# Periodic Table Quiz

**Name:**

**Science Understanding**

Scientists organise the elements from lightest to heaviest on a grid called the periodic table. The periodic table helps scientists to look up the names and symbols of all the known elements. Use the periodic table to answer the following questions.

<table>
<thead>
<tr>
<th>Periodic Table</th>
<th>Name</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Helium</td>
<td>He</td>
<td>He</td>
</tr>
<tr>
<td>Lithium</td>
<td>Li</td>
<td>Li</td>
</tr>
<tr>
<td>Beryllium</td>
<td>Be</td>
<td>Be</td>
</tr>
<tr>
<td>Sodium</td>
<td>Na</td>
<td>Na</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Mg</td>
<td>Mg</td>
</tr>
<tr>
<td>Potassium</td>
<td>K</td>
<td>K</td>
</tr>
<tr>
<td>Calcium</td>
<td>Ca</td>
<td>Ca</td>
</tr>
<tr>
<td>Scandium</td>
<td>Sc</td>
<td>Sc</td>
</tr>
<tr>
<td>Titanium</td>
<td>Ti</td>
<td>Ti</td>
</tr>
<tr>
<td>Vanadium</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Chromium</td>
<td>Cr</td>
<td>Cr</td>
</tr>
<tr>
<td>Manganese</td>
<td>Mn</td>
<td>Mn</td>
</tr>
<tr>
<td>Iron</td>
<td>Fe</td>
<td>Fe</td>
</tr>
<tr>
<td>Cobalt</td>
<td>Co</td>
<td>Co</td>
</tr>
<tr>
<td>Nickel</td>
<td>Ni</td>
<td>Ni</td>
</tr>
<tr>
<td>Copper</td>
<td>Cu</td>
<td>Cu</td>
</tr>
<tr>
<td>Zinc</td>
<td>Zn</td>
<td>Zn</td>
</tr>
<tr>
<td>Gallium</td>
<td>Ga</td>
<td>Ga</td>
</tr>
<tr>
<td>Germanium</td>
<td>Ge</td>
<td>Ge</td>
</tr>
<tr>
<td>Arsenic</td>
<td>As</td>
<td>As</td>
</tr>
<tr>
<td>Selenium</td>
<td>Se</td>
<td>Se</td>
</tr>
<tr>
<td>Bromine</td>
<td>Br</td>
<td>Br</td>
</tr>
<tr>
<td>Krypton</td>
<td>Kr</td>
<td>Kr</td>
</tr>
<tr>
<td>Aluminium</td>
<td>Al</td>
<td>Al</td>
</tr>
<tr>
<td>Silicon</td>
<td>Si</td>
<td>Si</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>Sulfur</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>Chlorine</td>
<td>Cl</td>
<td>Cl</td>
</tr>
<tr>
<td>Argon</td>
<td>Ar</td>
<td>Ar</td>
</tr>
<tr>
<td>Boron</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Carbon</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Oxygen</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Fluorine</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>Neon</td>
<td>Ne</td>
<td>Ne</td>
</tr>
</tbody>
</table>

**Lanthanoids**

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cerium</td>
<td>Ce</td>
</tr>
<tr>
<td>Praseodymium</td>
<td>Pr</td>
</tr>
<tr>
<td>Neodymium</td>
<td>Nd</td>
</tr>
<tr>
<td>Promethium</td>
<td>Pm</td>
</tr>
<tr>
<td>Samarium</td>
<td>Sm</td>
</tr>
<tr>
<td>Europium</td>
<td>Eu</td>
</tr>
<tr>
<td>Gadolinium</td>
<td>Gd</td>
</tr>
<tr>
<td>Terbium</td>
<td>Tb</td>
</tr>
<tr>
<td>Dysprosium</td>
<td>Dy</td>
</tr>
<tr>
<td>Holmium</td>
<td>Ho</td>
</tr>
<tr>
<td>Erbium</td>
<td>Er</td>
</tr>
<tr>
<td>Thulium</td>
<td>Tm</td>
</tr>
<tr>
<td>Ytterbium</td>
<td>Yb</td>
</tr>
<tr>
<td>Lutetium</td>
<td>Lu</td>
</tr>
</tbody>
</table>

**Actinoids**

<table>
<thead>
<tr>
<th>Name</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thorium</td>
<td>Th</td>
</tr>
<tr>
<td>Protactinium</td>
<td>Pa</td>
</tr>
<tr>
<td>Uranium</td>
<td>U</td>
</tr>
<tr>
<td>Neptunium</td>
<td>Np</td>
</tr>
<tr>
<td>Plutonium</td>
<td>Pu</td>
</tr>
<tr>
<td>Americium</td>
<td>Am</td>
</tr>
<tr>
<td>Curium</td>
<td>Cm</td>
</tr>
<tr>
<td>Berkelium</td>
<td>Bk</td>
</tr>
<tr>
<td>Californium</td>
<td>Cf</td>
</tr>
<tr>
<td>Einsteinium</td>
<td>Es</td>
</tr>
<tr>
<td>Fermium</td>
<td>Fm</td>
</tr>
<tr>
<td>Md</td>
<td>Md</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Lr</td>
<td>Lr</td>
</tr>
</tbody>
</table>

### Questions

1. **State** the total number of elements listed on the periodic table.

2. **Identify** the chemical symbol of the following elements.

   - Hydrogen
   - Helium
   - Carbon
   - Oxygen
   - Nitrogen
   - Aluminium
   - Calcium
   - Iron
3 **Identify** the names of the elements with the following chemical symbols.

Li ____________ B ____________
Na ____________ Si ____________
P ____________ Cl ____________
Cr ____________ Cu ____________

4 **List** the names and symbols of all the elements whose names start with the letter 'C'.

________________________________________

________________________________________

________________________________________

5 **Identify** three elements named after famous scientists.

________________________________________

6 **Identify** three elements named after a place, country, continent or planet.

________________________________________

7 Some chemical symbols do not appear to correspond to the chemical names. For example, the chemical symbol for silver is Ag. **List** the name and symbol of five other elements whose chemical symbols do not correspond with the name of the elements.

________________________________________

________________________________________

________________________________________

8 In the table below, **list** five elements that you might use in your everyday life and **identify** where they might be used.

<table>
<thead>
<tr>
<th>Element</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Science understanding

Verbal/Linguistic

Use the periodic table on page 93 to complete the crossword below by filling in the element name that corresponds to each symbol.

Across
8 Al
9 Ti
11 O
13 B
15 Cu
17 N
18 P
22 Ca
23 F
24 Fe
26 He

Down
1 Pt
2 Be
3 Li
4 Cl
5 Ar
6 Na
7 C
10 Mg
12 K
14 Si
16 Au
19 S
20 H
21 Ag
25 Ne
### Science understanding

#### Verbal/Linguistic

Use what you know about the elements that you find in your everyday life to match the elements below to the properties listed in the table.

<table>
<thead>
<tr>
<th>Description of properties</th>
<th>Chemical name</th>
<th>Chemical symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am lightweight and shiny and conduct electricity very well. For these reasons, I am used in overhead power lines. I am also used in soft-drink cans because I can be recycled.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. At room temperature I am a solid, bright yellow powder. I am a typical non-metal. I don’t conduct electricity and I crumble easily. I can be found under oxygen on the periodic table.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I can be found in many different forms. Sometimes I am a black crumbly solid called charcoal. However, I can also form very hard, beautiful and expensive crystal lattices called diamond.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I am a colourless, odourless gas that makes up most of the air you breathe but I am not oxygen. I am one of the first 10 elements listed in the periodic table.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I am a yellow gas with a pungent smell. But don’t breathe me in or I will damage your lungs. I am also used in swimming pools to kill bacteria. I am between elements 10 and 20 on the periodic table.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I am yellow and shiny. I conduct electricity very well so am sometimes used for wiring in electrical equipment. However, I am more commonly used in jewellery because I am rare and expensive.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I am strong and hard and can be bent into many different shapes. That’s why I am used in construction. However, I am often mixed with metals and carbon. Otherwise I will rust.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I am a very light and non-toxic gas. I do not react with other substances so I am often used to make party balloons that float. If you breathe me in, I will make your voice sound funny.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I am an invisible, non-toxic gas. I am one of the most important elements on Earth. I am in water, sand and air. You need me to breathe and stay alive. Plants produce me through photosynthesis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I am shiny and orange-brown in colour. I can be drawn into wires or hammered into sheets. I conduct electricity very well and am cheap to produce, which makes me perfect for household wiring and electrical equipment.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>