

## PROJECT

### COLLECT INFORMATION ABOUT THE ELEMENTS WHICH NAMED BY THE NAMES OF SCIENTISTS

**Title of the Project** : To collect the information of elements which named by the names of the scientists.

**Purpose of the project** : To know the elements which were named by the names of scientists.

**Hypothesis** : there are 118 elements in the periodic table. These elements were named by a mythological concept or character, a mineral or similar substance, a geographical region, a property of the element or a scientist.

**Material** : Internet, science magazines etc.,

**Procedure** : We collect the names of 118 elements in internet. We separated the Element names which named by the names of the scientists. We collect the information of the element.

**Introduction** : A chemical element or element is a species of atoms having the same number of protons in their atomic nuclei. There are 118 elements that have been identified, of which the first 94 occur naturally on Earth with the remaining 24 being synthetic elements.

Element names can refer to:

- a mythological concept or character (including an astronomical object),
- a mineral or similar substance,
- a place, or geographical region,
- a property of the element, or
- a scientist.

### Information of Elements which named by the names of the scientists:

#### 1) Gadolinium (Gd) :

It is discovered by Jean Charles Galissard de Marignac in 1880. Its atomic number is 64. It is named for gadolinite, one of the minerals in which it was found, in turn named for chemist **Johan Gadolin**. Gadolin discovered a "new earth" containing the first rare earth compound yttrium.



#### 2) Curium (Cm) :

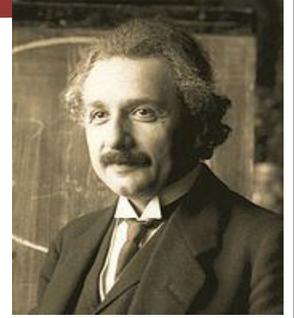
Curium is a transuranic radioactive chemical element. It is discovered in 1944 by the group of Glenn T. Seaborg at the University of California, Berkeley.

It was named after **Marie Curie** and her husband **Pierre Curie** who are noted for discovering radium and for their work in radioactivity.



**3) Einsteinium (Es) :**

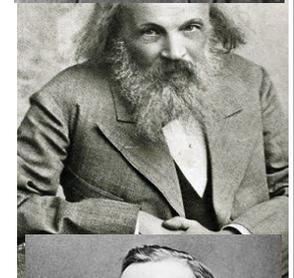
It is a synthetic element with symbol Es and atomic number 99. It was discovered as a component of the debris of the first hydrogen bomb explosion in 1952, and named after **Albert Einstein**. Einstein developed the general theory of relativity, one of the two pillars of modern physics.

**4) Fermium (Fm) :**

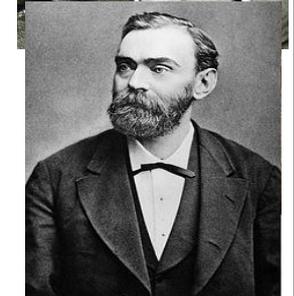
It is a synthetic element with symbol Fm and atomic number 100. It was discovered in the debris of the first hydrogen bomb explosion in 1952, and named after **Enrico Fermi**, one of the pioneers of nuclear physics.

**5) Mendeleevium (Md) :**

Mendelevium is a synthetic element with chemical symbol Md and atomic number 101. Mendeleevium was discovered by bombarding einsteinium with alpha particles in 1955, the same method still used to produce it today. It was named after **Dmitri Mendeleev**, father of the periodic table of the chemical elements.

**6) Nobelium (No) :**

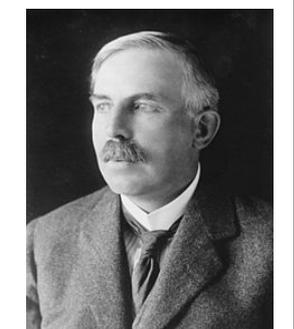
Nobelium is a synthetic chemical element with symbol "No" and atomic number 102. It is named in honor of **Alfred Nobel**, the inventor of dynamite and benefactor of science. It was discovered in 1966 from the Joint Institute of Nuclear Research at Dubna.

**7) Lawrencium (Lr) :**

Lawrencium is a synthetic chemical element with chemical symbol "Lr" and atomic number 103. It is named in honor of **Ernest Lawrence**, inventor of the cyclotron, a device that was used to discover many artificial radioactive elements.

**8) Rutherfordium (Rf):**

Rutherfordium is a chemical element with symbol Rf and atomic number 104, named in honor of physicist **Ernest Rutherford**. It is a synthetic element and radioactive. It was reportedly first detected in 1964 at the Joint Institute of Nuclear Research at Dubna.



**9) Seaborgium (Sg) :**

Seaborgium is a chemical element with symbol Sg and atomic number 106. It is named after the American nuclear chemist **Glenn T. Seaborg**, and is the first and so far only element to be named after a person who was alive when the name was announced. It is a synthetic element (an element that can be created in a laboratory but is not found in nature) and radioactive.

**10) Bohrium (Bh) :**

Bohrium is a chemical element with symbol Bh and atomic number 107. It is named after Danish physicist **Niels Bohr**. It is a synthetic element and radioactive. It is discovered in 1981. Niels Bohr was a Danish physicist who made foundational contributions to understanding atomic structure and quantum theory.

**11) Meitnerium (Mt) :**

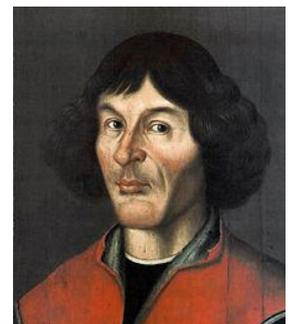
Meitnerium is a chemical element with symbol Mt and atomic number 109. It is an extremely radioactive synthetic element. The GSI Helmholtz Centre for Heavy Ion Research near Darmstadt, Germany, first created this element in 1982. It is named for **Lise Meitner**. She was an Austrian physicist who worked on radioactivity and nuclear physics.

**12) Roentgenium (Rg) :**

Roentgenium is a chemical element with symbol Rg and atomic number 111. It is an extremely radioactive synthetic element. Roentgenium was first created in 1994 by the GSI Helmholtz Centre for Heavy Ion Research near Darmstadt, Germany. It is named after the physicist **Wilhelm Röntgen**. He was a German mechanical engineer and physicist, who produced and detected electromagnetic radiation in a wavelength range known as X-rays or Röntgen rays.

**13) Copernicium (Cn) :**

Copernicium is a chemical element with symbol Cn and atomic number 112. It is an extremely radioactive synthetic element that can only be created in a laboratory. Copernicium was first created in 1996 by the GSI Helmholtz Centre for Heavy Ion Research near Darmstadt, Germany. It is named after the astronomer **Nicolaus Copernicus**.

**14) Flerovium (Fl) :**

Flerovium is a superheavy artificial chemical element with symbol Fl and atomic number 114. It is an extremely radioactive synthetic element. The element is named after the Flerov Laboratory of Nuclear Reactions of the Joint Institute for Nuclear Research in Dubna, Russia, where the element was discovered in 1998. The name of the laboratory, in turn, honours the Russian physicist **Georgy Flyorov**.



**Interpretation of the student:**

We collected the information of the elements which named by the name of the scientists. We collected the photographs of the scientists and information in internet.

**Conclusion:**

There are 118 elements in the periodic table. These elements were named by a mythological concept or character, a mineral or similar substance, a geographical region, a property of the element or a scientist.

**References:** Internet, science magazines, wikipedia.



**PROJECT REPORT**

**Title of the Project** : To collect the information of elements which named by the names of the scientists.

**Class** : 9th

**Subject** : Chemistry

**School** :

**Time frame** : 5 days

**Material/Sources used tools:** Internet, Science books.

**Details of procedure followed:**

We collect information of the scientists whose names were named to the chemical elements from internet. We also collected the contributions of the scientists in various science books. We collected some pictures in Internet.

**Finding Observations:** We collect the information of the scientists and their contributions from internet. We collect pictures of the scientists from various science books.

**Project outcome** : After completion of this project we understood that the contributions of the scientists whose names were named to the chemical elements. We understood the nomenclature of the elements in various aspects. These elements were named by a mythological concept or character, a mineral or similar substance, a geographical region, a property of the element or a scientist. In this project we collected information of the elements which were named by the names of the scientists.

**Name of the group members and work allotment:**

Sl.No	Name of the team member	Work allotment
1		
2		
3		
4		
5		
6		

Date of Submission :

Signatures