

Atomic Structure Worksheet

Student Name: _____ Grade Level: _____ Due Date: _____

Project Objective:

Answer the Following Questions

- Which subatomic particle determines the identity of an element?

Answer: _____

- Where are protons and neutrons located in an atom?

Answer: _____

- What charge does an electron carry?

Answer: _____

- What does the atomic number represent?

Answer: _____

- What is the total number of electrons in a neutral atom of oxygen?

Answer: _____

Create Lewis Dot Structures
For each element, write the chemical symbol and add dots to represent valence electrons.

Example:

Oxygen → O..

Reflection (Write 4–5 Sentences)

In your own words, explain why understanding atomic structure is important in science. How does it help in understanding elements, reactions, or materials?