How do Fossils Form?

Fossils are extraordinary clues that can reveal ancient past environments that are over hundreds of millions of years old. But what are fossils and how do they form? In this science-based activity, children can debate what will become fossils of the future using a series of picture cards that show modern day animals and plants. They can compare their findings to some surprising real fossils such as dragonflies and sand ripples. As a further investigation and linking to English, children put a storyboard in the correct order that tells of an Ichthyosaur that becomes a fossil.

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**Teachers’ Materials**

The ‘Fossils of the Future’ picture cards need to be printed and cut into sets of cards (1 set per group). In addition, the Ichthyosaur storyboard cartoons need to be printed on card and the captions onto transparencies.

**Practicalities**

Much of this activity can be delivered in the classroom with the class divided into groups.

**Discussions**

In the activity, ‘Fossils of the Future’, ask the children to consider the types of conditions needed to ensure successful fossilisation (fast burial, lack of disturbance of remains, hard body parts). Although soft body part preservation is extremely rare, [this squid on the Fossil Finder Database](https://example.com) shows some preservation. The soft body parts have survived due to the lack of oxygen (anaerobic conditions) on the seabed. Without oxygen, bacteria are unable to survive, and the soft tissue decomposes extremely slowly.

**Extensions and Adaptations**

The Ichthyosaur storyboard lends itself to be interpreted as a class play, assembly, podcast or even a stop motion animation. By withholding the captions and asking the children to write their own story, there is a greater opportunity to link to skills in English.

**Links to Other Resources**

How do Fossils Form? links well to the following resources:

- Fossil Detectives
- How did Ammonites Move?
- Rock Detectives
- Make a Model of the Jurassic Coast