

Which of several phases are present, and in what proportions?



## STANDARDS

- Obtain standards for as many of the candidate constituents as you are able.
- Bulk standards are OK, even if constituents are nanoscale.
- Prepare the standards in the same way you do the samples. For instance, if your sample is powder, use a powder for a standard, not a foil.
- If an appropriate standard for one of the constituents is not available or does not exist, make sure to include a standard with the correct valence, and, ideally, the correct nearest-neighbor coordination. For example,  $\text{FeCl}_2$  is a reasonable analog for  $\text{FeI}_2$ .