| Content: Math   |   |  | Grade Level: 6th   |  |
|---|---|--|--|--|
| Standard: 6.RP.3b   |   |  |  |  |
| Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double |   |  |  |  |
| number line diagrams, or equations.   |   |  |  |  |
| I can statements:   |   |  |  |  |
| •   | I can calculate unit rates.   |  |  |  |
| •   | can sol   | ve real world problems involving ratio and rate.   |  |  |
| Score   | In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.                                  |  | Sample Activities  |  |
| 4.0   |   |  | BIKING You and a friend start biking in opposite directions from the same<br>point. You travel 108 feet every 8 seconds. Your friend travels 63 feet every<br>6 seconds.   |  |
|   |   |  | <ul> <li>a. How far apart are you and your friend after 15 minutes?</li> <li>b. After 20 minutes, you take a 5-minute rest, but your friend does not. How far apart are you and your friend after 40 minutes? Explain your reasoning.</li> </ul> |  |
|   |   |  | Solution: a. 4.09 miles b. 10.14 miles   |  |
|   | 3.5   | In addition to score 3.0 performance, in-depth inferences and applications with partial success. |  |  |
| Score<br>3.0  | The student can solve real world problems using ratio and rate reasoning.<br>The student exhibits no major errors or omissions. |  | If steak costs \$2.25 per pound, how much does 0.8 pounds of steak cost?<br>Explain how you determined your answer.  |  |
|   |   |  | Answer: The unit rate is \$2.25 per pound so multiply \$2.25 x 0.8 to get \$1.80 per 0.8 lb. of steak.   |  |
|   | 2.5   | No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.     |  |  |
| Score   | There are no major errors or omissions regarding the simpler  |  | Write a unit rate for the situation.   |  |
| 2.0   | details and processes. However, the student exhibits major  |  | \$28 saved in 4 weeks  |  |
|   | errors or omissions regarding the more complex ideas and processes.   |  |  |  |
|   |   |  | Answer: \$7 per 1 week   |  |
|   | The student can find simple unit rates.   |  |  |  |
|   | 1.5   | Partial knowledge of the 2.0 content, but major errors or omissions regarding the 3.0 content.   |  |  |
| Score 1.0   | With help, a partial understanding of some of the simpler details and processes   |  |  |  |
|   | and some of the more complex ideas and processes.   |  |  |  |
|   | 0.5   | With help, a partial understanding of the 2.0 content, but not the 3.0 content.                  |  |  |
| Score 0.0   | Even with help, no understanding or skill demonstrated.   |  |  |  |