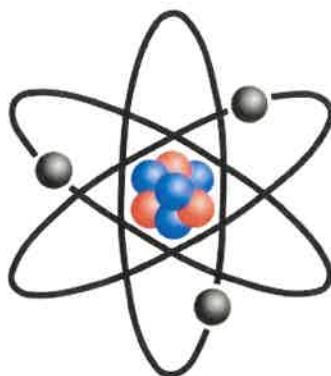


# THE ATOM

## 1 Drawing of an atom



Ways in which this drawing helps us to understand the structure of the atom.	Ways in which this drawing could be improved.

### Inside the Atom

Particle	NEUTRON	PROTON	ELECTRON
Relative charge			
Relative mass			

2 a) Give the definition of atomic number

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b) Give the definition of mass number

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c) Give the definition of relative atomic mass

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## Isotopes

3 a) Give the definition of the term isotope

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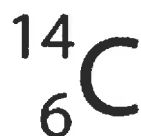
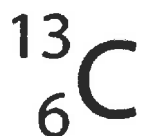
b) Explain why all the isotopes of a given element have exactly the same chemical properties

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c) Examples

ISOTOPE	PROTONS	NEUTRONS	ELECTRONS	USE
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4 a) An atom in which the number of protons is greater than the number of neutrons is



b) Which of these correctly shows the numbers of sub-atomic particles in a  ${}^{41}\text{K}^+$  ion?

	Number of electrons	Number of protons	Number of neutrons
<b>A</b>	19	19	20
<b>B</b>	18	20	21
<b>C</b>	18	19	22
<b>D</b>	19	18	23