

Name 2nde

JAILBREAK!



A jailbreak has occurred at PTCF (Periodic Table Correctional Facility) earlier today and several dangerous elements are now on the loose! The Periodic Sheriff has instructed you to research one of the fugitive elements and to design a "Wanted Poster" to be published as part of the "Most Wanted List."

Your missions:

- Randomly pick an element: my element is
- Do your research Due date:
Every element is different. Research about your element, use your resources, gather some clues, and fill out the **Fugitive File!**
Use those websites for your research:

<https://www.webelements.com>
<https://periodic-table.io>

- Sketch Due date:
Complete the **Suspect Sketch**.
- Put it all together Due date:
You've done the leg work! Use all the periodic table facts, research, and clues you have gathered to put together your Wanted Poster.
But be careful! You must fill out the Wanted Poster as if your element was a **living being**. Use the info and example below to help you:

Mug Shot: You will draw a picture of your element as a person here. Your drawing should reflect the characteristics, uses, etc. of your element. For example: "gold" could be a gold coin person or could be a lump of gold dressed up as a person. Make them look like a criminal (but remember – little old ladies can be criminals!!)

Alias: criminal surname. Create it according to its crimes or personality.

Associated with crime family: the name of your element's family.

Date and place of birth: fill in the exact or approximate date when your element was discovered and in which country it was discovered.

Reward: tell the population what you are ready to give to the person who will capture this dangerous element! Be creative, it doesn't have to be money. Don't forget to explain why you chose this reward.

Description: give a physical description of the character you created based on your element's characteristics (color, luster, solid, liquid, gas, shiny, dull etc.) AND a description of their personality based on your element's chemical properties/uses.

Example: Gold is a bright individual with a shiny, yellow-orange complexion. Gold has a malleable personality and often bends himself to other's directions, however gold should still be considered influential and dangerous – people have killed to be with him.

Wanted for: describe what your element does, or is used for, or occurs, but again, write it as though you are talking about a criminal: what could he had done for being on the "most wanted list"?

Example: Gold has been involved in several bank robberies in the form of coins and gold bars. Has been known to hang around the necks of rich people as necklaces or other jewelry. In extreme cases gold will conduct electricity as a means of escaping the law.

Warning: put in a "dangerousness" warning (any type of danger will do).

Example: Although gold has a medium electronegativity he should still be approached with caution. Gold may covalently bond without notice.

FUGITIVE FILE

Name and symbol of Element:

Date of discovery:

Origin or place of discovery:

Discoverers:

Origin of its name:

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Origin of its symbol:

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o Description:

Atomic number:

Relative atomic mass:

Atomic radius (empirical):

Position in the periodic table: group (number and name):

period: block:

Ground state electronic configuration:

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Melting point: K = °C Boiling point: K = °C

State at room temperature:

Density of solid: kg.m⁻³

Pauling electronegativity:

Appearance at room temperature:

○ Any special characteristics (anything that makes this element different from the others):

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○ Where/how do we use this element?

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○ Which elements does it bond/form molecules/compounds with?

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○ Is your element dangerous or hazardous? If so, how and why?

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SUSPECT SKETCH

Name of Element:

Periodic Table Picture

Write here the chemical short-hand of the **most common isotope** of your element using the form:



Planetary Model Sketch

Draw here the atom diagram of your element (showing the different electron shells—not the subshells)

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Atomic Emission Spectrum

Represent here the atomic emission spectrum of your element (showing its pattern of colored radiations)

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400 nm

700 nm

Find it here:
https://physique.ostralo.net/spectre_em_abs/

Name of the structure :

Crystal structure

←

Draw the crystal structure of your element. Don't forget to specify what is the name of such a structure.

Find it here: <https://periodic-table.io>