

SCIENCE · GRADES 5–6

Evolution and Adaptation

How life changes over time

What is evolution?

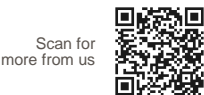
Living things slowly change over many generations to suit their environment. Animals that have features helping them survive (an adaptation) tend to live longer and have more babies — and pass that feature on. Over thousands of years, the species changes. This is called NATURAL SELECTION, an idea explained by Charles Darwin in 1859.

Five adaptations

Animal	Adaptation	Why it helps
Polar bear	White fur, thick fat layer	Camouflage in snow; warmth in cold
Cactus	Spines instead of leaves	Less water lost; protection from animals
Giraffe	Very long neck	Reach leaves no other animal can
Bat	Echolocation	Hunt insects in total darkness
Chameleon	Can change skin color	Camouflage and signaling

Charles Darwin (mini-bio)

Born	1809, Shrewsbury, England
Voyage	Sailed on HMS Beagle, 1831–1836
Big idea	Natural selection — animals with helpful traits survive and reproduce



<b>Famous book</b>	On the Origin of Species (1859)
<b>Died</b>	1882. His grave is in Westminster Abbey, London.

