Reading the periodic table: grades 6-7

Suggested beginner level | 25-35 minutes | Student worksheet. Use the first 20 elements.

Name and goal

Name: _____ Date: _____

Goal: read an element tile, find rows and columns, and count particles.

1. Read and record

Find carbon, oxygen and sodium. Record symbol, atomic number, period and group for each.

Element	Symbol	Atomic number	Period	Group
Carbon	_____	_____	_____	_____
Oxygen	_____	_____	_____	_____
Sodium	_____	_____	_____	_____

2. Look for a pattern

Find lithium, sodium and potassium. Which group do they share? Record their periods.

_____

Explain the difference between a row and a column in your own words.

_____

3. Count particles

A neutral oxygen atom has 8 protons. How many electrons does it have? Explain.

_____

Carbon-12 and carbon-14 both have 6 protons. Calculate their neutron numbers using A = Z + N.

_____

Why should you not subtract 6 from carbon's decimal reference atomic mass to find an exact neutron count?

_____

4. Exit ticket

An atom has 11 protons. Name the element and give its symbol. If it gains an electron, does its element identity change?

_____

Source used: _____

Suggested levels are starting points, not formal curriculum alignment. Use the site or printed data; no physical element samples are needed. Source data and limitations: elementexplore.com/sources.html. These original Element Explore materials may be copied and adapted for classroom use.