



Philosophy  
Circles

# What makes a successful species?

*A dialogue on the theme of evolution, between the shrew-like ancestor of mammals, a dinosaur, and a crocodile, about which species and classes of animals have been most successful.* This would be good to do towards the end of a unit on evolution, having established key vocabulary.



To recap on what evolution is, make teams of five or six, and give them the challenge of representing 'evolution' through a freeze-frame. All teams compete simultaneously and you can judge which is most accurate at the end. Your minute can be an elastic one if they are struggling, but don't lose the sense of urgency!



Read the stimulus as a class. Either by you, or with pupils taking a role each with a narrator.

Several technical words have been used in this story. It adds to the scholarly feel and might also introduce some new terms. Rather than stop after reading and check all has understood all words, let pupils discuss it in pairs. They're likely to work out most of it themselves, and prevents halting the pace.



This may feel quite a cerebral discussion to be having with Key Stage 2, but their general knowledge of animals will play a big role in informing their opinions. If they are struggling to grasp the question, you can scaffold things with questions like these:

Is a successful species one that has lasted the longest unchanged, or that has evolved the most, or that has made most intellectual strides, or is the most numerous?

Or does a successful species have to be able to live in balance with others?

Is the most successful species one that can speak? Or, as mere whippersnappers at perhaps 200,000 years old, is it too soon to judge our place in the hall of fame?

Further viewpoints can be found in these short and interesting articles:

<https://blog.rsb.org.uk/measuring-species-success/>

<http://wonderopolis.org/wonder/what-is-the-oldest-species-living-today>

## NEXT STEPS

Let pupils apply their thinking to design the most 'successful' animal or species possible. It will be interesting to see how their own definitions of success inform what they create.

In one of the 6 billion places where they could talk, a small, shrew-like mammal, a crocodile and a dinosaur were boasting about their modern descendants and how successful they were.

“They’ve all got my snout. And my teeth. And tail. In fact, they’re just like my own children,” said the crocodile.

“I’m surprised you know what your children look like, since you don’t even wait to see them hatch. You and your descendants rely on sheer numbers for a few offspring to survive,” said the shrew, shrewishly.

“You’re just jealous because I’m a timeless classic. There’s always a need for crocodiles: 200 million years and only a few minor changes. Your descendants, on the other hand, have to keep changing and finding new ways to make a living. You’d hardly know they were related to one another.”

“But that’s mammal power for you - dingos, dromedaries, dolphins - delightfully diverse. Capable of anything.”

“Not capable of flying around the world, though,” said the dinosaur. “When other reptiles were taking it lying down and going extinct, my descendants took to the skies. Vast flocks of them. Elegant, acrobatic – and we can sing.”

“You forget bats. Flight AND echolocation. There’s not much birds can teach mammals,” said the shrew.

“I think you’re ignoring the elephant in the room,” said the crocodile.

“What’s wrong with elephants? Magnificent creatures...”

“It was a figure of speech. I meant you’re ignoring the obvious problem that none of us have spoken about. Human beings.”

“Yes,” said the dinosaur. “Battery farms for chickens, dodos extinct...”

“Handbags!” snapped the crocodile.

“Humans aren’t all bad. They do make our descendants look fabulous in those nature documentaries,” said the shrew, shrewdly.

“True,” said the dinosaur. “I love the flamingo one. Did you know the pink comes from...”

“Don’t let him distract you!” said the crocodile. “Very clever, but look where humans’ cleverness is getting them – and everything else. Species haven’t been going extinct this fast since...”

“Don’t. Mention. The asteroid,” said the dinosaur, who would have shuddered if dinosaurs shuddered.

“You have to hand it to the humans, though. There are an awful lot of them,” said the shrew.

“If that’s the game,” said an ant, who had been earwigging, “We’re still king of the hill.”