

Rolling marble analysis (31 pts)

Predictions - 1 pt

Data table - 2 pts

Graph of position vs. time - 4 pts

Axes labels and units - 1 pt

Regression curve - 1 pt

6. The slope increases as the velocity increases - 2 pts

Graph of velocity vs. time - 4 pts

Axes labels and units - 1 pt

Linear regression line - 1 pt

Slope with units - 2 pts

13. Acceleration

14. It would increase. The velocity would increase more quickly with time - 2 pts

Graph of  $y$  vs  $t^2$  - 4 pts

Regression line - 1 pt

Slope with units - 2 pts

18. Acceleration is twice the slope - 1 pt

19. Percent difference - 1pt