When Responding to the AP Chemistry Free Response Questions:

Write This…	…Not That!	Rationale
Generally		
The language used in the question when asked to make a choice (ex: "increases", "decreases", etc.)	Other words that may mean the same thing but are likely more ambiguous (ex: "goes up", "goes down", etc.)	Make it easy to give you points, and be sure the reader can understand what you saying
Answer the specific question first, then "justify", "explain" etc.	Burying the answer in the text of the response	Make it easy to give you points
names of specific elements and compounds, "reactants", "products", etc.	"it"	Ambiguous
"Species"	"It", "stuff", etc.	Be formal in language
A justification or explanation when it is part of the question	Only the answer without supporting it	Justification/explanation required to earn point
"mass", "volume", etc.	"size"	Be specific
References to specific data or graphs when prompted to "explain how the data…" or something similar	Make generalizations about the data without specifically citing provided data or trials	Required to earn point
Net ionic equations only containing species that change	Aqueous ionic compounds in their undissociated form, spectator ions	Including these is not a net ionic, it's a molecular or complete ionic
Particle view diagrams with ions and polar molecules orientated in the correct direction relative to each other	Incorrectly oriented dipoles	Drawings must demonstrate understanding of interactions at the molecular level (ref. 2015 #4)
An answer with units if "include units" is stated in the problem	An answer without units	If "include units" is written in the prompt, a unit is required to earn full points
Show all work used to derive an answer	An answer without supporting work shown	Work is often what earns some/all of the points
Answers expressed to the correct number of significant figures	Answers with an incorrect number of significant figures	1 pt traditionally is assessed somewhere in the FR for significant figures.
Gases		
Components of the Kinetic Molecular Theory as justifications for changes at the molecular level	Ideal gas law for molecular level justification	arguments based on PV = nRT are at the bulk level and not the molecular level (ref. 2013 #5)
Thermodynamics		
Values with correct signs	Values with incorrect signs	Necessary for correct calculations and determinations – watch signs based on bonds breaking/forming, heat flow in calorimetry indicated by temperature changes, signs that may change in application of Hess' Law, etc.
Kinetics		
Value of k with units	Value of k without units	Units required to earn point
Specific parts of the molecules that must collide in order for the reaction to occur	"Collision must occur in the correct orientation"	AP wants more specific answer
A rate law that includes the rate constant k as part of it	A rate law without k being included	Incomplete rate law if k is not included
A rate law based only on reactants	A rate law that includes products	Rate laws are based only on reactants

Equilibrium		
Discussion of Q vs. K	"reduce the stress", or "due to Le Châtelier's Principle"	Preferred AP language
"Proceeds"	"Shift" – if equilibrium has not yet been established (i.e. a precipitate has not yet been formed when evaluating K_{sp})	If equilibrium is not yet established, then it cannot "shift" – rxn will proceed in a certain direction until equilibrium is established
K_{sp} expressions that only contain the ions	K_{sp} expressions that contain or imply a species in the denominator	Solids and liquids are not included in equilibrium expressions
Correct formulas (including charges!) for all species in equilibrium expressions	Substitutions, abbreviations, chargeless ions, other shorthand that may work out in calculations but does not represent the correct species	Equilibrium expressions must be written formally when requested
In K_p expressions: $P_{species}$	In K_p expressions: [species]	Concentration is not used in K_p, partial pressures are
"x has been assumed to be so small relative to the original concentrations that it can be ignored"	Nothing about why you ignore x to avoid quadratics	Show you understand why you are making the decision
Acids and Bases		
"The pH > 7 because the salt produced in the neutralization behaves as a base: $A^- + H_2O \rightleftharpoons HA + OH^-$ "	"The pH > 7 because it's a battle between weak acid and strong base and strong base wins."	State the actual reason not the memory aid
"The solution is neutral when $[H_3O^+] = [OH^-]$."	"The solution is neutral when pH=7."	True definition of neutral – neutral is only pH of 7 when $K_w = 1.0 \times 10^{-14}$ (at 298 K)
$K_w = K_a \times K_b$ for a conjugate pair	$K_w = K_a \times K_b$ for an unrelated acid/base pair	This equation only holds true for conjugate acid-base pairs
pH = pKa because it is at ½ the equivalence point of a titration of a weak acid with a strong base	pH = pKa	Explains the reason behind this, and shows you understand this is only true at this point
Atomic Structure		
"Effective nuclear charge increases"	"It wants to have a full octet"; "it's close to having a full octet"	State the actual reason not the memory aid
"It has a more polarizable cloud of electrons"	"It has more electrons", "it has more mass", "it has more surface area", "it is bigger", "it has more protons"	This is the shortest way to show the reason – simply mentioning "more" of something is probably not enough to demonstrate without further explanation of why that is the case
"period"	"shell" when referring to elements and their location on the Periodic Table	Elements are in a period, electrons are in a shell
Reference reasons for periodic trends (i.e. effective nuclear charge, coulomb's law, polarizability, etc.)	Stating the trend as the reason ("because it is to the left", "because it is further down the periodic table", etc.)	State the actual reason not the memory aid
"Electrons in higher energy levels are farther from the nucleus, resulting in a larger atom/ion."	"More electrons/more energy levels make the atom/ion bigger."	Explanation of reason, not just statement of fact, required for point (Ref 2016 #1)

Bonding and Intermolecular Forces		
"Overcome intermolecular forces"	"break up" a solid/liquid	IMFs should be used to justify
Ion interactions	LDF's when discussing ionic compounds	Ionic compounds have ions with whole charges, which dominate interactions
"Coulombic attraction"	"Opposites attract"	State the actual reason not the memory aid
Describe the process of overcoming intermolecular forces/polarity	"Like dissolves like"	State the actual reason not the memory aid
"Has hydrogen bonds between the molecules"	"Has hydrogen bonds"	Shows that you understand hydrogen bonds are not actually bonds
"ionic compound"	"molecule" when discussing an ionic compound	A molecule is a covalent compound
"ions"	"atoms" when discussing ionic compounds	Ionic compounds contain ions
"atoms"	"ions" when discussing covalent compounds	Covalent compounds do not contain ions
Lewis structures that are complete with necessary lone pairs and/or resonance	Lewis structures that are missing lone pairs and/or resonance (if needed for correct structures)	Lewis structures are incorrect without necessary lone pairs
Identify specific intermolecular forces at play	"stronger intermolecular forces"	Shows your understanding of the chemistry at play
"dissolve" when discussing interactions between molecular substances in solution	"ionize", "dissociate", "bond", "react", "attack", "break up", etc.	Molecular substances do not dissociate into ions, dissolving is not reacting, and otherwise be formal in usage
Electrochemistry		
Loss of mass of electrode is due to atoms of electrode going into solution as ions	Loss of mass of electrode is due to loss of electrons	Electrons have extremely small (negligible in this case) mass (ref. 2014 #3)
Discussion of Q vs. K for changes in cell potential after a change, or qualitative discussion of Nernst Equation	Discussion of Le Châtelier's principle	Preferred AP language (ref. 2014 #3)

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Sources:

Review of Released Free-Response Questions with Samples and Commentary
Adrian Dingle's Blog Posts on Writing Good Answers (https://www.adriandingleschemistrypages.com/)
AACT Webinar: Teaching Students How to Better Answer Non-Calculator Problems
AP Teacher Community
AP Teachers in the National AP Chemistry Teachers Facebook Group

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