

## Key stage 2 exercise 1

### Pupil C – Piece D: an explanation

Context: as part of the science topic on evolution, pupils explored fossils, in particular those created by the process of mold and cast. They went on to write an explanation about these processes.

Fossils are the cast of remains of animals, plants or insects. They can be formed in different ways, for instance, insects getting trapped in tree sap, which eventually hardens into amber; an animal becomes trapped in the ice and is frozen, or the mould and cast of different animal bones. These processes take place over millions of years.

One of the ways for a fossil to be formed starts with the animal <sup>dying</sup> dead. The flesh of the animal is then eaten by other creatures. All that remains of the animal is its bones. Sediment (soil and sand) eventually covers the <sup>skeleton</sup> bones, which presses it down into the ground. From that point on, more layers of sediment pile over the bones. The sediment now develops into solid rock. Over the time, small streams of ground water finds its way through the rock and slowly wears the bones away. This would occur over a prolonged time. All that is left is a natural mould in the exact same shape as the animal. The ground water slowly carries small particles of rock, which fills the mould over thousands of years.

When tectonic plates collide, the fossil would rise to the ground; this is not the only way that a fossil would rise. This could happen. It could rise through an earthquake or the way that mountains rise naturally. Finally, the ~~erosion~~ (wind and rain) would slowly <sup>erode</sup> wash the top layers of rock away, leaving the fossil visible. Paleontologists dig and dig for a very prolonged time to conclude in discovering parts of a fossil, or, if they are lucky, a whole fossil.