

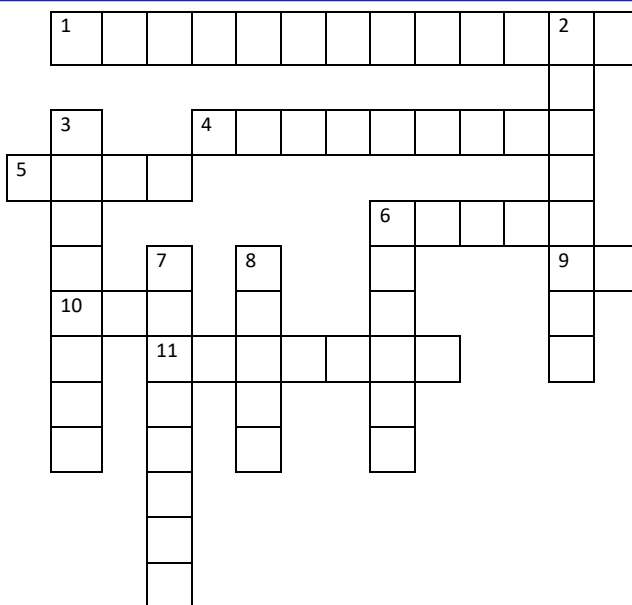
ENIGMA 2

- **Visual and format**

In a manual for the exploitation of the machinery in the control room .



Enigma/puzzle



Resolve the crossword and use the last word in the puzzle as the the lead to the next puzzle:

Across

1. An Alpha particle
4. What happens to the atomic number when a beta particle is emitted
5. The mass of an alpha particle
6. The only form of nuclear radiation which is not a particle
9. Possible unit for radioactivity
10. The amount the atomic number decreases by when an alpha particle is emitted
11. Where all nuclear radiation is emitted from

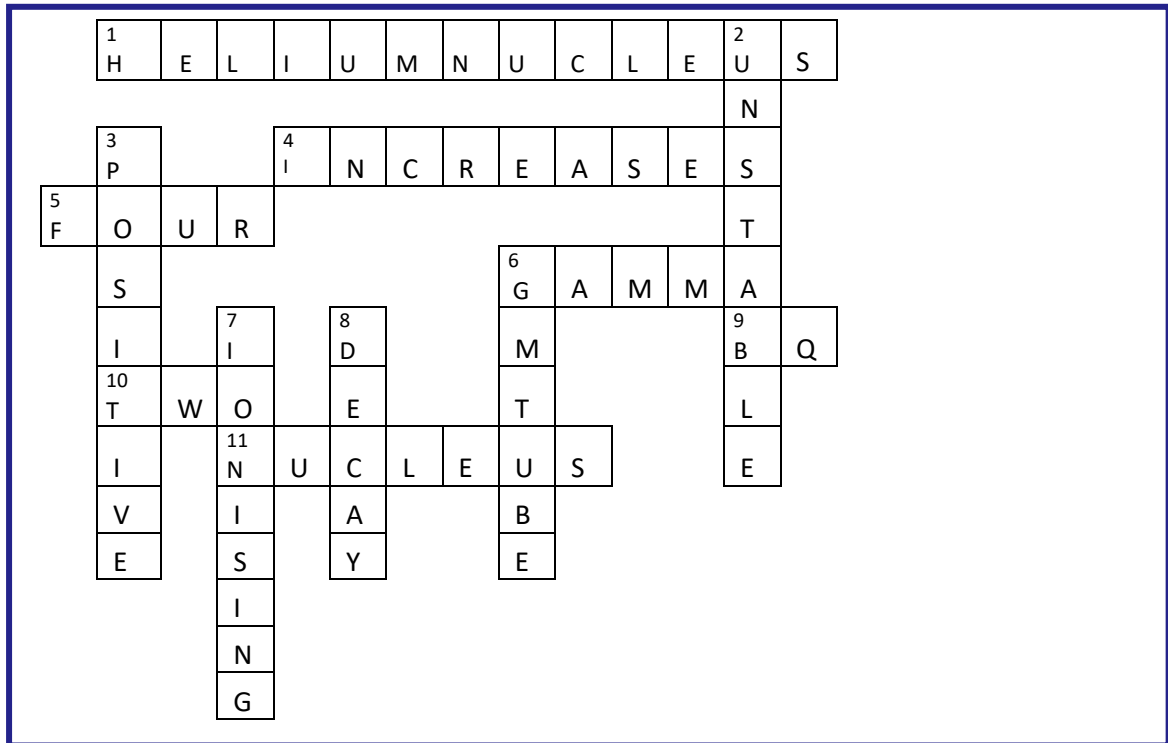
Down

2. An atom which could decay
3. The charge of a proton, nucleus and alpha particle
6. Detects radiation
7. The ability to cause atoms to become charged
8. When an atom emits radiation

- **Estimated solving time**

20 min

- Solution**



- Depends on**

Having knowledge about radioactivity and terms related to it.

- Benefits**

They will learn about the characteristics of radioactivity.

- **Hints:**

- **Hint 1**

No 9 is the abbreviation of the full name of the unit.

(subtle)

- **Hint 2**

No 1 is a part of the atom of a chemical element.

(easy)

- **Hidden place/placement**

Behind the portrait of Marie Curie in a manual for the exploitation of the machinery in the control room.

- **Material needed**

Paper

Pen or pencil

Periodic table