

Formative Unit Test Review

- 1) Adamantium has 3 isotopes. Ad-131 (56%), Ad-132 (14%), and Ad-133 (30%). What is the average atomic mass of Ad?
- 2) The element Studium has 3 isotopes. Studium-284, Studium-285, & Studium-286 which is 5% abundant. The AAM of Studium is 284.62u. What are the abundances of the other two isotopes?
- 3) What are the names of the 5 VSEPR shapes? Draw each shape (include bond angles if you can) & state how many lone pairs (lp) and bonded pairs (bp) are included.
- 4) BCl_3 - a) draw the Lewis Dot Diagram, b) calculate the EN and state bond types, c) draw 3-D shape
- 5) If an atom has high EA, describe it's IE. How are the two related?
- 6) Atomic & Ionic Radius - Which is larger:
 - a. K or Br (why?)
 - b. K^+ or Br^- (why?)
- 7) Rank the following in terms of decreasing IE: sodium, magnesium, silicon, sulfur (why?)
- 8) What is a radioisotope? Provide one practical use for them and one possible danger.