10: Bird Bonanza

From carrier pigeons, to kiwis; to night owls, and penguins; from the unique dancing birds of paradise to toucans and storks, birds are unique species that range in color, shape, and size. There are over 10,000 different species of birds in the world, and the Ostrich is recorded as the largest bird. These descendants of dinosaurs have hollow bones and feathered wings which allow them the gift of flight! Although birds may not look like other scaled animals such as snakes nor are birds cold blooded, birds are classified as reptiles which are warm blooded vertebrates that produce offspring by laying eggs.

Reading Recommendations:

Children
1. *A Place for Birds* by Melissa Stewart
2. *The Language of Birds* by Rafe Martin
3. *The Message of Birds* by Kate Westerlund
4. *Elsie's Bird* by Jane Yolen
5. *From Egg to Bird* by Marlene Reidel
7. *Our Yard is Full of Birds* by Anne Rockwell

Juniors
1. *Hoot* by Carl Hiaasen
2. *Birds* by Carolyn Boulton
3. *How to Attract Birds* by John V. Dennis
4. *Crinkleroot's Guide to Knowing Birds* by Jim Arnosky
5. *The Aeriel Hunters: Birds* by Martin Bramwell  

**Teens**
1. *The Conference of Birds* by Ransom Riggs  
2. *North American Birds* by Corus Milne  
3. *The Birds of NH* by Allan R. Keith  
4. *Backyard Birding*  
5. *The Bird and the Blade* by Megan Bannen  
6. *Canary* by Rachele Alpine

**Activity:**

**Materials**
- Pinecones  
- Jar of peanut butter (or other nut butter)  
- Bird seed (or create a mixture of other foods safe for birds, such as cooked rice, cereals, sunflower seeds, corn, and oats)  
- Ribbon, twine, or string  
- Paper plates or covered work surface  
- Bowls or shallow tins (used to hold the bird seed)  
- Knife or other utensil (to spread the peanut butter)

**Procedure**
Using pinecones to craft your own personal bird feeder, this activity will attract chirping birds and other wildlife to your backyard!

1. To begin making the pine cone bird feeders, you need to place your pine cone onto the paper plate, or your designated work space.  
2. Take a butter knife, or your preferred utensil, and scoop out some peanut butter, which you will then spread the peanut butter over your pinecone. Be sure to fill all of the cracks and creases with the sticky peanut butter!  
3. Next, sprinkle the bird seed on the pine cone so it sticks to the peanut butter. You can also choose to roll the peanut butter filled pinecone in a tray of prepared bird seed. If you want to better spread the bird seed around the pinecone add on some additional peanut butter to mix with the bird seed.  
4. Then tie a piece of your ribbon, twine, or string around the top of the pine cone.  
5. Your bird feeder is not complete and ready for the birds. Find the perfect spot outside and hang the feeder from a tree or hook. Keep and eye out to spot all the birds that come to east on your creation!

**Dive Deeper:**
After reading and/or completing the activities, does this topic peak your interest?  

Check out these websites to further explore the topic of birds:

can-help-birds/feeding-birds/safe-food-for-birds/

Check out these videos and films to visually learn more:
1. Top 10 Most Stunningly Beautiful Birds in the World — https://www.youtube.com/watch?v=axa5KI06RDE
2. Our Planet: Birds of Paradise Dancing — https://www.youtube.com/watch?v=nPhVOZiPokA
4. How to Attract Birds to Your Feeder — https://www.youtube.com/watch?v=jH0425VzERs
5. Free Birds (2013 Film)
6. Angry Birds (2016 Film)
7. Rio (2011 Film)
8. Piper (2016 Short Film)
9. Nim’s Island (2008 Film)
10. For the Bride (2000 Short Film)
11. March of the Penguins (2005 Documentary)

To stimulate the brain and engage in active learning, ask these questions:

Looking to build upon writing skills? Share your responses to these questions in a personal journal or brief paragraph essay.
Looking to build upon verbal communication and discussion based skills? Share your responses around the dinner table at night with family members; each person can contributes to the conversation with their own perspectives.
Looking to visually demonstrate your ideas? Share your responses by drawing and labeling a diagram, creating a storyboard with pictures, construct a 3D model, or acting out a scene.

1. Would you want to live as a bird? What are some of the unique characteristics that birds have but humans do not (for example: flight or night vision)?

2. Observe the birds you find in your backyard, and the birds that come to your newly made bird feeder. How many different kinds of bird do you see? What do these birds look like (describe their size, colors, type of sounds they make)?

3. Use your online resources or books to trace the migration pattern of one type of bird. Why do these birds migrate? Where do birds migrate to? How long does it take the birds to get to their destination, and how long do they stay in one place?