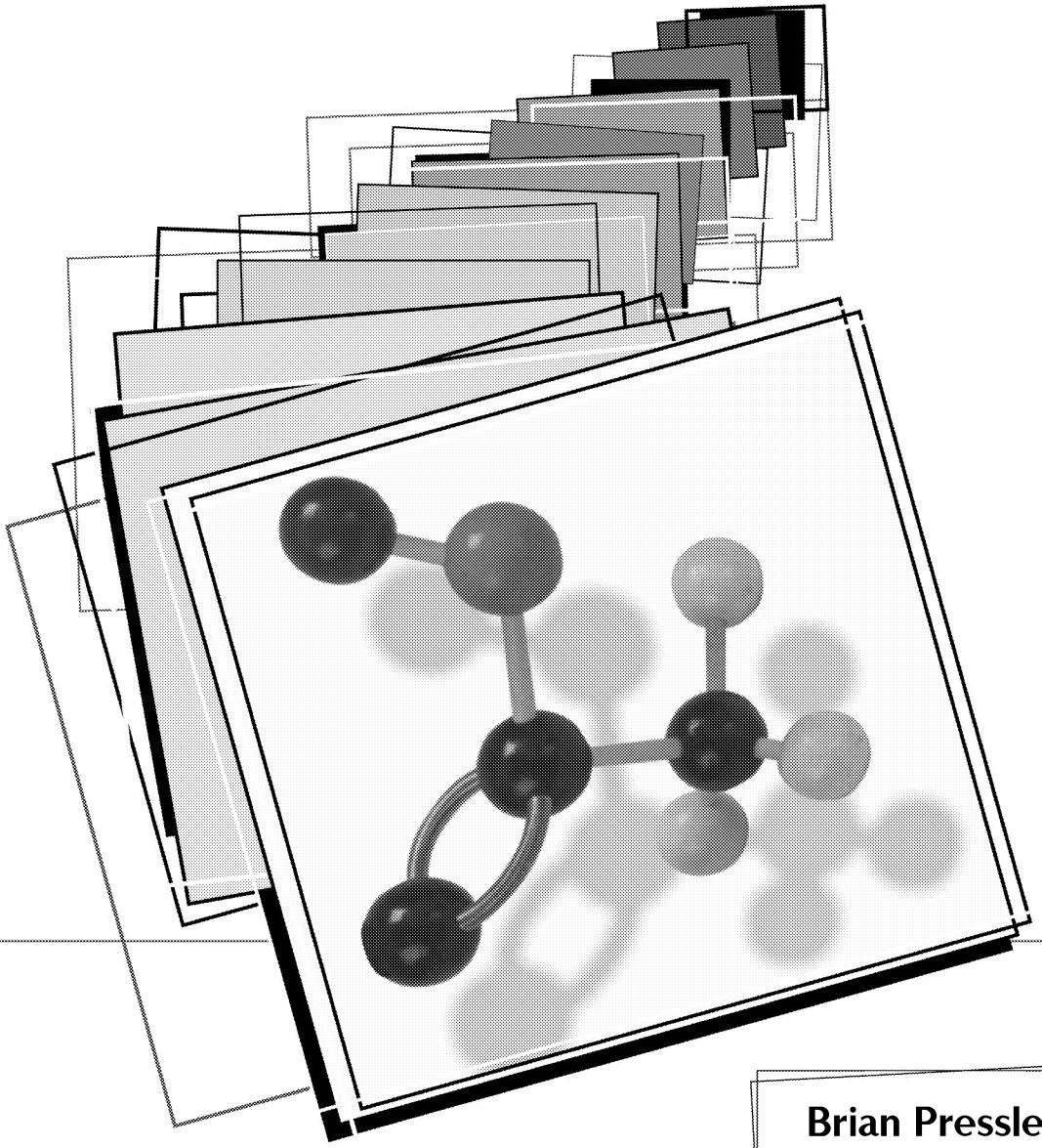
Chemistry JEOPARDY



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WALCH
PUBLISHER
Portland, Maine

Contents

2 Atoms and Ions

Section 8

	Atomic Structure	Development of Atomic Theory	Mass and Charge	Chemists and the Atom	Models
5	The smallest sample of an element	The view that matter can be infinitely divided into smaller parts	The charge on an electron	This scientist is credited with the discovery of cathode rays.	J.J. Thomson's model of the atom
10	The subatomic particle that has a negative charge	The view that there is a smallest particle of matter that cannot be divided	The charge on a proton	This scientist is credited with the discovery of the electron.	In this model the electrons move in a fixed path around the nucleus.
15	The subatomic particle that has a positive charge	The idea that when elements form a compound, they always react in a specific proportion by mass	The charge on a neutron	This scientist is credited with discovering protons, which he initially referred to as hydrogen nuclei.	In this model the electrons are scattered in a cloud around the nucleus.

20	The subatomic particle that has no charge	The idea that elements combine in simple, whole-number ratios in compounds	The mass of an electron in kg	This scientist is best known for the law of multiple proportions.	A picture or representation that helps people envision objects that are too big or too small to observe easily
25	The central portion of an atom that contains the protons and neutrons	The idea that matter is neither gained nor lost in a chemical reaction	The mass of a proton in kg	This scientist is best known for calculating the charge on an electron.	The idea that it is impossible to know both the location and the velocity of a subatomic particle
BONUS	Particles thought to make up neutrons and protons	The English chemist who first proposed the law of multiple proportions	The mass of a neutron in kg	The name of the ratio that J.J. Thomson calculated that allowed another scientist to determine the charge on an electron	In the quantum mechanical model, the smallest area where electrons are found
NOTES					

5 The Periodic Nature of Chemistry

Section 30

	Periodicity	Bonding	Other Bonds	VSEPR	Other Bond Behaviors
5	The energy needed to remove the most loosely held electron in an atom in the gas phase	The force of attraction that holds atoms together in molecules and crystals	The type of bond formed by the sharing of electrons	VSEPR stands for this phrase.	A way to describe a molecule by averaging several Lewis structures
10	The ability of an atom, already combined with another atom, to attract electrons to itself	The type of bond formed by the transfer of electrons	Substances that contain covalent bonds	The shape of a molecule with a bond angle of 180°	Asymmetric molecules that act as if they have partial charges on opposite ends
15	Half the distance between two bonded atoms, or two atoms that are as close as can be without bonding	The arrangement of two s electrons and six p electrons in an atom	A covalent substance that contains only two kinds of elements	A three-atom shape with bond angles of ≤ 120°	Molecules where all charges are symmetrically distributed

20	The distance from the nucleus of an ion to its outer shell of electrons	A diagram that shows the valence electrons for an atom or ion as dots around the chemical symbol for the element	A covalent bond where one atom supplies both electrons in a bond	A four-atom shape with bond angles of ≤ 120°	The force that holds molecules together by a temporary shifting of charge
25	The repulsion between kernel electrons and valence electrons	The electrons in an atom that are not valence electrons	The bond between two atoms that share two pairs of electrons	A four-atom shape with bond angles of ≤ 109.47°	The bond formed when a hydrogen atom in a molecule acts as an exposed proton
BONUS	The statement that elements placed in order by atomic number show repeating periodic properties	Another term for ionic bonds	The bond between two atoms that share three pairs of electrons	A five-atom shape with bond angles of 109.47°	A substance with two oppositely charged ends
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