M18 Concept Question 1

Comment on your level of confidence to explain the phenomena and underlying mechanisms behind the following ideas to freshmen in 16.00?

1) Aerospace structures are generally made of alloys rather than pure metals.

2) Metals tend to become harder the more they are deformed.

3) Why are single crystals of material often softer than polycrystalline materials
   
   1. Supremely confident
   2. Somewhat confident
   3. Could do it on a good day
   4. Uncertain
   5. Utterly confused