Question/Activity	Likely response	Rationale
When teaching about the Earth we often use practical activities to explore Earth processes. Here pupils are invited to make their own soil from various ingredients.		Preparation for bridging from the model to real Earth processes
What is this? How might we make our own soil from the ingredients?	Several small piles of different ingredients which might be found in soil. Sheet with definitions of litter, humus, decomposition	Concrete preparation seeing the ingredients
Let's mix up the ingredients. What will it look like then?	One pile where it is difficult to see the individual ingredients and the colour will be a grey-brown	Construction – thinking of the result based on previous experience
Add a little water and stir the mixture. Suggest what your mixture might represent	Soil	Construction –continuing to build up a pattern of the constituents of soil
What might be missing in your home-made soil, compared with real soil from the garden?	Worms, small creatures, fungi, bacteria	Construction – thinking of the result based on previous experience
Ask where pupils think the ingredients of the soil came from – the sand and clay: the litter: the humus.	Sand and clay from the rocks underneath: litter from fallen leaves and other matter: humus from the decomposition of plant or animal material	Bridging from previous knowledge
Ask what could make the soil from somebody else's garden different from yours.	Different amounts of some of the ingredients	Bridging to the world