**NEWSLETTER 4**

**PARROT**



**DUCK**



**WOODCOCK**

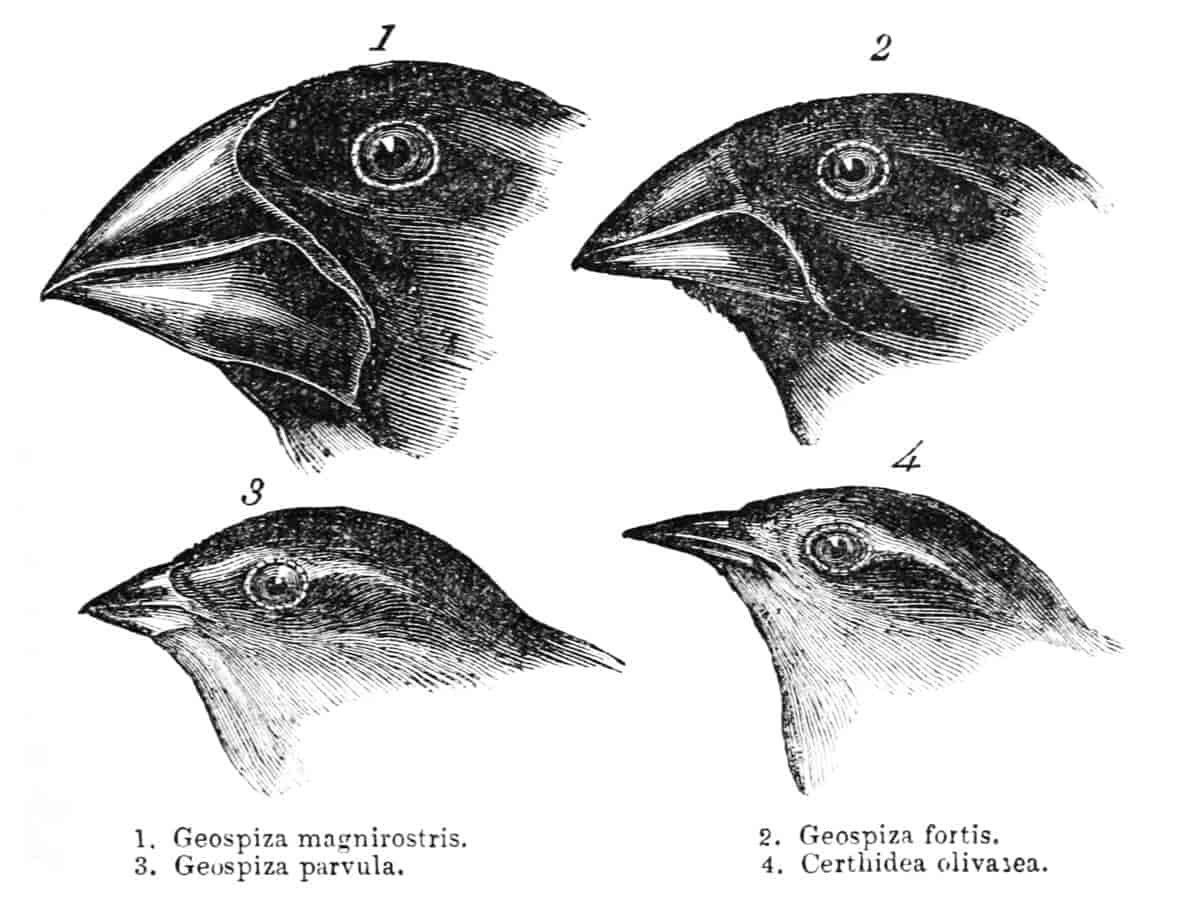
Look at the different beaks on these three birds…. They are useful for eating different types of food. Which shape do you think would be best for:

\*Scooping up and filtering food from water and mud

\*Poking deep into soft ground to get insects

\*Cracking hard shells to get nuts and seeds?

The way birds have gradually developed a variety of beak shape is an example of evolution.



Nearly 200 years ago Charles Darwin went to the Galapagos Islands and studied the plants and creatures there. He noticed finches’ beaks were slightly different depending on their diet. This, amongst many other observations, led him to his now well-known theories of natural selection and evolution.

Although people think of Charles Darwin as the father of evolution, fewer people know that his grandfather, Erasmus, came up with many of these new and amazing ideas almost 100 years earlier and passed them on to Charles. He was convinced that all forms of life may have evolved, over millions of years, from a common ancestor.

He wrote “Some birds have acquired harder beaks to crack nuts, as the parrot….. Other birds have acquired long beaks to penetrate the moister soils in search of insects or roots, as woodcocks; and others broad ones to filtrate the water of lakes, and to retain aquatic insects, as ducks. All which seem to have been gradually produced during many generations…..”

Erasmus Darwin lived and worked in Lichfield from 1756 to 1781. Although he worked as a doctor he was also a writer and poet, a scientist, inventor and botanist. His house, in Beacon Street, is now a museum: soon the museum will reopen and you will be able to come and find out more about Dr. Darwin.

Meanwhile, try and imagine how you would manage to eat using only a beak instead of a knife and fork. What shape beak would be best for picking up your favourite food?

