

**Video question script, Earth Science for Years 1 and 2. Circus activity 2. Rock explorer**

Question/Activity	Likely response	Rationale
<p>When you are given lots of different things, do you like sorting them out into groups? We are going to end up sorting out rocks and other things which are found in the ground, but first we are going to sort out some sweets. <i>Several random objects on table while introducing the topic.</i></p>		<p>Preparation for the activity. Construction = applying their previous experience</p>
<p>Let's start by sorting out these sweets. Can you put them into three or four groups? For example, I could start by putting all the ones with yellow colours into one group. <i>Packet of Haribo™ jelly sweets</i></p>	<p>Several different groupings are possible. Demonstrate one way.</p>	<p>Preparation for the activity. Construction = applying their previous experience</p>
<p>Now we are going to sort out a lot of things which have come out of the ground, such as rocks, minerals and fossils, but first we need to look at our rock explorer's tool kit. What can we see?</p>	<ul style="list-style-type: none"> <li>• magnifier</li> <li>• rock ID books</li> <li>• clipboards and pencils</li> </ul>	<p>Preparation for activity</p>
<p>Here are a lot of things which have come out of the ground. Have a good look at them and decide how you can put them into groups. For example, you might put all the shiny ones into one group and all the red ones into another group. But <u>you</u> decide.</p>	<p>I would probably accept whatever groupings you said, but here is what I decided. Show groupings on a sheet of paper</p>	<p>By grouping rocks into categories, a pattern is developed. Discussion about how to group the rocks involves metacognition, and disagreement about which group a particular specimen should join causes cognitive conflict.</p>
<p>I wonder what you think some of these things could be used for.</p>	<p>Offer a few suggestions – building stone, shop fronts, crystal for watches etc</p>	<p>Construction = applying their previous experience</p>
<p>Let's pretend that the groups are families, with Mummy and Daddy stones and their babies. Make up some stories about each "family".</p>	<p>e.g. the "Smooth " family, or the "Shell family"</p>	<p>Discussion about the activity is metacognition.</p>