

Element Puzzle Clues

Name(s):

Class:

Date:

Use the suggested resources to identify the elements that are described by the clues below. In the blank beside each clue, put the chemical symbol and atomic number of the correct element. In the crossword puzzle, fill in the complete name for each element.

ACROSS

1. _____ Found in catalytic converters
2. _____ Extremely active alkali metal
3. _____ Malleable element
4. _____ Produces the red color in fireworks
5. _____ Oxidation numbers are +2 and +3
6. _____ Alchemists tried to make this element from other metals
7. _____ Its electron configuration is $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^3$
8. _____ Poisonous, yellow-green gas
9. _____ Emits a red light when an electron transition occurs
10. _____ Most abundant element
11. _____ Small amounts of this element are required by the human body
12. _____ Used in copy machines, because of its conductivity
13. _____ Liquid at room temperature
14. _____ A semiconductor
15. _____ Needed for atomic bombs
16. _____ Oxide of this element produces acid rain
17. _____ Ion of this element is added to drinking water to prevent cavities
18. _____ Element found in amino acids and proteins
19. _____ Found in emeralds
20. _____ Allotrope of this element is being depleted from earth's stratosphere
21. _____ Imitation diamonds
22. _____ Element with larger atomic radius: chlorine or phosphorus
23. _____ Used to build missiles

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23. _____ Used to build missiles
24. _____ Component of Teflon
25. _____ Used to replace sodium in table salt

DOWN

26. _____ Added to table salt to prevent goiter
27. _____ Properties similar to nitrogen and phosphorus
28. _____ Computer chips
29. _____ Its ion is present in acidic solutions
30. _____ Found in an antidepressant
31. _____ Found in the paint of older homes
32. _____ Gas released from soil that can build up in your home
33. _____ Found in dry cell batteries
34. _____ Found in fluorescent light fixtures
35. _____ Found in deodorants and antiperspirants
36. _____ Diatomic molecule
37. _____ Element with the higher first ionization energy: magnesium or aluminum
38. _____ Noble gas found in several compounds
39. _____ The heaviest alkaline earth metal
40. _____ Discovered by Sir William Ramsay
41. _____ Named for the sun
42. _____ Most ductile of these elements: phosphorus, copper, or silicon
43. _____ The least electronegative element
44. _____ A transuranium element
45. _____ A metalloid
46. _____ Oxyacid containing this element is found in car batteries
47. _____ Found in artists' paints
48. _____ Food cans are coated with a thin layer of this metal to prevent corrosion
49. _____ Its atomic number is 98
50. _____ Found in organic compounds
51. _____ Used in rat poison
52. _____ Fuel for nuclear power plants
53. _____ Important element for the fertilizer industry
54. _____ The density of this alkali metal is 1.53 g/cm^3
55. _____ Definition of a mole is based upon this element
56. _____ Found in household bleach
57. _____ Given to patients before they receive digestive system x-rays

58. _____ Mendeleev referred to this element as 'ekaboron'
59. _____ Found in rechargeable batteries
60. _____ Discovered by the Curies
61. _____ Alloy of this metal is used for tooth fillings

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