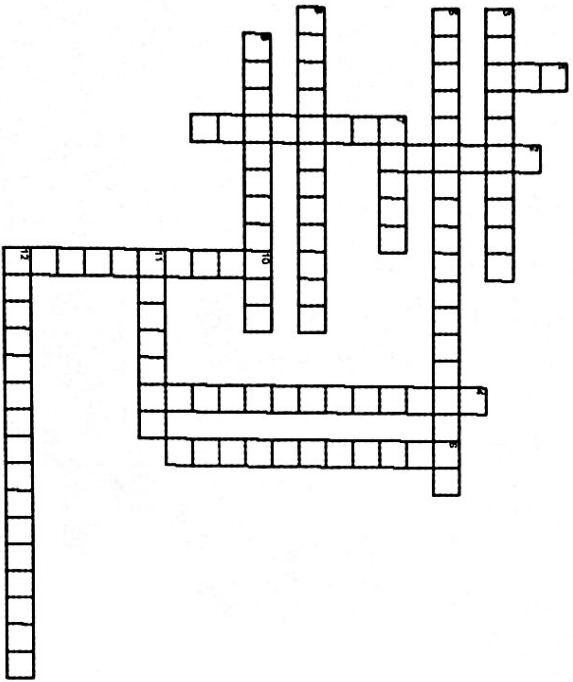


# Periodicity XWord A Chem 1H, Modern\_Chemistry

Name \_\_\_\_\_ Date \_\_\_\_\_

Instructions: Complete the puzzle. Use the clues to help you fill the boxes with the correct words.



## ACROSS

- the process of adding or removing electrons from an atom or molecule, which gives the atom or molecule a net charge
- one of the elements of Group 2 of the periodic table (beryllium, magnesium, calcium, strontium, barium, and radium)
- an ion that has a negative charge
- one-half of the distance between the center of identical atoms that are not bonded together
- the law that states that the repeating chemical and physical properties of elements change periodically with the atomic numbers of the elements
- one of the elements of Group 17 (fluorine, chlorine, bromine, iodine, and astatine); combine with most metals to form salts
- the energy change that occurs when an electron is acquired by a neutral atom

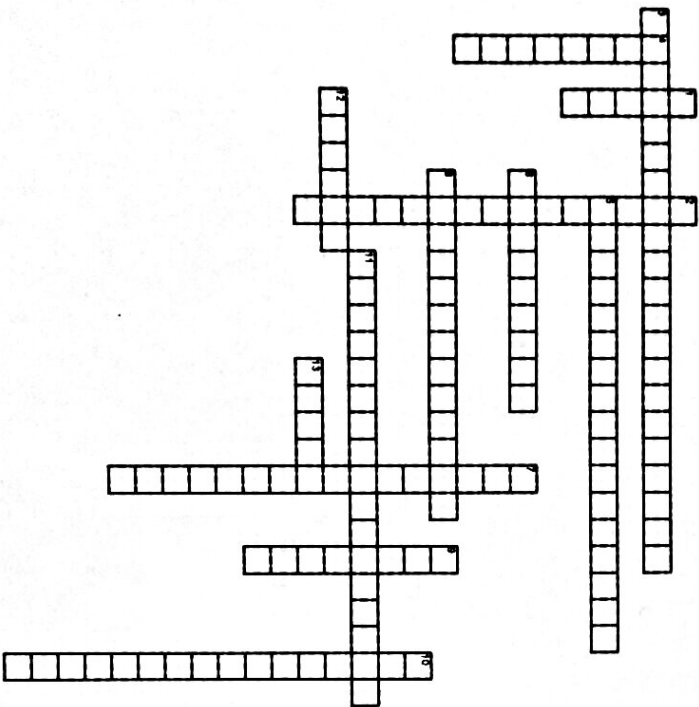
## DOWN

- an atom, radical, or molecule that has gained or lost one or more electrons and has a negative or positive charge
- an ion that has a positive charge
- an arrangement of the elements in order of their atomic numbers such that elements with similar properties fall in the same column, or group
- one of the elements of Group 1 of the periodic table (lithium, sodium, potassium, rubidium, cesium, and francium)
- these elements have atomic numbers from 89 (actinium, Ac) through 103 (lawrencium, Lr)
- a member of the rare-earth series of elements, whose atomic numbers range from 58 (cerium) to 71 (lutetium)

# Periodicity XWord B Chem 1H, Modern\_Chemistry

Name \_\_\_\_\_ Date \_\_\_\_\_

Instructions: Complete the puzzle. Use the clues to help you fill the boxes with the correct words.



## ACROSS

- the rare earth metals found in the lanthanide and actinide series of elements
- a measure of the ability of an atom in a chemical compound to attract electrons
- a regular pattern associated with the elements in a group or period
- one of the metals that can use the inner shell before using the outer shell to bond
- in chemistry, a horizontal row of elements in the periodic table
- a vertical column of elements in the periodic table; these elements share chemical properties

## DOWN

- an element that is shiny and that conducts heat and electricity well
- an electron that is found in the outermost shell of an atom and that determines the atom's chemical properties
- an element that conducts heat and electricity poorly and does not form positive ions in a solution
- an element in the s-block or p-block of the periodic table
- one of the elements of Group 18 of the periodic table (helium, neon, argon, krypton, xenon, and radon); these elements are inert or unreactive
- the energy required to remove an electron from an atom or ion (abbreviation, E)