



Name:

Class:

Student worksheet

7.3 Atoms have mass

Pages 138–139

Atoms are all about the mass

- 1 In the following table, summarise information about the structure of the atom.

	LOCATION	CHARGE	MASS
Protons			
Neutrons			
Electrons			

- 2 What does the atomic number of an atom represent?

- 3 What does the mass number of an atom represent?

- 4 How can you calculate the number of neutrons using the atomic number and mass number?

- 5 In the table below, write the conventional representation of the following elements.

LITHIUM	HELIUM	PHOSPHOROUS	ALUMINIUM
IODINE	CARBON	XENON	IRON



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- 6 Complete the following table using your knowledge of atomic number. Remember: You cannot have a decimal in the neutron column, so you must round off the mass number first.

ATOMIC NUMBER	MASS NUMBER	NUMBER OF ELECTRONS	NUMBER OF PROTONS	NUMBER OF NEUTRONS	CHEMICAL SYMBOL	NAME
3						
	35					
21						
						tin
	52					

Extend your understanding

- 7 There were many men responsible for our current level of understanding of the atom. Draw a timeline that includes the name of each scientist, the year of his discovery and what he discovered.

Democritus, John Dalton, J. J. Thomson, Lord Ernest Rutherford, Neils Bohr, Sir James Chadwick.

