Applications of displacement reaction in industrial chemistry Displacement reactions are very important chemical reactions of chemistry.PbSO4 + 2NaNO3 Reaction between barium chloride and copper sulphate – BaCl2 + CuSO4 ?2NaCl + Br2 Examples of double displacement reaction – Reaction between potassium nitrate and aluminum chloride – KNO3 + AlCl3 ?AgCl + NaNO3 Examples of Displacement Reactions Examples of single displacement reaction – Reaction between zinc and copper sulphate Zn + CuSO4 ?If you are looking for different types of chemical reactions then you can get detailed study material on it by registering yourself on Vedantu or by downloading Vedantu leaning app for class 6–10, IITJEE and NEET.In which carbon displaces iron from its oxide It is largely used in extraction of metals It is used in acid indigestion.It is used in flame photometry.For example, we use electroplating to prevent iron objects from rusting which is based on displacement reaction.Displacement Reaction Definition The type of reaction in which part of one reactant is displaced by another reactant is called displacement reaction.A–C + B It will occur if A is more reactive than B. Generally, metals and its salts give single displacement reactions.The reactivity of metals is because of their incomplete outer orbitals or due to their electronic configuration.PbCl2 + Cu Reaction between chlorine and sodium bromide – Cl2 + 2NaBr ?Fe(OH)3 + BaCl2 Reaction between lead nitrate and sodium sulphate – Pb(NO3)2 + Na2SO4 ?BaSO4 + CUCl2 Applications of displacement reactions Displacement reactions have many applications in various fields.The reaction between potassium and magnesium chloride occurs as follows – 2K + MgCl2 ?Metals with high atomic numbers tend to be more reactive as their electrons are far from the positively charged nucleus.Double displacement reactions are those reactions where the cations and anions of reactants switch places with each other or replaces each other.Al(NO3)3 + KCl Reaction between lead nitrate and potassium iodide – Pb(NO3)2 + 2KI ?2KNO3 + PbI2 Reaction between iron chloride and barium hydroxide – FeCl3 + Ba(OH)2 ?Those reactions in which one element replaces another element from its salt or compound are called single displacement reactions.For example, potassium is more reactive than magnesium, so potassium replaces magnesium from magnesium chloride.CB + AD Example of double displacement reaction – Reaction between silver nitrate and sodium chloride is an example of double displacement reaction.CuNO3 + 2Ag Reaction between iron and copper sulphate – Fe + CuSO4 ?FeSO4 + Cu Reaction between lead and copper chloride – Pb + CuCl2 ?FeSO4 + Cu There are two types of displacement reactions – Single displacement reaction Double displacement reaction What is Single Displacement Reaction?So, reactivity series of metals can be defined as a series of metals, in order of reactivity from highest to lowest.Metals form positively charged ions as they tend to lose electrons.So, Hydrogen is a non–metal but still it has been included in the reactivity series as it helps in the comparison of reactivity of metals.Generally, it can be represented as follows – AB + CD ?ZnSO4 + Cu Reaction between copper and silver nitrate – Cu + 2AgNO3 ?As replacement of one ion of reactant takes place by another ion of reactant.In these reactions more reactive metal displaces less reactive metal from its salt.2KCl + Mg What is Reactivity Series?Reactivity series is the series of metals based on their reactivity from highest to lowest.In which aluminum displaces iron from its oxide.They are used in many ways in various fields.Example – Fe + CuSO4 ?These are also called single replacement reactions.The reaction given below – AgNO3 + NaCl ?Some of them are given below – It is used in thermite welding.This was all about displacement reactions.It is also called a replacement

reaction. General representation can be written as well – A + B–C ?