Name: _____ Date: _____

Dinosaurs Are Still Here

Reading level 9 (5th grade) · 572 words

Look out the window. Is there a sparrow on the fence, or a pigeon on a wire? Scientists say you are looking at a dinosaur. That is not a joke. Birds are not just far-off cousins of the dinosaurs. They belong to the dinosaur family itself. And they are still here today, all around you.

To see how scientists know, go back to the year 1861. In a quarry in Germany, a pit where stone is dug out, someone found the print of a single feather in the rock. It was about 150 million years old. That same year, workers dug up a whole skeleton of the same kind of animal nearby.

The animal was named Archaeopteryx. It was about the size of a raven. It had feathers and wings, like a bird. But it also had small teeth, three claws on each hand and a long bony tail, like the dinosaurs of its day. It was a big clue that birds and dinosaurs were kin. Imagine finding it!

A scientist named Thomas Huxley studied the fossil. He saw that it was close to some small dinosaurs. But there was a problem. For more than a hundred years, nobody found a dinosaur that clearly had feathers. The idea was like a puzzle with a piece missing, and it stayed missing for a long, long time.

Then, in 1996, a surprising fossil came out of the ground in China. It was a small dinosaur with a long tail. Its body was covered with a coat of simple, hair-like fuzz. It was the first dinosaur, outside the birds and their closest kin, to be found with signs of feathers. It was named Sinosauropteryx.

Not everyone agreed at first. A few scientists said the fuzz was not feathers at all, but a kind of frill. Then more fossils turned up, and most researchers disagreed with that idea. In 2017, a study tested one more idea. Was the fuzz collagen, a tough stuff found in skin? The tests said no, and the fuzz was still fuzz.

Even the colors can be read. Scientists looked at the fuzz on the tail of that little dinosaur under a microscope. They found tiny structures that hold color. The tail had neat bands of ginger and white, like a barber pole. Those tiny parts, in a fossil over 120 million years old, show what its stripes were. Fossils can do that.

Feathers are only part of the story. Birds and many dinosaurs share hollow bones. They share a wishbone, the same kind of bone you may pull apart at dinner. And they share habits. Scientists list building nests and sitting on eggs among the things that dinosaurs and birds both did. Look closely, and the two match.

So scientists draw the family tree like this. One big branch holds the theropods, the two-legged dinosaurs, and Tyrannosaurus is one of them. Birds sit at the tip of that branch. They are the only dinosaur family that lived through the great die-off that ended the age of the dinosaurs. That is quite a family.

Today there are around 11,000 kinds of birds. Even that first fossil may not be the oldest bird, because older fossils have been found since. The story is still being written. So tomorrow, when a bird sings outside your window, stop and listen carefully. You may be hearing a dinosaur. So what is the bird outside your window?

Questions

1. What was found in the German quarry in 1861?

A. The print of a single feather
B. A whole nest of eggs
C. A living bird

2. What did Sinosauropteryx have that surprised scientists?

A. Wings for flying
B. A coat of fuzzy, feather-like filaments
C. A beak

3. Which of these do birds and dinosaurs share?

A. Hollow bones
B. Wings for flying
C. Teeth

4. How was the argument about the fuzz settled?

A. More fossils turned up and a 2017 study tested the idea
B. Scientists never change their minds
C. The fossils changed shape

5. In this book, what does quarry mean?

A. A pit where stone is dug out
B. A small bird
C. A museum

Words to know

fossil: old buried remains
feathers: bird's covering
theropod: two-legged dinosaur
quarry: stone pit
wishbone: forked bone

Answer key: Dinosaurs Are Still Here

1. A. The print of a single feather
2. B. A coat of fuzzy, feather-like filaments
3. A. Hollow bones
4. A. More fossils turned up and a 2017 study tested the idea
5. A. A pit where stone is dug out