students will answer the question by showing their work on a green index card. |
| **Abstract Station** | |
| Problem | A bakery was making cupcakes for a wedding. The bakery had made 42 cupcakes, which meant they were 60% done! How many cupcakes will be made for the wedding? |
| Materials | Pencil, Yellow, Problem |
| How will you record student work? | Students will answer the question by showing their work on a yellow index card |