

Name _____

It's Element--*ary*!!!

Have fun with the elements: Use your Periodic Table and the elements' symbols to find the correct answers to these clues:

Clues	Symbols	Elements
1. a man's nickname	_____	_____
2. a negative reply	_____	_____
3. a medical doctor	_____	_____
4. me	_____	_____
5. opposite of "out"	_____	_____
6. opposite of "she"	_____	_____
7. an "average" grade	_____	_____
8. a "failing" grade	_____	_____
9. smelly tennis shoes	_____	_____
10. an English sports car	_____	_____
11. University of Southern California	_____	_____
12. abbreviation for "company"	_____	_____
13. a young man's (or woman's) club/association	_____	_____
14. abbreviation of "pint"	_____	_____
15. a lung disease	_____	_____
16. abbreviation for afternoon	_____	_____
17. abbreviation for morning	_____	_____
18. abbreviation for Pennsylvania	_____	_____
19. abbreviation for Maryland	_____	_____
20. sound of laughter	_____	_____
21. not me!	_____	_____

HOW ELEMENTS ARE NAMED

Study the Periodic Chart of the elements. Do any of the names of the elements sound familiar? They should. Some elements have ancient names of Latin and Greek origins; but many others were named for famous men, countries, planets, etc. With a copy of the Periodic Chart before you, see how many of the following questions you can answer:

1. There are five elements named for famous scientists. Can you find three?
_____, _____ and _____.
2. There are four elements named for planets. Can you find all four of them?
_____, _____, _____, and _____.
3. There is one element named for a city in the United States and another for the state of that city. Can you find the element named for the city and the element named for the state? _____ and _____.
4. There are two elements named for large regions which include several countries. Do you know what these elements are called? _____ and _____.
5. Element numbers 68, 70, 39, and 65 were all named for the same city, Ytterby, Sweden. What are the names of these elements?
_____, _____, _____, and _____.
6. The ancient name for France was Gaul, and the ancient name for Russia was Ruthenia. Can you find the elements named for these ancient lands?
_____ and _____.
7. Find the elements named in honor of France, America, Poland and Germany.
_____, _____, _____ and _____.

Periodic Table Puns 2

Name _____

Use your imagination and the elements in the Periodic Table to solve each pun!

1. Not an exciting person _____
2. Thanksgiving guests _____
3. Get clean with this _____
4. Drive away in style in a _____
5. Does a body good _____
6. Proud to be an _____
7. Mickey's pal _____
8. Warrior Princess _____
9. A nice guy _____
10. Someone who loves computers _____
11. The first person in a race has the _____
12. $E = mc^2$ _____
13. This man followed the yellow brick road _____
14. How to tell a secret _____
15. Monday night TV show _____
16. A phrase from Dr. Suess _____
17. What a doctor does to his patients _____
18. Part of a whole _____
19. Place for washing dishes _____
20. Drink in an Al can _____
21. Happens when you lasso a horse _____
22. What a dog does with a bone _____
23. A sinking ship _____
24. What a cloud does _____

It's Elemental, My Dear

Over 2000 minerals have been identified by geologists. They classify minerals into groups based on how they are similar. Table Two lists some of these groups. The Elements group includes over 100 known minerals. Many of the minerals in this group are composed of only one element. Geologists sometimes subdivide this group into metal and nonmetal categories. Gold, silver, and copper are examples of metals. The elements sulfur and carbon are nonmetallic minerals. Most minerals are combinations of two or more elements. Table Two describes the chemical composition of some common minerals. The chemical composition lists the elements that make up the minerals. For example, the chemical composition for the mineral quartz is SiO_2 . That means each quartz molecule is composed of one atom of silicon and two atoms of oxygen. Each molecule of quartz has three atoms in it.

Select eight minerals from Table Two. Select at least one from each group. Use a periodic table to identify the elements found in one molecule of that mineral. You will also need to identify the number of atoms found each of the elements in that mineral. Record this information on your student sheet. An example has been done for you.



Table Two

Group	Mineral	Chemical Composition
Elements	Gold Silver Copper Carbon Sulfur	Au Ag Cu C S
Sulfides	Galena Pyrite	PbS FeS ₂
Halides	Fluorite Halite	CaF ₂ NaCl
Oxides	Corundum Hematite	Al ₂ O ₃ Fe ₂ O ₃
Carbonates	Calcite Dolomite	CaCO ₃ CaMg(CO ₃) ₂
Sulfates	Gypsum	CaSO ₄ (H ₂ O)
Silicates	Beryl Biotite Hornblende Muscovite Olivine Quartz	Be ₃ Al ₂ (SiO ₃) ₆ K(Mg,Fe) ₃ (Si ₃ O ₁₀)(OH) ₂ Ca ₂ (Mg,Fe,Al) ₅ (AlSi) ₈ O ₂₂ (OH) ₂ KAl ₃ Si ₃ O ₁₀ (OH) ₂ (Mg,Fe) ₂ SiO ₄ SiO ₂

It's Elemental, My Dear

Mineral

Elements



Example	
Dolomite $\text{CaMg}(\text{CO}_3)_2$	1 atom of calcium, 1 atom of magnesium, 2 atoms of carbon, and six atoms of oxygen

Periodic Table Puns

Name _____

Use your imagination and the elements in the Periodic Table to solve each pun!

Example: Five cents - Nickel, Ni

1. What you do in a play

2. What you do to a wrinkled shirt

3. "Tasty" part of your mouth

4. Someone who likes to start fires

5. Superman's weakness

6. Your brother or mine

7. Extinct

8. Imitation diamond

9. A type of flower

10. Las Vegas lights

11. Police

12. Golden State

13. Name of a goofy convict

14. Mr. Mony's enemy

15. What you do to flowers

16. What you did to ripped jeans

17. A "prize" element

18. A very smart person

19. Person from the big blue planet

20. A fur seller

Do you have any "punnies" of your own?

Write them on the back of this page. Be sure to include the answers!

Memorization Tips: Elements/ Symbols

Silver - Ag	If a person who is expecting a present of a gold necklace receives a silver one. he might say, "Ag, I didn't want silver!"
Gold - Au	" <u>Hey you</u> , I want that gold necklace!" Said with "Hey you" sounding like Au.
Aluminum - Al	All cans are made from aluminum.
Bromine - Br	That brother of mine - Bro of mine!
Calcium - Ca	"Caws give milk!" Pronounced with an accent to make cows sound like it's spelled with an A.
Chlorine - Cl	"You Clean with chlorine!"
Fluorine - F	You need to Floss after using fluorine!
Iron - Fe	"Fe, Fi, Fo, Fum, I'm an iron man!"
Helium - He	If you breathe in helium, you will laugh! He, He, He!
Mercury - Hg	Greek mythology - Hg stands for Helmet guy!
Potassium - K	You will get Kicked out of school for the double nasty! You can't do the first three letters and cannot say the next three!
Sodium - Na	"Naw, I don't want any sodium!"
Nickel - Ni	"Nick owes me a nickel!"
Oxygen - O	"Open your mouth wide to take in oxygen!"
Lead - Pb	Pencil broke!
Silicon - Si	Silly con!
Tin - Sn	A tin roof gets hot in the Sun.
Manganese- Mn	Take first three letters - Man
Magnesium- Mg	Take first three letters - Mag