Honors Physics Mr. McMullen

Name _____ Date _____ Period_____

Physics: A Mathematical Science

A. Completing Concepts

In the space to the left, write the answer that best completes each statement.

_____ 1. _____ is the science that examines the fundamental laws relating matter and energy.

_____ 2. _____ was one of the first scientists to base conclusions on experimental evidence.

_____ 3. Mass, _____ , and time are considered fundamental quantities.

_____ 4. In SI, the fundamental unit of mass is the _____ .

_____ 5. The _____ of an object is the quantity of matter it contains.

_____ 6. The units for speed and volume are examples of _____ units.

_____ 7. An error due to _____ is possible if a meter scale is not read from directly in front.

_____ 8. When using scientific notation, it is customary to have _____ digit(s) to the left of the decimal point.

_____ 9. In using scientific notation, measurements can be added or subtracted only if the exponents are _____ .

_____ 10. To multiply measurements expressed in scientific notation, the exponents must be _____ to obtain the correct power of 10 for the product.

_____ 11. To find the exponent of the answer when dividing measurements expressed in scientific notation, _____ the exponent in the denominator from the exponent in the numerator.

_____ 12. _____ is the extent to which a measured value agrees with the accepted value for a quantity.

_____ 13. The _____ of a measuring device is limited by the finest division on its scale.

_____ 14. The figures written for a measurement are called _____ digits.

_____ 15. A(n) _____ that serves only to locate a decimal point is not significant.

_____ 16. The result of a mathematical operation on measured quantities cannot be more precise than the _____ precise of the quantities involved.

_____ 17. In the metric system, _____ are used to change the value of standard units by powers of ten.