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Merits of the Modern Periodic Table

1. The modern periodic table is based on the atomic numbers of elements which is the most fundamental property of elements.

2. The modern periodic table helps us understand why elements in a group show similar properties but elements in different groups show different properties. → In the modern periodic table the elements are arranged according to their electronic configurations. All the elements having similar electronic configurations are put in the same group and show similar properties. The elements having different electronic configurations are placed in different groups and show different properties. Thus the modern periodic table brings about the relationship between atomic structure

and properties of elements.

3 The modern periodic table explains the reasons for the periodicity in properties of elements. → It says that the electronic configurations of the elements are repeated at regular intervals, so the properties of elements are also repeated at regular intervals.

4 The modern periodic table tells us why the properties of elements are repeated after 2, 8, 18 and 32 elements.

5 There are no anomalies in the arrangement in the modern periodic table.