## **ACTIVITY 5: THE BIRD COUNT CHALLENGE**



The purpose of this activity is for students to engage students in bird watching and citizen science by encouraging them to identify and record the birds they observe in their local environments and communities.

## <u>Materials:</u>

- Bird identification guide or app
- Binoculars
- Notepads or bird count sheets
- Pencils or pens
- Access to the <u>Cornell Lab of Ornithology's</u> <u>eBird website</u> (optional)

First, ask students to complete the following sentence out loud and all at once: "during the winter birds fly..." Ask them to consider how we know that birds fly south for the winter? Explain to them that not only have we learned that birds often fly south in the U.S. during the winter, but also that one of the ways that scientists have learned this is by mapping the types and quantities of different birds in various areas over time and tracking the patterns. This leads to the ability to predict and explain migration patterns of birds and for us to monitor what is going on with different bird species year round.

Next, inform them that as part of this activity, they are going to monitor the bird populations in their environments and communities through the bird watching challenge. Emphasize the important role that citizen science can play in bird monitoring for conservation and scientific research. Explain that the overall process of this activity will have students watching for, identifying, counting, and documenting the number of each type of bird in their watch area. Have them partner/group up and provide them with the materials that they will need to conduct the bird count challenge. Then, assign locations for the bird watching activity, such as a spot at school, students' homes, a local park, or other natural area in the community. Encourage students to choose a location that is accessible and safe for them to explore the birds with their partners. Give students a set amount of time to observe and record the birds they see in the designated area. Encourage them to use binoculars to get a closer look at the birds and to note and log important details, such as size, color, and behavior. They can complete the bird count challenge on a single occasion or multiple times over a period of days/weeks. Remind them to use the bird identification guide or app to help identify any birds that were not immediately recognizable. Have students tally up the number of birds they observed and record this information on their notepads, apps, or bird count sheets with their groups.

Last, after the observation period is complete, reconvene as a group and have all students share their data to collectively summarize the birds they observed and recorded. You could create a shared class spreadsheet, make a class histogram on chart paper or a large whiteboard, or find another way to summarize the data. Make time to analyze the data as a class once it is summarized. Have groups compare their findings to those of other students, and discuss the similarities and differences between everyone's results. Ask them to consider how this data might compare at different times of the year?

As an extension of the activity, you can consider repeating the data collection during a different season of the year. You could also have students enter their bird observations into <u>eBird.org</u>, a citizen science platform from Cornell University where they can contribute their data to ongoing research and bird monitoring efforts. If you choose to extend this activity, be sure to follow up by discussing the importance of citizen science and how students' bird observations can help scientists better understand and protect bird populations.