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Unit 1 Chemistry Review
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41) The particles in a solid are tightly packed in an orderly arrangement. Particles in a liquid are in close contact, but not in an orderly arrangement. The particles in a gas are relatively far apart.

42) Chlorine condenses.
Mercury freezes
Water freezes
bromin freezes

44) heterogeneous mixtures are non-uniform and has 2 or more phases. Homogeneous mixtures have one phase and a uniform composition.

46) a) heterogeneous mixture
b) homogeneous mixture
c) homogeneous mixture (assume well mixed)
d) homogeneous mixture

48) Compounds can be separated by chemical means, elements cannot.

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49. a) element, element, compound
b) element, element, mixture
c) element, element, compound
d) element, compound, compound

50.) a) nitrogen, hydrogen
b) potassium, oxygen
c) carbon, hydrogen, oxygen
d) calcium, sulfur

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46) because it has equal amounts of protons (+) and electrons (-) so they "neutralize" the charge

47) atomic # represents the # of protons in the nucleus (and, if it's neutral, the # of electrons)

48) a) 15
b) 42
c) 13
d) 48
e) 24
f) 82

49) atomic # = # of protons
atomic mass = # of protons + # neutron

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50)

Atomic #	mass #	# protons	# neutrons	Symbol of elem.
9	19	9	10	F
14	28/29	14	14/15	Si
22	47	22	25	Ti
25	55	25	30	Mn

52) isotopes! (different # of neutrons)

56) according to their atomic # and similar properties

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24) so that undiscovered elements with similar properties could be placed in the same group

26) a periodic repetition of their physical + chemical properties

27) Yes! They are in the same family (column)

28) a) nonmetal
b) nonmetal
c) metal
d) nonmetal
e) metal

29) Metalloids have properties that are similar to those of metals and nonmetals, depends on conditions.

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30) Group 1A, Group 2A, Group 7A + Group 8A respectively

31) Na, Mg, Cl

33) Aluminum