

Hidden in this grid are the names of six metallic elements and six non-metallic elements. As you find them draw a circle around them. Beware, do not to circle any compounds or mixtures like alloys, that are also hidden in the grid.

Write the answers in the tables of metals and non-metals. Find the atomic number and electronic structure for each element to complete the tables.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C | A | R | P | L | A | T | B | R | A | S | S |
| L | P | M | A | G | N | E | S | I | U | M | U |
| B | O | H | S | O | L | D | E | R | A | N | L |
| R | T | S | O | D | I | U | M | S | L | I | F |
| O | A | I | U | S | T | S | L | I | U | T | L |
| N | S | L | F | A | P | S | T | L | M | R | U |
| Z | S | I | L | L | C | H | E | I | I | O | O |
| E | I | C | U | T | I | E | O | C | N | G | R |
| G | U | O | S | U | L | F | U | R | I | E | I |
| O | M | N | M | C | A | L | C | I | U | N | N |
| N | E | O | C | A | L | C | I | U | M | S | E |
| E | C | A | R | B | O | N | S | T | E | E | L |

| | Metal | Atomic number | Electronic structure |
|---|-------|---------------|----------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

| | Non-metal | Atomic number | Electronic structure |
|---|-----------|---------------|----------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |

Answers

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C | A | R | P | L | A | T | B | R | A | S | S |
| L | P | M | A | G | N | E | S | I | U | M | U |
| B | O | H | S | O | L | D | E | R | A | N | L |
| R | T | S | O | D | I | U | M | S | L | I | F |
| O | A | I | U | S | T | S | L | I | U | T | L |
| N | S | L | F | A | P | S | T | L | M | R | U |
| Z | S | I | L | L | C | H | E | I | I | O | O |
| E | I | C | U | T | I | E | O | C | N | G | R |
| G | U | O | S | U | L | F | U | R | I | E | I |
| O | M | N | M | C | A | L | C | I | U | N | N |
| N | E | O | C | A | L | C | I | U | M | S | E |
| E | C | A | R | B | O | N | S | T | E | E | L |

| | Metal | Atomic number | Electronic structure |
|---|-----------|---------------|----------------------|
| 1 | Aluminium | 13 | 2.8.3 |
| 2 | Calcium | 20 | 2.8.8.2 |
| 3 | Lithium | 3 | 2.1 |
| 4 | Magnesium | 12 | 2.8.2 |
| 5 | Potassium | 19 | 2.8.8.1 |
| 6 | Sodium | 11 | 2.8.1 |

| | Non-metal | Atomic number | Electronic structure |
|---|------------|---------------|----------------------|
| 1 | Carbon | 6 | 2.4 |
| 2 | Fluorine | 9 | 2.7 |
| 3 | Nitrogen | 7 | 2.5 |
| 4 | Phosphorus | 15 | 2.8.5 |
| 5 | Silicon | 14 | 2.8.4 |
| 6 | Sulfur | 16 | 2.8.6 |