CLUE workbook organization

class	**reading**	before class	in class	beSocratic
1	NA		**background survey** • How would you decide whether a particular question was answerable scientifically? • What is the difference between a scientific and a non-scientific question? provide an example of each.	NA
2	Ch 1 pp.25-38	• What things have atoms in them? (air?, gold? cells? heat? light?) • What properties ascribed by the Greeks to atoms do we still consider to be valid? • If “earth” had atoms that were cubic, what shape would you ascribe to the elements “air’ “water”, and “fire”?	• How would you explain the difference between an atom and an element? • What differentiates one element from another? • What is the difference between an atom and a molecule? • What is the difference between an element and a compound?	
3	Ch1 pp. 38-45	• How does the discovery that atoms have parts alter Dalton's atomic theory • What would the distribution of alpha particles, relative to the incident beam, look like if the positive nucleus took up the whole atom (sort of like the plum pudding). What if it took up 50%?		atomic structure (Dalton, Thompson, & Rutherford) • What does the distribution of alpha particles actually look like (recall that 1 in every 8000 particles were deflected)

class	**reading**	before class	in class	beSocratic
4	Ch 1 pp.45-51	• What is potential energy? Can you provide an example? • What is kinetic energy? Can you provide an example? • At the atomic level – what do you think potential energy is? • At the atomic level – what do you think kinetic energy is?	• How does raising the temperature affect the speed of a gas molecule? (what is the result of raising the temperature?) • Why does raising the temperature affect the speed of a gas molecule?	Molecular movement (and temperature) Conservation of energy / interactions
5	Ch 2 pp.			