

CLASS 11

BIOLOGY

EXTRA QUESTIONS

Class 11 Biology Chapter 1 The Living World – Extra Questions with Answers

Extra practice questions for Class 11 Biology Chapter 1 (The Living World), beyond the textbook. These Class 11 Biology Chapter 1 important questions are handy for last-minute exam practice.

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Extra practice questions for Class 11 Biology Chapter 1 (The Living World), beyond the textbook. These Class 11 Biology Chapter 1 important questions are handy for last-minute exam practice.

Very Short Answer Questions (1 mark)

Q1. Who introduced binomial nomenclature?

Ans: Carl Linnaeus.

Q2. What is the basic unit of classification?

Ans: Species.

Q3. Name the code that governs the nomenclature of animals.

Ans: ICZN (International Code of Zoological Nomenclature).

Q4. What is a herbarium used for?

Ans: To preserve dried plant specimens for identification and reference.

Q5. What is the correct way to write a scientific name?

Ans: Genus name (capitalized) followed by species name (lowercase), both italicized, e.g. *Homo sapiens*.

Short Answer Questions (2–3 marks)

Q6. List the taxonomic categories in hierarchical order from Kingdom to Species.

Ans: Kingdom > Phylum/Division > Class > Order > Family > Genus > Species.

Q7. Differentiate between taxonomy and systematics.

Ans: Taxonomy deals with identification, nomenclature, and classification of organisms. Systematics is a broader field that also studies evolutionary relationships and diversity among organisms.

Q8. What are taxonomical keys and why are they useful?

Ans: Keys are tools based on contrasting characters (usually in pairs called couplets) used for identifying plants and animals based on similarities/dissimilarities.

Higher-Order Thinking / Application Questions

Q9. Explain why “growth” alone cannot be used as a defining feature to distinguish living from non-living things, using the example of a growing crystal versus a growing organism, and identify what characteristic truly distinguishes them.

Ans: A crystal can also “grow” by external accumulation of material on its surface without any internal cellular processes taking place, meaning growth in a purely physical/external sense is not exclusive to living things. What truly distinguishes living organisms is that their growth occurs through internal, cellular processes: cells within the organism’s body increase in number (via cell division) and/or size, driven by intrinsic metabolic processes. This is why metabolism (the sum of all chemical reactions occurring within an organism, including anabolism and catabolism) is considered a defining, non-negotiable characteristic of life, unlike growth alone which can occur (in a superficial sense) in some non-living systems like crystals or mountains (through external deposition) without being underpinned by cellular metabolism.

Q10. Explain why binomial nomenclature, rather than common (vernacular) names, is essential for scientific communication about organisms, using an example of how the same organism might have different common names in different regions.

Ans: Common names for organisms vary widely by region, language, and culture — for example, the plant

Mangifera indica is called “mango” in English, “aam” in Hindi, and by yet other names in other languages, and even within a single language, the same common name might sometimes be used for entirely different species in different areas, leading to confusion and ambiguity. Binomial nomenclature solves this problem by assigning every species a single, universally standardized, Latinized two-part scientific name (genus+species) that is internationally recognized and governed by formal nomenclature codes (like ICBN/ICN for plants and ICZN for animals), ensuring that scientists anywhere in the world, regardless of their native language, can refer to the exact same organism without ambiguity, which is essential for accurate scientific research, taxonomy, and cross-country/cross-language biological communication.

Class 11 Biology Chapter 1 – Solutions and Notes

For complete step-by-step answers and a quick summary, check the [Class 11 Biology Chapter 1 Solutions](#) and [Class 11 Biology Chapter 1 Revision Notes](#).

See also: [Chapter 1](#)