

# The Story of Life

## MATERIALS:

- Timeline of Life: [can be found here](#)
- Picture of a [Diplodocus](#)
- Picture of a [T-Rex](#)

Today we're going to hear a story - a story about life. Do you remember the story of how the Earth came to be? Today we have a story of the coming of life on the Earth - of the plants, animals and human beings. But first, think back to when the Earth was born - that little drop of light and heat, of commotion and confusion. Yet in this tiny drop, every particle had been given its set of laws, so that when the Earth cooled, everything settled down according to those rules - the rocks, the water, and, surrounding everything, the air.

From afar, the Earth looked like a beautiful little pearl, and when the Sun looked at her he could not stop looking. He looked day and night, because she was so beautiful. She was his beautiful little daughter. But then one day, the Sun saw that something was not quite in order. It had rained a lot on Earth, and as the water passed through the air, it got mixed up with the gas. The water and gas were washing away the rocks and filling the seas full of salts.

There were also many, many storms and then the water pounded away against the rocks, breaking them up and shattering them. These rocks were falling into the seas. The seas were filling up more and more, and the land was being washed away. It looked as if the order created at the very beginning was breaking down. Who was the culprit? Whose fault was it?

The Sun looked at the Water, who said: "Who me? What have I done? I obey the laws I was given. If I get hot, I rise and disappear. If I get cold, I fall. If I find a hollow, then, being a liquid, I have to flow into it. It's that silly Air, she stirs me up - it's her fault"

But Air said: "Who me? I was given the job of covering the Earth with layers and layers of blankets. The Earth has a really hot tummy, but her head and feet are always freezing and I always have to pull the blankets over her. It's water who jumps on my back for a ride. That's all right when it's flat and level, but when there are mountains, I have to drop her... Wouldn't you? I have serious work to do, and I do it. I think it's the fault of the rocks. The Earth is full of wrinkles and bumps, like the mountains, who have no consideration at all! They don't move an inch to let me pass, and they get so hot that I have to climb up to avoid burning. And sometimes they get so cold, that when I pass I cringe from the cold."

But the rocks said: "We don't do anything except sit around! It's not our fault; we can't help getting hot when the sun shines. If you ask us, Sun, - it's your fault, you are the culprit."

Everyone was doing what they should be doing, but order was being threatened. And so something had to be done... But what??

So, something else was created: a tiny drop of what seemed to be water, but wasn't. It was a tiny drop of a jelly-like substance, so tiny you couldn't even see it. And this tiny drop had the power to eat and grow, and to make others who are like itself.

So Life came in the form of little creatures that looked like little drops of jelly. They ate, grew, and created others that were like themselves. They were like tiny little living machines for cleaning up the seas. They gobbled up the salts and used them to build their bodies. Some of them got itchy and used the salts to build shells. Then when they died, the shells dropped to the bottom of the sea and the salts remained trapped in the shells.

Time passed - the creatures lived and died, lived and died, lived and died, (repeat as many times as you want), and very gradually new layers of ooze and mud were built up on the bottom of the sea. The ooze was made up of these tiny, tiny shells. These layers were like the pages of a book – the book of the Earth. Some of the pages remained, to tell us what happened so long ago. Long, long, long (repeat as many times as necessary) before any of us were born.

These tiny creatures – the little living machines, cleaning up the seas – were made of only one cell. This single cell had to do all the work - breathing, eating, getting rid of what was not wanted, and, as it went drifting around in the sea, it went on cleaning up the water.

As time went by, some of them said: “Why don’t we join up and get together? That way we could do things better.” And so, there also came into being bigger creatures, each made up of many cells. They, too, went on growing and creating others like themselves.

And this, too, went on for a long, long time. Then, at a certain point, some of them began to think: “Hmmm. Instead of having all of us doing the same thing, why not have each one doing his own job?”

So some cells lined up and said: “We’ll take care of eating”, while others said: “We’ll take care of the breathing”, and yet others said: “We’ll take care of moving us about,” and so on. And so there came creatures with legs, mouths, with a heart, and so on. In other words, creatures with organs, and when the book of the Earth opens out for us, on the first page that we read, all of these creatures were already there. Here they are.

(Unroll the first part of the timeline)

(Indicate the following creatures) Here is a creature made of just one cell. Here’s another one. Here’s one with two whips for getting around. Here are two who joined together and they are called sponges.

Here’s one that made arms for waving around in the water to catch little animals – the sea anemone. Here’s a great creature that was found in great numbers all over the place: these are trilobites. They came in a variety of forms and sizes. Some had tails and some did not, some were big and others were little. Now we don’t have them around anymore; they don’t exist.

As time went by, all kinds of animals appeared. There were all kinds of experiments. These look like trees, but they are not trees, they are animals. Here we can see that they built themselves up out of rings of stone, actually made of salt, and they had these feathery arms for waving about to catch their food. One ring was built on top of the other until they looked like this. Because they’re so colourful, and look like flowers, so they were called Sea Lilies. But of course, they weren’t plants at all. When the animals died, the stone rings collapsed and scattered to the bottom of the sea:

And so, there were all sorts of living beings. And among them there were some who, instead of eating others, made their own food from sunlight and water. We can see them here. (Indicate the first algae and kelp) We can see them here and here, and there (Move over to the next black line for more green).

These particular living beings drifted around with the others until one day they thought: "I wonder what it would be like on the land?" So they drifted up there and found plenty of sunlight and food. The air was full of a gas (carbon dioxide) that they could use for food, and they found it so good that they remained, and in time, many others joined them.

So for the very first time, life was trying out the land.

Around the same time, something else was happening. A new kind of life appeared, with a kind of rod inside its body. This was the beginning of animals with bones.

In time, this animal led to the first fish. You can see them here. (Indicate the fish) These first fish were very different to the ones we know now. You know when this experiment first started, there were all kinds of trials and experiments going on. For example, there were big fish with plates of armour for protection. Fish like this would lie buried in the mud, waiting for food to come drifting by. (Indicate the fish)

Over a period of time, the land started to rise up, and so parts of the sea were closed off. When there was no rain, the sea started to dry up. Now, if you need water for life and that water starts to dry up, how can you live? There were some fish trapped inside the water, and they said: "I'll build a sack inside my body, keep it moist and so breathe outside the water." They tried it and it worked! And so breathing outside of water was invented. These animals, who lived partly in and partly out of the water, were amphibians, like the salamanders and the frogs. They developed legs for walking on the land. With them came the sound of the first voice to be heard on the land. Before then, there was only the sound of the wind, of rocks crashing, water falling. Now there was the first voice.

The amphibians enjoyed life on the land, because plants had also come to land - making food from the gas in the air, and there was plenty of that. The insects had also come to the land, so there was plenty of food for the amphibians. The amphibians had a great time! and grew and they grew and they grew into many different sizes. But there was only one problem: Because of the way their skin was made, they needed to be near the water, to lay their eggs in the water. This was a problem, because some of them wanted to go further from the water. They really didn't like being so tied to the water, and wanted to explore and eat many other plants.

And so some of them developed a special kind of skin that would not dry out, even under the sun, and for the eggs, they invented a shell. Now there was no problem, and they could go as far as they liked because their skin wouldn't dry out, and they were able to lay eggs safely. These animals were reptiles. So the reptiles had a good time, because they were able to eat the plants and the amphibians. The reptiles grew and grew and grew - there was nothing and no one to oppose them. Some of them grew to enormous sizes, like this one: Show a picture of a [Diplodocus](#).

Some people say that this reptile was so big that it had to have another brain, here at the base of the tail - otherwise, it wouldn't know if someone stepped on its tail, it was so far from its brain.

Here is another one (show a [picture of a T-Rex](#)). This one is tall, rather than long and again we can see him compared to a man. This one is as high as a two-story building (ca. 20ft or 6m), and had enormous jaws! Its teeth alone were 6 inches long! Oh, how the land would have shaken had these two animals ever met! These reptiles had the Earth to themselves - they were the lords, they ruled the Earth for a long, long time.

There were at the same time some very small animals, which were afraid of the reptiles. But what could they do? They lived on the margins, on the fringes, in places where the reptiles wouldn't go, where it was cold. Because they were so small, they didn't need as much food, but they also robbed eggs from the reptiles, because, usually, the reptiles did not look after their eggs. Over time, these small animals living on the fringes developed something on their skin to protect themselves from the cold: hair or fur, and feathers. And they also developed warm blood. These were the first mammals.

What about their eggs? They knew what happened to abandoned eggs, so they carried their eggs inside. The birds couldn't do this for long, as they were always flying around, so they built nests and laid their eggs there. However, one of the parents always sat there to keep the eggs warm and to stand watch.

The mammals waited until the young were ready to come out of their bodies, and fed them milk from their very own bodies. This was all very, very new because, so far, hardly any creatures looked after their eggs. After their eggs were laid, they just left them, and the young ones that hatched had to fend for themselves. They were often eaten. But the birds and the mammals stayed with their young until the little ones could look after themselves, and in this way they could protect them.

By the time of the mammals (indicate), the weather changed and it started to get very, very cold. The climate had begun to change. The reptiles, who had no fur or feathers, mostly died out. So now the mammals had their chance, and they went everywhere. There were big hippos, big pigs and giant elephants with enormous tusks. The mammals had a great time!

The weather became colder and colder, and large areas of the land were covered by ice. Some mammals walked over the ice to find warmer places where there were plants and other animals and so they spread all over the world. In the end, though, none of the giant ones survived: they all died out.

Towards the end of this very, very cold period, a completely new type of being appeared.

This being did not have heavy fur like some of the animals. This being did not have sharp teeth or sharp claws to defend itself. But it did have something that none of the others had: a much larger brain, with the power to think and imagine. And an enormous amount of love - a love so different, that it made this being altogether different from all the other animals, because this love could go beyond the love for one's own children. This being could love others, even those that he would never see. This new being was the Human Being (indicate).

It's as though all of this (sweeping gesture back over timeline) had to happen before the human being could come at the end of it all. Because, if man had appeared at any of the other times, he could not have survived. It would have been impossible for him to live. But now, all was ready.

If the Earth had had a voice, she would have said: "I have spread a thick carpet of grass so that you have soft ground for your feet to walk on. I have put flowers in my hair and covered myself with jewels. My cupboards are full with milk and honey, meats and vegetables. Down in the cellar there is coal and iron. Now that all is ready, it is time for you to come."