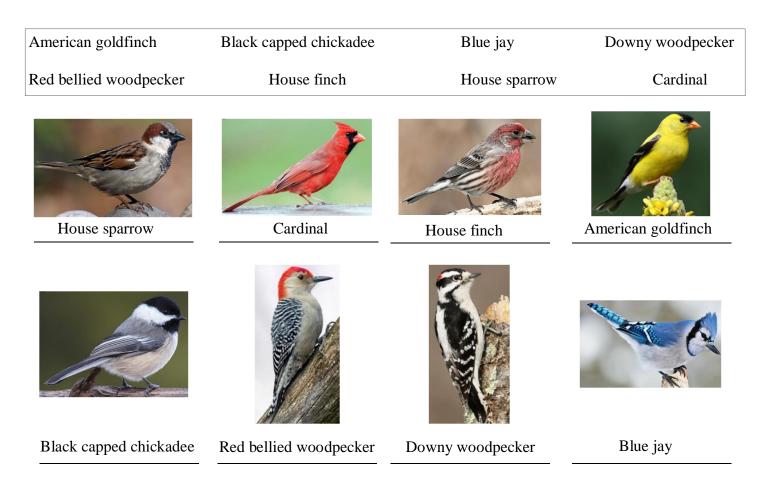
## **Bird Fact Sheet**

- 1. If you don't own a bird feeder, you can make one using a variety of items you may have at home. One option is to scrape out half of a shell of an orange or grapefruit, tie on some strings, and fill it with bird food. Another is to use items you may find in your recycling bin. Drink cartons can easily be made into bird feeders by cutting a large hole on the side opposite from the handle. The hole should start 2-3 inches from the bottom. It should be about 6 inches high and 3-6 inches wide to make enough room for the birds to get in. Add a stick near the bottom of the hole for birds to perch on. You can then decorate it, fill it with seed, and then hang it outside with some rope. One other option is to find a pinecone or toilet paper roll, roll it in peanut butter or shortening, and then cover it with bird seed.
  - a. Make sure to offer food that is good for the birds and that they will like. The food should include plain sunflower seeds, plain peanuts, cracked corn, fruits (grapes, oranges, and bananas), and/or soaked raisins.



2. The correct answers to the bird matching is below.

Identifying birds by sight can be difficult when you're first starting out. To help you identify other birds at your feeder, download the free Merlin App, made by Cornell Lab of Ornithology. It allows you to put in specific information to help you identify your bird.

- 3. Every species of bird has its own call that is different from other birds. Just like learning by sight, learning to recognize birds by their calls can be very difficult, so naturalists (experts on natural history) and scientists come up with phrases that sound similar to the call to help them remember. For example, during one chickadee call, it sounds like they're saying "chicka-dee-dee-dee", while blue jays sound like they're yelling their name "JAY JAY JAY". You can also listen to other bird calls on the Merlin App (listed above) to try to identify which species the call is coming from.
- 4. Noticing specific characteristics of the birds you see is important when trying to identify them. Practicing drawing different birds can train your brain to notice these specific characteristics. Many birders (people who watch birds) will look at the shape of a bird's beak, the colors on the feathers, the patterns on the feathers, whether or not the bird has a crest, their shape during flight, and more in order to identify them. Once you get started with identifying birds, you will find that certain groups of birds, like sparrows and ducks, are harder to identify by species than others. You will also learn that male and female birds often look different. Males are often brighter and more beautiful than the females. This is because a male bird's main job is to find a mate. Females have better camouflage because they are often the ones to raise the babies, so they need to blend in with their environment.
- 5. Ornithologists are bird scientists. They study bird physiology (their body makeup), genetics, behavior, and ecology (how they fit within an ecosystem). When we study birds, we can learn about their habits what food they prefer, what time of day they are most active, their behaviors, where they spend time, etc. Many ornithologists focus on bird migration. Every year, specific bird species will travel long distances in search of food, shelter, and a mate. In Buffalo, many birds leave during the winter and head south to find a warmer climate. These birds will then return to Buffalo in the spring when there is more food available. Studying bird migration is helpful so we can learn the locations that birds rely on for food, shelter, and breeding. We can then work to protect those areas in order to help birds. Watching birds in your backyard can help you make a connection with your local wildlife and teach you about your local ecosystem.
  - a. When collecting data, choose an identifier for your bird. If you don't know the species, you can make up a name.
- 6. After looking at and analyzing data, scientist often think about what questions they have. These questions then lead to new studies. You can make your own study like an ornithologist by asking a question about the observations on your data chart. Think about a question that you can answer by watching your feeder over time. It can be based on food preference, weather, time of day, animal interactions, or anything else you can think of. Think of a hypothesis (educated guess) and come up with a plan for how you will take data. This can be a chart like the one on the worksheet, or you can make your own method for data collection. Once you have your methods figured out, you should start collecting data. The longer you collect data, the better your results will be. When you finish with your data collection, look at your data and see if your hypothesis was correct. After scientists finish a study, they often repeat that study to see if they get the same results. This helps scientists make sure they are getting the best information possible.