

**Answer on Question #47752, Physics, Other**

*Which of the following statements are true of all free-falling objects? List all that apply*

- A. Air resistance has a negligible effect upon the object**
- B. Gravity is the only force acting upon the object**
- C. such objects accelerate at rate dependent upon their mass*
- D. The net force on the object is equal to  $mg$**
- E. The acceleration of the object has a magnitude of  $9.8 \text{ m/s/s}$ .*
- F. The velocity of the object is continuously changing**
- G. None of these statements are true.*

From listed statements C, E and G are wrong. C - if object is in free fall there are no dependence of its mass. E - acceleration of the object has a magnitude of  $9.8 \text{ m/s/s}$  only on Earth and can be different on other planets. All other statements are true.