

Decision Tree

Outdoor Activity

This activity provides teachers with a resource for exploring the many ways plants and animals adapt to winter. It can be done indoors or outdoors and all decision tree 'titles' have been provided in this lesson. There is a short 3.5 minute video that accompanies this resource. In the video you will see how the Decision Tree is laid out and how each stage of the decision tree can be explained in the field.

Instructions

1. Watch the 3.5 minute Decision Tree Video which describes how to use the decision tree with your students. It is meant for teachers so you can replicate the decision tree titles that are included for you, however, you could also play it for students if desired.
2. Gather the students outdoors or indoors with enough space for you to lay out the decision tree in a dichotomous key fashion.
3. Go through all the headings (similar to how it's outlined in the attached video) as two options for winter survival at each level.
4. Print photos of various animals and hand out one to each of your students. Have them work through where their animal falls on the decision tree. You could also use the animals cards found in the "Web of Life" activity.
5. Consider extending the learning by conducting individual research projects on animals and their winter adaptations.

Materials:

- [Winter Decision Tree Appendix](#)
- Photos/lists of animals that can be placed/added to the decision tree (not provided – can be found via google)
- [Decision Tree Video](#)

Discussion

The Decision Tree acts like a dichotomous key where it provides two possible 'response' choices for each adaptation technique. All animals will fall somewhere on the flow chart. The responses indicate how the animal best adapts to the 5 factors of winter (Snow, Cold, Radiation, Energy, Wind). Some animals will be completely absent from these factors, meaning they do not live in an area where a response is required, the remaining animals have some sort of physiological response to the factors. Students find this way of looking at animals adaptations and it often elicits interesting questions that could lead to inquiry-based learning.