

Student learning outcome (SLO):

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| <ul style="list-style-type: none"> • Classification of living organisms and its importance. | <ul style="list-style-type: none"> • Structure of a dicot and a monocot plant |
| <ul style="list-style-type: none"> • Difference vertebrates and invertebrates | <ul style="list-style-type: none"> • Classification of vertebrates into five groups |
| <ul style="list-style-type: none"> • Classification of invertebrates into five groups | <ul style="list-style-type: none"> • Effect of human activities on biodiversity |
| <ul style="list-style-type: none"> • Measures for conservation of endangered species | |

Overview:

The main purpose of this lesson is to understand the classification and its importance to study different organisms.

Introduction:

Video can be shown to explain classification of living things.

<https://www.youtube.com/watch?v=SlbFuiCfkr8>



Material:

The teacher will bring a chart showing different groups of living organisms.

Keywords:

Vertebrates, invertebrates, angiosperms, gymnosperms monocots, dicots, conservation.

Activities:

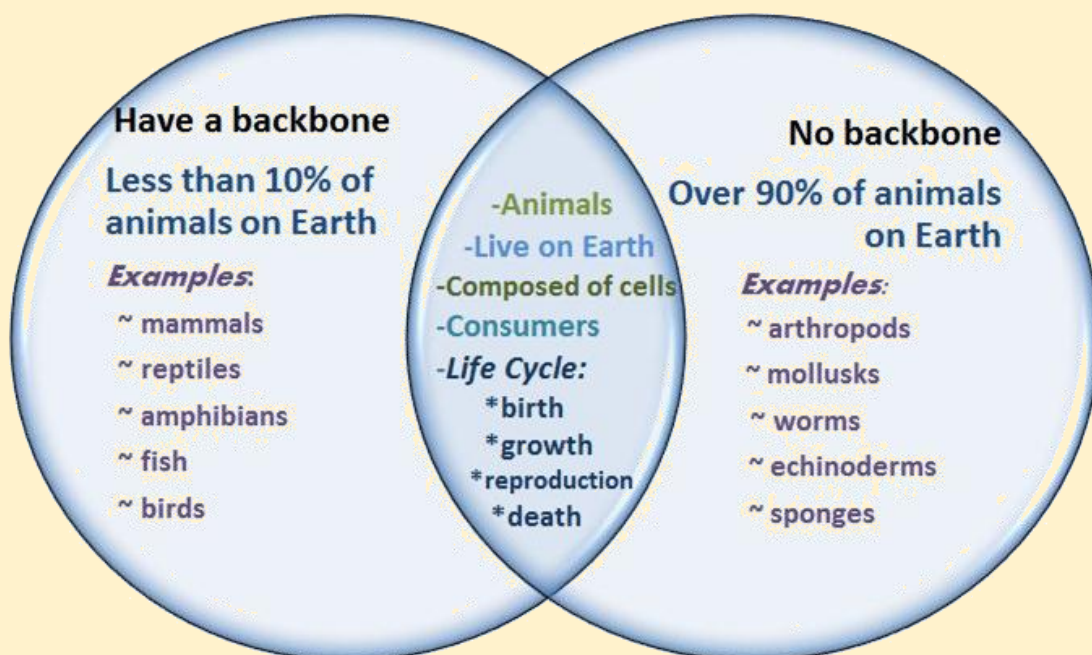
1. Explain students why classification is important. When organisms are classified, they are simply put into a group with other organisms “**on the basis of similarities**”.
2. Make a display of the “**five groups of organisms**” with examples and the key characteristics of each group.

3. Work in groups of two. Collect pictures of animals of each class of “**vertebrates and invertebrates**” with their characteristics. Prepare a report and present it in front of your class.
4. Bring seeds, leaves or flowers of different plants in the class. Ask the students to observe and categorize them either they are “**monocots or dicots**”.
5. Working in group ask the students to “**observe two different ecosystems**”. Describe differences between them and identify which one is more diverse. Also discuss the consequences if certain species were to be removed.
6. Organize “**plant a tree**” campaign in your school.
7. Venn Diagram:

Venn diagrams are a great way to help students visualize the connections between two things, in this case, vertebrates and invertebrates. To make this graphic organizer, just draw two overlapping circles on a sheet of paper. Make sure to make the circles large enough to have room to write.

Vertebrates

Invertebrates



Essential questions:

Before starting the lesson, ask some questions to explore the background knowledge of students:

1. What are living things?
2. Do vertebrates have a backbone?
3. What is the difference between monocots and dicots?
4. What is biodiversity?
5. Compare endangered and extinct species.
6. Ask students to make a flowchart showing different organisms.
