

Video question script, KS2: Circus activity 1: How could I become fossilised?

Question/Activity	Likely response	Rationale
<p>When teaching about the Earth we often use practical activities to explore Earth processes. This example asks how we might become fossilised.</p>		<p>Preparation for bridging from the living animal to the fossil</p>
<p>What is this?</p>	<p>A stick person</p>	<p>Concrete preparation = asking them to describe the item</p>
<p>Ask: What would happen if this person fell into a nearby river or the sea and died – how might they become fossilised? What things might make the chances of fossilisation difficult? Pause the video and discuss.</p> <p><i>[Diagram of a body with its skeleton (This file is licensed under the Creative Commons Attribution 3.0, Author Bernhard Ungerer.)]</i></p> <p><i>[Photo of a tooth – usually the last part of a human to be left and so is the part most often fossilised. (I, Werneuchen the copyright holder of this work, hereby release it into the public domain.)]</i></p>	<p>Allow time for thinking, and then replace photo with diagram of skeleton as in ESEU workbook.</p> <p>Some possible answers:</p> <ul style="list-style-type: none"> • the current drags the body along the bottom, scratching the skin so that blood runs into the water; • creatures start eating at the scratches and at other softer parts of the body like the eyes; • small water creatures enter through any holes and start eating from the inside; • after a few days, decay of food in the stomach produces gas so that the body floats to the surface and is carried along; • fish and other creatures attack any weak points and gradually begin to remove the skin; • when the skin and other soft parts like the guts and lungs have been removed, the body sinks to the bottom again and the muscles start to rot; • as the muscles rot and are eaten, most bones are still held together by ligaments – but these begin to decay so that small bones begin to separate; • currents roll or drag the bones along the bottom grinding them down and breaking them up – first the smaller bones and then the larger ones; • eventually, all that is left is the hardest part of the body, the teeth; • these too are rolled around, worn down and broken up – so that finally nothing is left; • this is what happens to perhaps 99.99% of dead creatures – they are eaten and broken up and are not fossilised. Very often all that is left is the teeth, which are made of very resistant material <p>(+Tooth picture from ESEU pack)</p>	<p>Pupils are asked to use their thinking skills to imagine how a body might decay – ‘bridging’ between the characteristics of a living body and how it might behave after death.</p>
<p>Ask if I want to become fossilised myself, as completely as possible – what should I do?</p> <p><i>[Photos of volcanic ash cone, South Sandwich Islands and climbers on Glittertind,</i></p>	<p>The best chances of fossilisation are:</p> <ul style="list-style-type: none"> • where there is no activity to drag bodies along or break them up; <p>being completely covered really quickly with sediment e.g in an underwater landslide, buried in cool volcanic ash, (Photo), buried in thick ice (Photo) or in</p>	<p>As above</p>

<p>Norway, P. Kennett. Photo of peat bog, near A57, Snake summit, Peak District, Dr. J. Cripps]</p>	<p>a peat bog (Photo)</p> <ul style="list-style-type: none"> • this will keep out oxygen, so that animals that might eat the body can't live there; • and where there is no oxygen the bacteria that might rot the body can't live there either. <p>So dying on a road, or on a hillside would give no chance, but there is a better way.</p>	
<p>The picture shows the remains of a man who was buried in a peat bog, about 6000 years ago, where he lay undisturbed and where oxygen couldn't get to the body. Is he a true fossil?</p> <p>[Photo: 4th century BC Tollund Man, found preserved in a peat bog in Denmark. (Tollundmanden i Silkeborgmuseet. PG Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation license)]</p>	<p>Picture of Tollund Man. Although his remains show the processes of fossilisation, he is not regarded as a true fossil, because he lived less than 10,000 years ago.</p>	<p>Bridging to previous knowledge, maybe involving metacognition</p>