



## WEEK 5: EVOLUTION



### Science in the News



A Spinosaurus foot bone peeks out from red sandstone at the Moroccan dig site.  
Photo credit: Paolo Verzone, National Geographic



### Try it at home - Just imagine!

#### What do you need?

- Paper
- Pencil (including colouring pencils if you have them)
- Your imagination!

#### What am I learning?

You are learning that animals adapt to suit their environment in different ways and that adaptation may lead to evolution.

If you want to learn more about the science behind this, check out our lesson on our website - [Science Creates Outreach](#)



#### Parents:

For primary learners, work through our full 'evolution' lesson plan with your child. It is based around the national curriculum learning objectives found in the year 6 'Evolution and inheritance' topic. Download here - [Science Creates Outreach](#)

For secondary learners, the contents can be discussed in more depth using the [original online article](#). \*\*

#### FOUND - A GIANT SWIMMING DINOSAUR!

Scientists have recently been studying the fossils of a dinosaur and, from the shape of its tail, have discovered that this is the first dinosaur **ever** to be known to swim!

We know that when dinosaurs were alive, millions of years ago, that there were other creatures that could swim, crocodiles for example, as well as fish the size of cars, but what we call **dinosaurs** strictly lived on land.

The incredible dinosaur, called *Spinosaurus*, was bigger than a Tyrannosaurus Rex and was more than 15 meters long - longer than the length of a bus. It had four legs, so before now scientists thought it walked. However, after studying the shape of the tail, scientists saw that it was streamlined and notched. They are now sure that it could swim, and that it used its tail like an oar to guide it through the water.

This is really amazing because it opens up a whole new world of possibilities for what dinosaurs looked like, what they did and where they lived, that we didn't know possible before.

#### Instructions:

1. First imagine a new planet is discovered. You are the first to take a step onto this amazing new world. Close your eyes and picture it. Now answer these questions: What is the weather and temperature like? What is the landscape like? Are there beaches or forests or Meadows? What kind of plants are there? What food is growing?

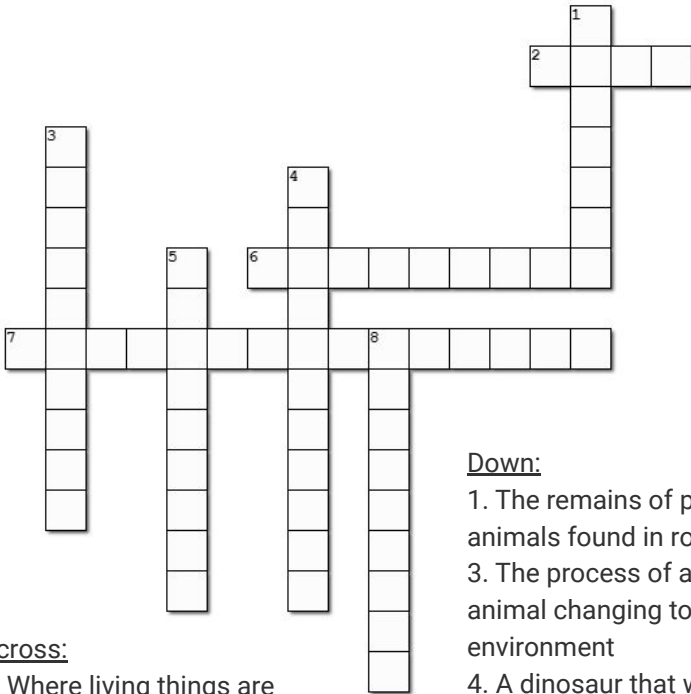


2. Next, close your eyes again and imagine seeing a creature slowly emerge from behind a rock. What does it look like? What features does it have that make it suited to live on this planet? Thick fur to protect it from the cold? Sharp claws for digging through the rocky ground? Long legs to wade through the muddy waters?

3. Then, draw your creature. Try to use colours, as this will help to show the features more clearly too.

4. Finally, label the newly discovered animal with its features and reasons for those features.

# outreach WEEK 5: EVOLUTION



**Across:**

- 2. Where living things are preserved and turned into fossils
- 6. Creatures that inhabited the Earth 65 million years ago. e learn about them through fossils
- 7. The people that find and study fossils

**Down:**

- 1. The remains of plants or animals found in rock
- 3. The process of a plant or animal changing to suit its environment
- 4. A dinosaur that we recently learned could swim!
- 5. The theory that every living thing has adapted over time because of competition
- 8. The children of animals or humans

Answers: 1. Fossils 2. Rock 3. Adaptation 4. Spinosaurus 5. Evolution 6. Dinosaurs 7. Paleontologists 8. Offspring



## Competition Time

For this week's competition we would like to see your newly discovered animals from the 'Try it at home' activity on page one of this newsletter. Imagine seeing a creature emerge from behind a rock on a new planet. What would it look like? What features would it have and why?

**Your competition entry should:**

- be labelled with the animal's features and reasons for those features.
- include your first name and age e.g. Patrick, 12 years old.

Finally, send your drawing to [info@sciencecreates-outreach.co.uk](mailto:info@sciencecreates-outreach.co.uk)

**The deadline for this issues competition is Thursday 28th May 2020.**

## Read, Watch, Ask



Have a read of our [lesson](#) to learn more about evolution.



What is evolution? Watch [here](#) to find out.\*



Got any questions about today's topic? Email us at [info@sciencecreates-outreach.co.uk](mailto:info@sciencecreates-outreach.co.uk) and we'll answer them!



## Did you know?

Whales are actually mammals. They don't have gills and they need air to breathe, yet they live underwater. Evidence from fossils tells us whales evolved from an animal that in fact used to walk on land about 50 million years ago!

## Last week's winner!

We have had some amazing photograph entries for last weeks competition. Congratulations to our winners, Josephine, age 12 and Karl, age 10, sent all the way from Oslo, Norway. You are real science photographers! Thank you for sharing.



[COMPETITION NOW CLOSED!]