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| **Free Body Diagrams (2 points)** | (2 points) Completely correct labeled forces and directions. No additional forces. | (1.5 points) 1-2 minor inaccuracies (mislabeled, incorrect direction, etc.) | (1 point) More than 2 minor inaccuracies OR one significant error or omission. | (0 points) Missing |
| **Mass & Weight of Washers (1 point)** | (1 point) Data and units are accurate. Conversion and calculations - work is shown and is correct. | (0.5 point) One or more mistakes. | | (0 points) Missing |
| **Cork Data (1 point)** | (1 point) Data and units are accurate. | (0.5 point) One or more mistakes. | | (0 points) Missing |
| **Cork Calculations (2 points)** | (2 points) Work, including units, is shown correctly for all calculations. | (1.5 points) One mistake or omission | (1 point) Two mistakes or omissions | (0 points) Three or more mistakes OR missing. |
| **Answers to Questions (1 point)** | (1 point) Questions are answered correctly, clearly, and concisely. | (0.5 point) Answers are not clear. | | (0 points) Both answers are incorrect or missing. |
| **Percent Error (1 point)** | (1 point) Work, including units, is shown correctly. | (0.5 point) One or more mistakes. | | (0 points) Missing |
| **Results (2 points)** | (2 points) Work submitted shown less than or equal to 15% error. | (1.5 points) Students repeated data several times with greater than 15% error. | | (0 points) Percent error greater than 15% with no attempt to repeat data. |

**Centripetal Force Lab Rubric**