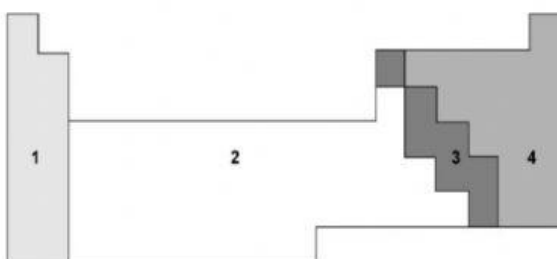
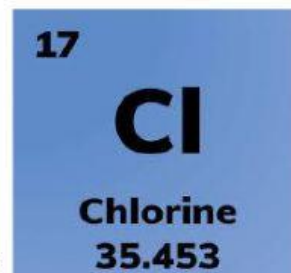


Physical Science Midterm Exam Prep

1. A neutral atom of the element Sodium has how many protons? Neutrons? Electrons?
Atomic mass? Atomic number? Element symbol?
2. A neutral atom of the element Fluorine has how many protons? Neutrons? Electrons?
Atomic mass? Atomic number? Element symbol?
3. What does the 17 represent in the following image?
4. What does the Cl represent in the following image?
5. What does 35.453 represent in the following image?
6. How many protons does the image have? Electrons? Neutrons?
7. An atom has 5 protons, 6 neutrons, and 7 electrons. What element is it?
8. An atom has 10 protons, 10 neutrons, and 8 electrons. What element is it?
9. These elements conduct heat and electricity well, they are malleable, ductile, and shiny.
10. These elements do not conduct heat and electricity well, they are brittle, and dull.
11. How many valence electrons does nitrogen have? Argon? Lithium? Magnesium?
12. Which type of elements appear in section 1? Section 2? Section 3? Section 4?



13. Which elements are unreactive because they have a full valence shell?
14. These compounds have high melting points, can conduct electricity, and made up of metals and nonmetals.

15. These compounds have low melting points, do not conduct electricity, and are made up of two or more nonmetals.
16. How are ionic bonds formed? How are covalent bonds formed?
17. What do you do when naming ionic chemical formulas?
18. What is the chemical formula when you combine Sodium (Na) and Oxygen (O)?
19. What is the chemical formula when you combine Beryllium (Be) and Fluorine (F)?
20. Which is the correct way to write dinitrogen tetroxide? Dihydrogen monoxide?
21. Which is the correct way to write pentaphosphorus trioxide? Trinitrogen dioxide?
22. What do you need when writing covalent chemical compounds?
23. Is the following chemical equation balanced? $\text{KF} + \text{Br}_2 = 2\text{KBr} + \text{F}_2$
24. The law of conservation of mass states This is why _____ must be balanced.
25. Balance the following chemical equation: $\text{___ Mg} + \text{___ S} = \text{___ MgS}_2$
26. Balance the following chemical equation: $\text{___ C} + \text{___ O}_2 = \text{___ C}_2\text{O}$
27. What happens when you heat up a liquid?
28. What happens to a balloon when it is placed in the sun? Outside in the cold?
29. Which is more concentrated, a solution with 30 grams of salt or 15 grams of salt?
30. In an ionic compound solution of salt (NaCl) in water what is the solute?

 What is the solvent? Will this solution conduct electricity?
31. What three factors affect how fast a solute will dissolve?

