

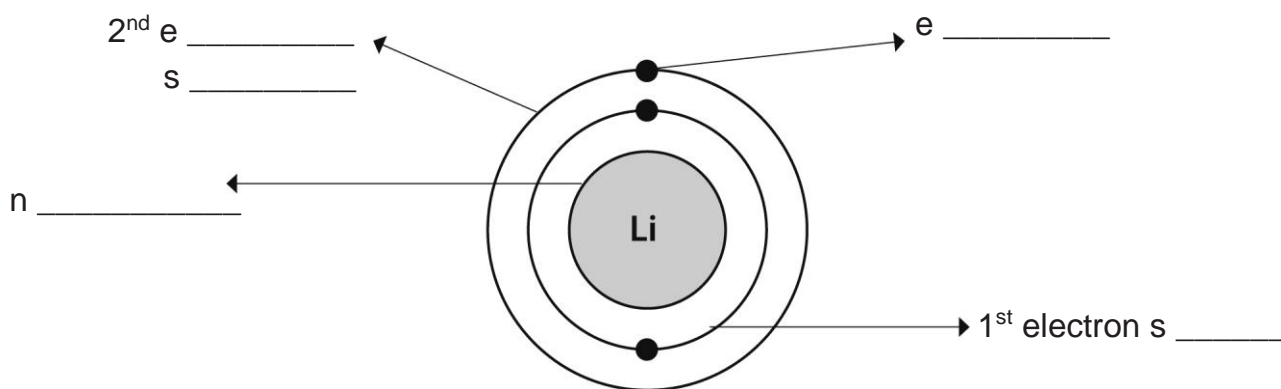
Arrangement of electrons

Electrons are always moving. They spin quickly around the outside of the **nucleus** in rings, or **shells**.

Not all shells can hold the same number of electrons.

- 1st ring (closest to the nucleus): maximum of 2 electrons
- 2nd ring: maximum of 8 electrons
- 3rd ring: maximum of 18 electrons
- 4th ring: maximum of 32 electrons

1 The diagram below shows how electrons are arranged in a lithium atom.



- What is the symbol for lithium? _____
- Label the diagram.
- How many electrons does lithium have? (Hint: Count the number of electrons in the diagram.) _____
- How many electron shells does lithium have? _____
- How many electrons are in the first shell? _____
- How many electrons are in the second shell? _____
- How many protons does lithium have in its nucleus? _____