

## 7-BY6 Population success

*Small changes over time that helps something like a living thing. Like, you know, snakes had legs. Over time things start to change because of their habitat. Say if an animal wasn't fit for that habitat, they'd like, change over time and adapt to it. It could be like a very, very small change, like the way they breathe or how they breathe. It could be a big change like if they have wings or don't have wings.*

*Say a snake found a partner and they have a baby, the baby would get their genes and the baby would pass it to their baby, then loads of snakes, they wouldn't have legs. And like it doesn't just have to happen to one snake. It can happen to a few over time.*

**Claim(s)**

**Evolution happens through small changes over time.**

**Changes are passed on between generations, from parent living things to their offspring.**

**Successful changes are those that help a species to be better fitted to its habitat.**

**Any challenges to the expressed claim?**

**Anything to disagree with?**

**Any clarification needed?**

**Question(s).**

**What advantage does having no legs give to a snake over a lizard?**

**What do you think the ancestor of lizards and snakes looked like?**

**What snakes and lizards are found in the United Kingdom?**

**Are slow worms snakes, worms or lizards?**

**Note:** This response is useful in having the potential of raising the issues common ancestors and speciation. Snakes and lizards had a common ancestor that had legs, estimated to have lived about 128 million years ago. It seems that on their evolution to becoming legless, the front limbs began to disappear first, and then the rear limbs.

Information about UK slow worms at <http://www.wildlifetrusts.org/species/slow-worm>

Slow-worms are neither worms nor snakes: they are lizards.

Snakes' evolutionary origins are obscure. The discovery of snakes with two legs has shed light on the transition from lizards to snakes, but no snake has been described with four limbs, and the ecology of early snakes is poorly known. The suggestion is that

snakes evolved from burrowing rather than marine ancestors. Snakes made the transition to a carnivorous diet early in their history.