



# Atomic Structure and the Periodic Table

## Multiple Choice Questions

### Set 2

You may use the periodic table to answer these questions.

Tick **one** box.

1. Which element is found in Group 1, period 3 of the periodic table?

- A. neon
- B. nickel
- C. nitrogen
- D. sodium

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2. Which subatomic particle has a positive charge?

- A. atom
- B. electron
- C. neutron
- D. proton

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3. Which element has a relative atomic mass of 108?

- A. silver
- B. selenium
- C. sulfur
- D. mercury

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4. How many neutrons are there in an atom of aluminium?

- A. 13
- B. 14
- C. 27
- D. 40

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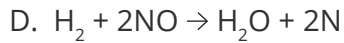
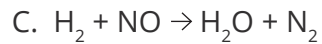
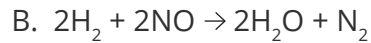
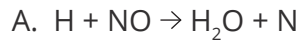
5. What name is given to elements in Group 0 of the periodic table?

- A. alkali metals
- B. halogens
- C. noble gases
- D. transition metals

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6. Hydrogen and nitrogen monoxide react to form water and nitrogen. What is the balanced symbol equation for this reaction?

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7. Which scientist conducted experimental work that provided evidence to show the existence of neutrons within the nucleus of an atom?

A. Bohr

B. Chadwick

C. Dalton

D. Thomson

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8. What does a mixture contain?

A. atoms of the same element with different numbers of neutrons

B. only one type of atom

C. two or more elements chemically combined together

D. two or more substances not chemically combined together

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9. Boron exists naturally as two isotopes,  $^{10}\text{B}$  and  $^{11}\text{B}$ . The abundance of  $^{10}\text{B}$  is 20% and the abundance of  $^{11}\text{B}$  is 80%.

What is the relative atomic mass of boron to 3 significant figures?

A. 10.2

B. 10.8

C. 11.2

D. 11.8

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10. Which statement about the elements in Group 7 is **not** correct?

A. they are all unreactive

B. they all have seven electrons in their outer shell

C. their melting points increase as you go down the group

D. they form diatomic molecules

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