

Molar mass of iron?

**Solution:**

Iron is a chemical element (Fe).

The molecular mass or molecular weight ( $M_w$ ) is mass of single molecule. The units of molecular mass is g/mol. The molar mass ( $M$ ) is the mass of 1 mole of substance. The units of molar mass is g/mol. The atomic mass ( $M_a$ ) is mass of an atomic particle or the molecule. The atomic mass of the element you can find in the Periodic Table. The units of molecular mass is atomic mass unit. The value of molar mass and the atomic mass is the same but units are different.

So  $M = M_a$ ;

The atomic mass of iron from the Periodic Table is 55.845 atomic mass unit.

So the molar mass of iron is  $M(\text{Fe}) = 55.845 \text{ g/mol}$ .

**Answer:  $M(\text{Fe}) = 55.845 \text{ g/mol}$ .**