



## Atomic Structure and the Periodic Table

Specification statement	Self-assessment		
	First review 4-7 months before exam	Second review 1-2 months before exam	Final review Week before exam
These are the bits the exam board wants you to know, make sure you can do all of these...			
I can recall that all substances are made from atoms	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the that periodic table shows the range of elements that are known to exist	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret the symbols on the periodic table and use them to identify elements	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term compound	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can describe the structure of an atom	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the relative size of an atom and a nucleus	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the relative masses of the three subatomic particles	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can use the periodic table to state the number of protons, electrons and neutrons in an element	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the terms mass number and atomic number	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can represent a reaction using a word equation	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can represent a reaction using a balanced symbol equation	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term mixture	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can describe different way to separate mixtures using physical processes	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can describe how a scientific model can be developed	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can describe the plum pudding model of the atom	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can describe how Rutherford and Marsden's experiments lead to the nuclear model of the atom, and the ideas the Bohr contributed to the model	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can state the Chadwick showed the existence of the neutrons	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can draw the electronic structure of the first 20 elements on the periodic table	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can use numbers to represent the electronic structure of the first 20 elements on the periodic table	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the relative charges of the three subatomic particles	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can explain why atoms have no overall charge	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can describe the formation of ions	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall that metals will go on to form positive ions	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹



I can recall the non-metals will go on to form negative ions	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the location of metals and non-metals on the periodic table	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the use of periods and groups to classify parts of the periodic table	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the development of the early periodic table	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe how Mendeleev developed the periodic table	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the properties of the noble gasses (in group -0)	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can recall that the boiling points of noble gases increase as you go down the periodic table	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the properties of group 1 metals	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the reactions of group 1 metals	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can recall that the reactivity of group 1 metals increases as you go down the group.	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can recall that group 7 element are non-metals and are found as diatomic molecules	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the reactions of group 7 non-metals	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the patterns in melting point, boiling point and reactivity in group 7	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe displacement reaction in relation to group 7 elements	😊 😐 😞	😊 😐 😞	😊 😐 😞
I can describe the properties of transition metals	😊 😐 😞	😊 😐 😞	😊 😐 😞
<b>Chemistry only</b>			
I can describe the uses of transition metals	😊 😐 😞	😊 😐 😞	😊 😐 😞
<b>Chemistry only</b>			
I can recall that transition metals form different coloured compounds	😊 😐 😞	😊 😐 😞	😊 😐 😞
<b>Chemistry only</b>			