



NCERT Solutions for 11th Class Biology: Chapter 1- The Living World



indCareer



indCareer



indCareer

NCERT Solutions for 11th Class Biology: Chapter 1-The Living World

Class 11: Biology Chapter 1 solutions. Complete Class 11 Biology Chapter 1 Notes.

NCERT Solutions for 11th Class Biology: Chapter 1-The Living World

NCERT 11th Biology Chapter 1, class 11 Biology chapter 1 solutions

Exercises

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>

1. Why are living organisms classified?**Answer**

The diversity of living beings makes it a challenge to systematically study them. Classification is a helpful tool to categorize them based on certain common characteristics. This enables scientists to study them in a more systematic way. The study of living beings is essential for the benefit of humankind. Discovery of new medicines, and better yielding crop varieties can be made possible only by systematic study of living beings. Moreover, environmental protection also makes it necessary for us to study the living beings in a systematic way.

2. Why are the classification systems changing every now and then?**Answer**

Millions of plants, animals, and microorganisms found on earth, have been identified by the scientists while many new species are still being discovered around the world. Therefore, to classify these newly discovered species, with new characters, new systems of classification have to be devised every now and then. This creates the requirement to change the existing systems of classification.

3. What different criteria would you choose to classify people that you meet often?**Answer**

In our day to day life we categorize people based on the basis of level of education, profession, hobbies, native place, sex etc.

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>

4. What do we learn from identification of individuals and populations?

Answer

In a diverse country like India we can learn from identification of individuals and populations about the native place, mother tongue, costumes, food habit, religion, caste, etc.

5. Given below is the scientific name of Mango. Identify the correctly written name.

Mangifera Indica

Mangifera indica

Answer

In binomial system of nomenclature, the generic name of a species always starts with a capital letter whereas the specific name starts with a small letter. Therefore, the correct scientific name of Mango is *Mangifera indica*.

6. Define a taxon. Give some examples of taxa at different hierarchical levels.

Answer

A particular level of hierarchy in the classification of living beings is called a taxon. For example, the basic level of classification is species, followed by genus, family, order, class, phylum or division, in ascending order.

7. Can you identify the correct sequence of taxonomical categories?

(a) Species → Order → Phylum → Kingdom

(b) Genus → Species → Order → Kingdom

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>

(c) Species → Genus → Order → Phylum

Answer

Both (a) and (c) represent correct sequences of taxonomic categories as the correct hierarchical arrangement of taxonomic categories in ascending order is

Species → Genus → Family → Order → Class → Phylum → Kingdom

In sequence (b), species should have been followed by genus. Therefore, it does not represent the correct sequence.

NCERT 11th Biology Chapter 1, class 11 Biology chapter 1 solutions

8. Try to collect all the currently accepted meanings for the word species. Discuss with your teacher the meaning of species in case of higher plants and animals on one hand and bacteria on the other hand.

Answer

In biological terms, species is the basic unit of taxonomy. It can be defined as a group of similar organisms capable of interbreeding freely among themselves under natural conditions to produce fertile off springs.

Therefore, a group of similar individuals that are reproductively isolated from other group of individuals form a species.

Species can also be defined as group of individuals that share the same gene pool.

NCERT 11th Biology Chapter 1, class 11 Biology chapter 1 solutions

9. Define and understand the following terms:

Answer

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>

(i) Phylum: A group of closely related classes is called phylum. For example: pisces, amphibia, reptilia, aves and mammalia belong to the Phylum Chordata.

(ii) Class: The group of closely related orders is called class. For example: orders Primata and Carnivora belong to the class Mammalia.

(iii) Family: A group of closely related genera is called a family. For example: family hominidae contains Apes, Monkeys and Man. In plants, families are categorized on the basis of vegetative and reproductive features.

(iv) Order: A group of closely related families is called order. For example: order carnivora, includes many families.

(v) Genus: A group of closely related species is called genus. For example: genus Solanum, includes many species such as nigrum, melongena, tuberosum, etc.

10. How is a key helpful in the identification and classification of an organism?

Answer

Key is taxonomical aid used for identification of plants and animals based on the similarities and dissimilarities. Selection of one character leads to rejection of another character while identifying a particular species or genera or family and so on. For example presence or absence of hair on body can give a clue if an animal belongs to mammalian or not.

NCERT 11th Biology Chapter 1, class 11 Biology chapter 1 solutions

11. Illustrate the taxonomical hierarchy with suitable examples of a plant and an animal.

Answer

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>

Classification of a plant

As an example, let us classify Mango

Phylum: Angiosperm

Class: Dicotyledons

Order: Sapindales

Family: Anacardiaceae

Genus: Mangifera

Species: Mangifera indica

Classification of a animal

As an example, let us classify Humans

Phylum: Chordata

Class: Mammalia

Order: Primata

Family: Hominidae

Genus: Homo

Species: Homo sapiens



Chapterwise NCERT Solutions for Class 11 Biology:

- Chapter 1: The Living World
- Chapter 2: Biological Classification
- Chapter 3: Plant Kingdom
- Chapter 4: Animal Kingdom
- Chapter 5: Morphology of Flowering Plants
- Chapter 6: Anatomy of Flowering Plants
- Chapter 7: Structural Organisation in Animals
- Chapter 8: Cell-The Unit of Life
- Chapter 9: Biomolecules
- Chapter 10: Cell Cycle and Cell Division
- Chapter 11: Transport in Plants
- Chapter 12: Mineral Nutrition
- Chapter 13: Photosynthesis in Higher Plants
- Chapter 14: Respiration in Plants
- Chapter 15: Plant - Growth and Development
- Chapter 16: Digestion and Absorption
- Chapter 17: Breathing and Exchange of Gases
- Chapter 18: Body Fluids and Circulation
- Chapter 19: Excretory Products and Their Elimination
- Chapter 20: Locomotion and Movement
- Chapter 21: Neural Control and Coordination
- Chapter 22: Chemical Coordination and Integration

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>

About NCERT

The National Council of Educational Research and Training is an autonomous organization of the Government of India which was established in 1961 as a literary, scientific, and charitable Society under the Societies Registration Act. The major objectives of NCERT and its constituent units are to: undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develop educational kits, multimedia digital materials, etc.

Organise pre-service and in-service training of teachers; develop and disseminate innovative educational techniques and practices; collaborate and network with state educational departments, universities, NGOs and other educational institutions; act as a clearing house for ideas and information in matters related to school education; and act as a nodal agency for achieving the goals of Universalisation of Elementary Education.

Its headquarters are located at Sri Aurobindo Marg in New Delhi.

[Visit the Official NCERT website](#) to learn more.

<https://www.indcareer.com/schools/ncert-solutions-for-11th-class-biology-chapter-1-the-living-world/>