


Example topic: Materials	Primary 5/6 Age 8-10	Activity Title: Cornflour slime
Science skill focus Questioning	Curriculum link: Change over time Materials can exist in different states (CoT2) 	
Progression Focus <ul style="list-style-type: none"> • Can children use their observations to ask deeper and wider questions? • Can children build on their own and others' ideas and experiences? 		
<p>Activity <i>Today we are chemists.</i></p> <p>Discuss the properties of water and cornflour before mixing, noting the children's descriptions, questions and predictions for what will happen when they are mixed (e.g. using mini-whiteboards, post-its or making a list on board).</p> <p>Consider how to make the cornflour slime/oobleck e.g. take turns, aprons, outside/cover floor. Explore their questions and predictions in small groups, for example, beginning with a cup of cornflour and half a cup of water, mixing with hands until the consistency of honey. Observe how when lifted, the mixture runs through your fingers, but when you apply force, it solidifies (this is a Non-Newtonian fluid – a liquid which acts like a solid under pressure).</p> <p>Ask the children to explore further: raising post-it questions to test e.g. trying different amounts of pressure (1 finger etc), can it be held/squeezed/twisted, can it be rolled into a ball, can it bounce, adding more water/flour.... Collate questions and discuss findings.</p>		
<p>Adapting the activity</p> <p>Support: Help to make a 'honey' consistency. Provide question stems: 'What if...?'</p> <p>Extension: Do objects float or sink in it? (paper clip, small plastic toy etc).</p> <p>Other ideas: Put slime in sealed bag on top of loudspeaker and observe changes in response to vibrations.</p>		
<p>Questions to support discussion</p> <ul style="list-style-type: none"> • What do you expect it to feel like? What does it feel like? • What questions do you have about the mixture? • Which questions can we investigate? • Have you tried to squeeze it? Roll it? • What other 'what if' questions could we ask? • When does it behave like a solid? Liquid? 		
<p>Pupil learning indicators</p> <p>Not fully achieved: Pupils explore the slime with their hands but struggle to verbalise their own investigable questions. They describe the material when prompted but do not link this to their knowledge of solids and liquids.</p> <p>Achieved: Pupils make suggestions, raising investigable questions. They test out their ideas and can describe their findings in relation to the properties of solids and liquids e.g. <i>I asked what would happen if you poke it with different fingers. I thought the little finger would sink in like a liquid, but it's more bouncier like a solid.</i></p> <p>Exceeded: Pupils test their questions independently and systematically e.g. adding measured amounts of water, testing different sized 'balls' of oobleck. They may make links with other materials.</p>		

