

# Adopt-An-Element

## Requirements:

### 1) Complete an Adopt An Element information sheet. (60% of grade)

You may use a variety of reference sources. Possible ideas are encyclopedias (book or CD Rom), science encyclopedias, science catalogs, magazines, and/or Internet sites\*. Information sheets must be neat, written in black ink, and contain all the information requested. You also need to provide a list of your sources on the back of your information sheet. A minimum of three sources are required.

### 2) Create an advertisement for your element. (40% of grade)

The advertisement must include the element's name, symbol, atomic number, atomic mass, cost, and an advertising slogan that describes one or more of its important uses. Advertisements must be neat, colorful, and contain all the information listed above. You may add pictures that relate to your advertisement theme.

## Example:

Be sure to include:

- ✓ Element's symbol
- ✓ Element's name
- ✓ Atomic number
- ✓ Atomic mass
- ✓ Ad slogan
- ✓ Cost
- ✓ Your name

You may add pictures or drawings that illustrate the various uses for your element.

**Your ad must follow the same format as this example!**

The example advertisement is enclosed in a rectangular box. At the top left is the atomic number '33' and at the top right is the atomic mass '74.9'. In the center, the symbol 'As' is written in a large, bold font, with the name 'Arsenic' written below it in a slightly smaller font. Below the name is a slogan: 'Arsenic's a sure fire way to deal with a nasty rat, It works better than a mean old cat!'. At the bottom left, the cost is listed as 'Cost = \$3.20 for 1 gram'. At the bottom right, the name 'John Smith' is written. Arrows point from labels on the right to each of these elements: 'Atomic Mass' points to 74.9, 'Atomic Number' points to 33, 'Symbol & Name' points to 'As' and 'Arsenic', 'Slogan' points to the slogan text, 'Cost' points to the cost text, and 'Name' points to 'John Smith'.

A list of periodic table sites is available on

**The Science Spot**

<http://sciencespot.net/>

Go to **Kid Zone**, then choose **Chemistry Links**

# Adopt An Element

Name \_\_\_\_\_

## Fact Sheet

Element \_\_\_\_\_

Symbol	Atomic Number	Atomic Mass
_____	_____	_____
# of Protons	# of Neutrons	# of Electrons
_____	_____	_____
Melting Point	Boiling Point	Normal Phase
_____ °C	_____ °C	_____

Cost = \_\_\_\_\_ for \_\_\_\_\_

Classification:  Nonmetal  Metal  Metalloid

My element belongs to the \_\_\_\_\_ family.

Origin of Name \_\_\_\_\_

Discovered by \_\_\_\_\_ in \_\_\_\_\_

Interesting Info: May include important uses, interesting facts, common compounds, etc.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

# Adopt An Element

## Grade Sheet

Name \_\_\_\_\_

### Advertisement = 24 points (40%)

- **Provided basic information\*** ..... + **12** \_\_\_\_\_
  - Atomic #       Symbol       Cost
  - Atomic mass     Name       Student's Name
- **Slogan and pictures relevant** ..... + **10** \_\_\_\_\_
- **Followed directions** ..... + **2** \_\_\_\_\_  
Neat, correct spelling/format, original

### Information Sheet = 36 points (60%)

- **Provided basic information** ..... + **10** \_\_\_\_\_
  - Name       Symbol       Atomic #       Atomic Mass
  - Protons       Neutrons       Electrons       Melting Point
  - Boiling Point     Normal Phase
- **Other information** ..... + **11** \_\_\_\_\_
  - Cost
  - Nonmetal/Metal/Metalloid
  - Family
  - Origin of Name
  - Discovery & Date
  - Interesting Information/Uses
- **References** ..... + **9** \_\_\_\_\_  
Minimum of 3; provided required information; correct format
- **Miscellaneous** ..... + **6** \_\_\_\_\_  
Black ink, complete sentences, correct spelling, neat

**Total Points = \_\_\_\_\_ out of 60 = \_\_\_\_\_%**

**A    B    C    D    F**

## Adopt-An-Element Project List

## Teacher Information

Visit the Chemicool site for details on cost information.

\* Cost listed on Los Alamos

\*\* No cost available

H		Ga		Re	
He		Ge		Os	
Li		As		Ir	
Be		Se		Pt	
B		Br		Au	
C		Kr		Hg	
N		Rb		Tl	
O		Sr		Pb	
F		Y		Bi	
Ne		Zr		Rn*	
Na		Nb		Ce	
Mg		Mo		Pr	
Al		Tc*		Nd	
Si		Ru		Pm*	
P		Rh		Sm	
S		Pd		Eu	
Cl		Ag		Gd	
Ar		Cd		Tb	
K		In		Dy	
Ca		Sn		Ho	
Sc		Sb		Er	
Ti		Te		Tm	
V		I		Yb	
Cr		Xe		Lu	
Mn		Cs		Th*	
Fe		Ba		Cm*	
Co		La		Cf*	
Ni		Hf		U**	
Cu		Ta		Ra**	
Zn		W		Es**	