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| **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.
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| 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
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| 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.
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| **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.
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| **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 |