TRUE / FALSE: BIODIVERSITY EDITION

Source: Maggie Kilian

Basic Description:
With active bodies and brains, participants test their knowledge, learn from one another and explore issues related to biodiversity and biodiversity conservation.

Materials:
List of themed true/false questions and answers
Optional: any photos or objects needed to ask and answer questions

Set up:
o Outdoors or gymnasium
o Have one person (or object) stand at one end of a trail and another at the other end, both within sight. One person/object represents “truth” the other "falsehood". To begin, the participants stand in the middle with the leader.

Time Needed:
10 to 20 minutes

Ages/Abilities:
Ages 4 and up (adults too!)
If you have a group or person with limited mobility they can participate by pointing in the direction they think the answer is and/or by being one of the true/false endposts.

Procedure:
1. Leader reads out a statement.
2. Participants run to the side that represents what they think the answer is.
3. Leader leads short discussion around what the answer is and why by asking group members to explain their responses.
4. Participants gather back in the middle with the leader to listen to the next statement.

Follow up discussion:
You can have some statements that could be either True or False depending on how you approach the issue. This can lead to some great discussions.

Extensions:
You can use any topic and any series of questions tailored to your theme and audience.
This is a nice way to introduce a topic and assess your audience’s prior knowledge; it is also a fun way to wrap up a program or topic or trip by setting your group up for success using questions you’ve explored in the past.
You can have your participants develop the true/false statements as part of an on-going project ahead of time.
Some Suggested Biodiversity True/False Questions

1. About half the species of life on earth have been named and classified. T or F?
   False. Fewer than 2 million species (anywhere between 1 and 10 %) have actually been named and classified, and only about 150,000 have been scientifically studied. In Canada, there are about 150,000 species of living organisms including plants, animals, fungus, and bacteria. Only about half of those have been identified, named and classified.

2. There are about 50 million species of living things on earth. T or F?
   False but maybe true! Scientists think that there are between 3 and 100 million species on Earth. But no one knows for sure because many species have not yet been discovered or studied. There’s a lot we don’t know about life on earth!

3. How many of you live in southern Ontario and Quebec or Southern British Columbia? Most Canadians do too, and expanding cities and pollution are two of the biggest threats to biodiversity in Canada. T or F?
   True! These ecosystems are home to many endangered species. Most Canadians live where some of the most threatened species also live. These species are threatened mostly because of the loss of their habitat to people. What can we do to help?

4. There are currently no more than 200 plant and animal species at risk in Canada. T or F?
   False! In Canada there are 431 species at risk according to the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). American Ginseng, Whooping crane, peregrine falcon, and swift fox are examples

5. In Canada, there are more species of earthworms (Oligochaeta) than there are mammals.
   T or F?
   True! Mammals are much more studied than things like earthworms and prairie grasses, so we tend to hear more about them. But healthy biodiversity means all species are maintained.

6. Almost all of the original prairie ecosystems in Canada are gone. T or F?
   True! Only 10% of Canada’s original prairies remain

7. Canada’s boreal forest is one of the biggest intact forest ecosystems in the world. T or F?
   True! It is about the size of 21 United Kingdoms, according to Greenpeace Boreal Challenge (529 million acres).

8. It is estimated that 800 of the 5000 plant species in Canada are exotic introductions that could maintain populations in the wild. T or F?
   True! Invasive plants like purple loosestrife are a major threat to Canada’s plant biodiversity.
9. Many common drugs we take are from plants and other living things. T or F?
True. In the United States alone, more than 40 per cent of all prescriptions written include drugs that originally came from wild species of fungi, bacteria, plants and animals. Examples include aspirin (from willow *Salix alba*), codeine and morphine (from the poppy *Papaver somnolifer*), and taxol (from Pacific Yew *Taxus brevifolia*).

10. As a single person, there is little I can do to protect plant biodiversity. T or F?
False. There is a lot you can do! For example: native plant gardening, plant monitoring, joining naturalist club, discovering local native flora, joining campaigns to protect habitats, leading native plant walks in your community, etc.