



Multibhashi



Articles



Class Objective

To understand the articles and be able to use them in sentences



Concept A:

In English the articles are a, an, and the which generally go with a noun. Articles are of two types: Definite Article and Indefinite article.

1. Definite Article: In English, there is only one definite article - the. But in Spanish, the same article “the” has four forms depending on the number and gender of the object:

aa	Singular	Plural
Masculino	El	Los
Feminino	La	Las



Concept A:

2. Indefinite Article: The Indefinite articles in English are -- a, an and in the plural form we use some. In Spanish, the indefinite article has four forms:

	Singular	Plural
Masculino	Un	Unos
Feminino	Una	Unas



Concept B:

Note 1:

- Noun ending with -O, consonant, -ma = Masculino
- Noun ending with a, -dad, -cion, z, -sion, -tud = Feminino.

Note 2:

To make Noun singular to plural

- If Noun is ending with vowel = add S
- Noun is ending with consonant = add 'es'
- Noun is ending with z = remove z and add 'ces'



Concept B:

Note 3:

- Un cuaderno un cuaderno rojo
- Una manzana una manzana roja

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EECS 441: ADVANCED TOPICS IN SIGNAL PROCESSING
LECTURE 1: INTRODUCTION TO THE COURSE

1.1 COURSE OBJECTIVES

1.2 COURSE STRUCTURE

1.3 COURSE MATERIALS

1.4 COURSE SCHEDULE

1.5 COURSE FACULTY

1.6 COURSE CONTACTS

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EECS 441: ADVANCED TOPICS IN SIGNAL PROCESSING
LECTURE 1: INTRODUCTION TO THE COURSE

1.1 COURSE OBJECTIVES

1.2 COURSE STRUCTURE

1.3 COURSE MATERIALS

1.4 COURSE SCHEDULE

1.5 COURSE FACULTY

1.6 COURSE CONTACTS

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EE-561: ADVANCED TOPICS IN SIGNAL PROCESSING
LECTURE 1: INTRODUCTION TO THE COURSE

1.1 COURSE OBJECTIVES

1.2 COURSE STRUCTURE

1.3 COURSE MATERIALS

1.4 COURSE SCHEDULE

1.5 COURSE FACULTY

1.6 COURSE CONTACTS

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EE-561: ADVANCED TOPICS IN SIGNAL PROCESSING
LECTURE 1: INTRODUCTION TO THE COURSE

1.1 COURSE OBJECTIVES

1.2 COURSE STRUCTURE

1.3 COURSE MATERIALS

1.4 COURSE SCHEDULE

1.5 COURSE FACULTY

1.6 COURSE CONTACTS

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EE-561: ADVANCED TOPICS IN SIGNAL PROCESSING
LECTURE 1: INTRODUCTION TO THE COURSE

1.1 COURSE OBJECTIVES

1.2 COURSE STRUCTURE

1.3 COURSE MATERIALS

1.4 COURSE SCHEDULE

1.5 COURSE FACULTY

1.6 COURSE CONTACTS

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EECS 441: DIGITAL SIGNAL PROCESSING
LECTURE 10: DISCRETE-TIME SYSTEMS

1.1. INTRODUCTION

1.2. DISCRETE-TIME SYSTEMS

1.3. SUMMARY

1.4. DISCRETE-TIME SYSTEMS

1.5. DISCRETE-TIME SYSTEMS

1.6. DISCRETE-TIME SYSTEMS

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
INSTITUTE OF TECHNOLOGY
DEPARTMENT OF ELECTRICAL ENGINEERING
EECS 441: DIGITAL SIGNAL PROCESSING
LECTURE 10: DISCRETE-TIME SYSTEMS

1.1. SYSTEM REPRESENTATION

1.2. SYSTEM ANALYSIS

1.3. SYSTEM DESIGN

1.4. SYSTEM IMPLEMENTATION

1.5. SYSTEM OPTIMIZATION

1.6. SYSTEM EVALUATION

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**
OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**
OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**
OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**
OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**
OF **THE** **CITY** **OF** **NEW** **YORK**

THE **NEW** **YORK** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

OF **THE** **LIBRARY** **OF** **THE** **ARTS** **AND** **SCIENCES**

OF **THE** **CITY** **OF** **NEW** **YORK**

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY

PHYSICAL CHEMISTRY
PHYSICAL CHEMISTRY