

Gravitational and inertial mass (15 pts)

Graph of gravitational vs inertial mass - 2 pts

Axes labels and units - 1 pt

Regression line - 1 pt

Slope of the line - 1 pt

5a. Gravitational mass - 1 pt

5b. Inertial mass - 1 pt

5c. They are equal - 1 pt

5d. A slope of one - 1 pt

5e. An error making the inertial mass greater than the gravitational mass (for example, stopping the timer too slowly)- 1 pt

5f. An error making the gravitational mass greater than the inertial mass (for example, having the pan balance read a positive mass when nothing is on the pan) - 1 pt

5g. Gravitational mass - 1 pt

5h. Astronauts use a spring system called SLAMMD which measures their inertial mass - 2 pts

5i. They cannot measure their gravitational mass because they are in freefall – 1 pt