

Video question script, KS2: : 'A World in a Grain of Sand'

Question/Activity	Likely response	Rationale
When teaching about the Earth we often use practical activities to explore Earth processes. This example uses the Earthlearningidea: 'A world in a grain of sand', which is a quote from a poem by William Blake.	-	Preparation for bridging from the model to real Earth processes
What is this? Can you see anything else?	An apparently empty tray A grain of sand in the tray	Concrete preparation = asking pupils to describe the apparatus
Ask: How could this grain of sand be eroded, transported and deposited? Give just one way. The definitions sheet will help you with the long words	Any answer. Display definitions sheet	Construction = applying previous knowledge
Demonstrate different ways in which the grain of sand could be eroded, transported and deposited in the classroom.	A person could pick up, move and put down the grain; you could move it along with your finger; you could tilt the tray; you could blow the grain along with your mouth or a straw; you could wash it along with a squirt of water	Construction = applying previous knowledge.
Ask: In how many ways can grains be moved naturally outside?	By falling down from where they are, through gravity. By moving water, in the sea or in rivers; by wind; by moving ice (eg. glacier); Moved by humans on a big scale. Humans now move more rock and soil than all the rivers of the world combined.	Bridging = applying learning from the activity to the real world
Ask: What can we tell from this magnified version of a grain of sand? (Display print of electron microscope image 150 times bigger)	The grain has rounded corners, so it must have been knocked around with other grains during transport, either by water or wind, and the corners were worn away;	Bridging = applying understanding from a grain at one scale to another
So, have we been able to see 'a world in a grain of sand' as in the poem by William Blake?	Yes/No	Metacognition –relating the thinking behind a concrete object to the world of poetry