Mock Final

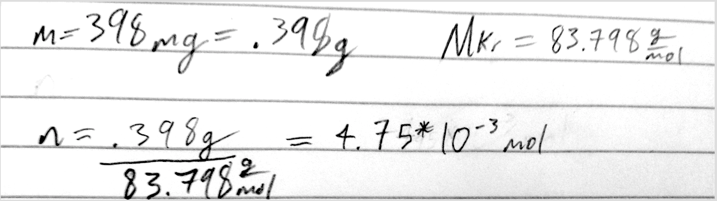
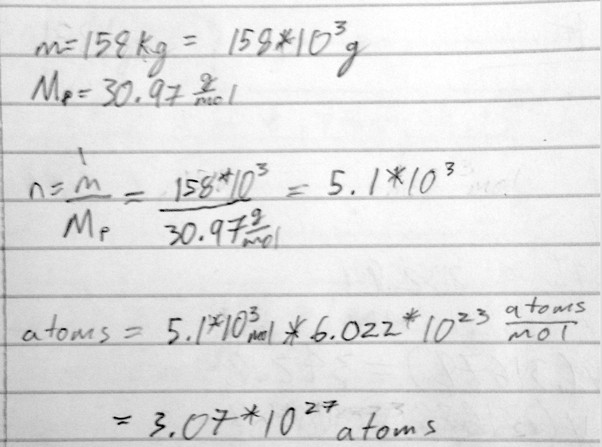
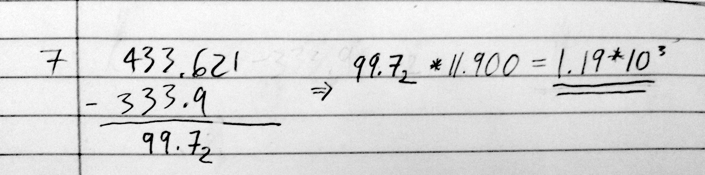
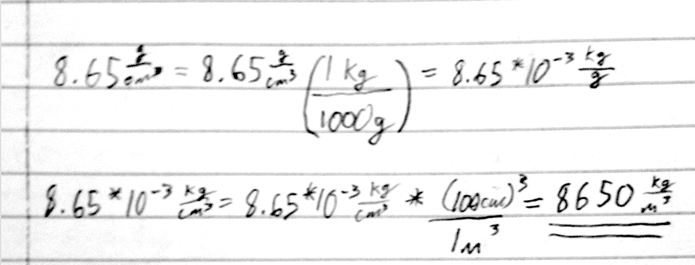
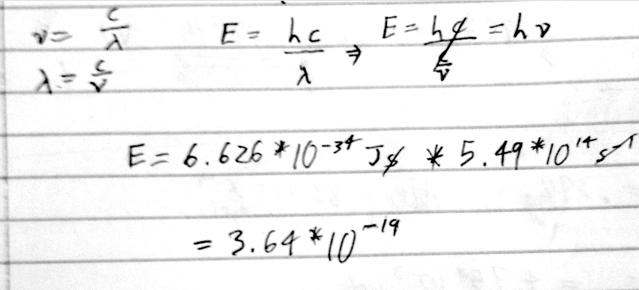
Table of Contents

[CH101-008 UA Fall 2016](/CH101-008/)

[About](/CH101-008/about/)

# Mock Final

Dec 3, 2016

* 1) A new compound was recently discovered and found to have an atomic weight of 342.38 amu. This element has two isotopes, the lighter of which has a mass of 340.91 amu and an abundance of 68.322%. What is the mass of the heavier isotope?
  + - A) 350.21
    - B) 345.55
    - C) 342.38
    - D) 348.67
    - E) 343.29
* Answer: B 
* 2) Identify the characteristics of a liquid.
  + A) definite volume and definite shape
  + B) definite volume and no definite shape
  + C) no definite volume and definite shape
  + D) no definite shape and no definite volume
* Answer: B
* 3) What species is represented by the following information?
  + p+ = 12 n° = 14 e- = 10
  + A) Si4+
  + B) Mg
  + C) Ne
  + D) Si
  + E) Mg2+
* Answer: E
* 4) How many moles of Kr are contained in 398 mg of Kr?
  + A) 4.75 × 10-3 moles Kr
  + B) 33.4 moles Kr
  + C) 2.11 × 10-4 moles Kr
  + D) 2.99 × 10-3 moles Kr
  + E) 1.19 × 10-4 moles Kr
* Answer: A 
* 5) How many phosphorus atoms are contained in 158 kg of phosphorus?
  + A) 3.07 × 10^27 phosphorus atoms
  + B) 2.95 × 10^27 phosphorus atoms
  + C) 3.25 × 10^28 phosphorus atoms
  + D) 1.18 × 10^24 phosphorus atoms
  + E) 8.47 × 10^24 phosphorus atoms
* Answer: A 
* 6) A student performs an experiment to determine the density of a sugar solution. She obtains the following results: 1.11 g/mL, 1.81 g/mL, 1.95 g/mL, 1.75 g/mL. If the actual value for the density of the sugar solution is 1.75 g/mL, which statement below best describes her results?
  + A) Her results are precise, but not accurate.
  + B) Her results are accurate, but not precise.
  + C) Her results are both precise and accurate
  + D) Her results are neither precise nor accurate.
  + E) It isn’t possible to determine with the information given.
* Answer: D
* 7) What answer should be reported, with the correct number of significant figures, for the following calculation? (433.621 - 333.9) × 11.900
  + A) 1.19 × 10^3
  + B) 1.187 × 10^3
  + C) 1.1868 × 10^3
  + D) 1.18680 × 10^3
  + E) 1.186799 × 10^3
* Answer: C 
* 8) If an object has a density of 8.65 g/cm3, what is its density in units of kg/m3?
  + A) 8.65 × 10^-3 kg/m3
  + B) 8.65 × 10^-7 kg/m3
  + C) 8.65 × 10^3 kg/m3
  + D) 8.65 × 10^1 kg/m3
  + E) 8.65 × 10^-1 kg/m3
* Answer: C 
* 9) Calculate the energy of the green light emitted, per photon, by a mercury lamp with a frequency of
  + 5.49 × 10^14 Hz.
  + A) 2.75 × 10^-19 J
  + B) 3.64 × 10^-19 J
  + C) 5.46 × 10^-19 J
  + D) 1.83 × 10^-19 J
  + E) 4.68 × 10^-19 J
* Answer: B 

Please enable JavaScript to view the [comments powered by Disqus.](https://disqus.com/?ref_noscript)

## CH101-008 UA Fall 2016

* CH101-008 UA Fall 2016
* [jmbeach1@crimson.ua.edu](mailto:jmbeach1@crimson.ua.edu)
* jmbeach
* hey\_beach

Notes and study materials for The University of Alabama's Chemistry 101 course offered Fall 2016.