

Using Drama to learn Science : A Thematic approach : Sports



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Strategy	Description of Strategy	Key learning	Possible activities	Some
		objectives		suggestions for
				starters
1. On the table (1)	Examining objects (often unusual or to be used in an unusual way) Group/s are presented with an object under the Easicope/ Digital microscope/ Visualiser The teacher models open questions –what could it be? Why is it that colour? I wonder what it might be used for?	To explore objects, to speculate and evaluate evidence to identify objects. To observe and listen carefully. To take turns and share ideas.	Ask children to sit in groups. Model using a feely bag/box with the whole group. An individual (volunteer or chosen) is blindfolded and will be the one to place their hands in bag/feelie box. Place the material e.g. wool, pumice, sponge, towelling, in the bag/box. Ensure the children have not seen it. Ask a child to feel the object and either describe what it feels like or ask the following questions : What does it feel like? Is it the same all over? How does it change/differ? What happens if you press it? Is it hard/soft? How do you know? How does it feel if you stroke it? What material do you think it is? What do you think will happen if you pull it?squeeze it? How do you think this material might be used? What might it be used for? Why would it be good for that? The whole class can use the information provided by the blind folded child and suggest it turn what it might be (with reasons). Or the feelie bag/box could be passed alongand the next child adds to the description? Can anyone guess what the object is? The activity could be developed to use several feely boxes for the children to use in groups. Children could compare and contrast the objects. In the context of sports, the objects could be several different balls made of different materials, and the children asked : what sport do you think it is used for and why?	How does it feel? Can you think of anything else it feels like? What happens if you? What could it? What could it? What further information might we need? What do other people think?
1. On the table (2)	Group/s are presented with an object. The teacher models open	To raise questions To explore and collect evidence to describe	The children are organised as a class sat facing the white screen that the visualizer/ easiscope will project onto. The children are asked to think about "what might be in the bag?"	What do you think? What might they



	questions –what could it be? Why is it that colour? I wonder what it might be used for? Children ask questions.	the unusual object.	The slow reveal exposes a part of the object a bit a time. Close observation is to be encouraged to 'see' details and develop descriptions of features. It is appropriate for the teacher to ask questions such asWhat does this suggest? How do you know? What object might be? What does that tell you? What kind of material do you think it is? What makes you think it has? If it is a would it? The objective is to have the children develop reasoned explanations about objects based on the observations they make. Examples of objects might be : hockey face guard, cricket pads, running spikes.	be? How do you know? How might we find out?
1. On the table (3)	Group/s are presented with an object. The teacher models open questions –what could it be? Why is it that colour? I wonder what it might be used for? Children ask questions.	To use senses to gather evidence to describe and compare the materials objects are made of. To identify how science is used in the development of objects we use.	Teacher in role, claims to have found an unusual object in the attic. Eg.old tennis racket that can be scrutinised first (and then compared to a new modern one). They can both be passed around the class. The teachers can ask questions such as What can you tell me about it? What might it be? What do you think it is used for? What is it made of? Is it wood/ is it metal? How do you know? Why do you think it is made out of this material? Do you recognise the object? How is it different to the modern object? How old do you think it is? Why do you think that? Was plastic invented then? Is it light or heavy? What else could it be made of? Where do you think it is used? Do you think it is all here? (Other old and modern objects that could be used – swimming costumes, footballs, hot water bottles, dolls)	What can you tell me about? What might it be? What do you think it is used for? How do you know? How might we find out? How old do you think it is? Why?
2. Spontaneous role play.	In small groups children develop arguments about science in everyday life. By working 'in role' they can explore views and ideas, which may be different from their own.	To explore ideas and possibilities about the properties of materials to their use in everyday contexts. To take turns.	Ask the children to work in groups of three. Each group choose a sports card (footballer/ basketball/cheerleader/gymnast, horse rider, cyclist/goalie in ice hockey/wrestling, swimming/ marathon runner/fisherperson, rugby/dancer). They are told that the Olympic committee only has a small amount of moneyfor each sport. In their group ask them to discuss (2 minutes) What do you need to be good at this sport? What clothing does this sports person need? What special clothing and/or	What might they? How would they? What else might they? How might we find out?





			equipment is needed? How would they move to play this sport? (and mime it for others to guess which they are working on). Ask them to mime getting ready and playing the sport. Give them some squares of material (bubble wrap, sponge, foil wrap, felt, Gore-Tex) and ask them to discuss in groups how might these materials be good for their sport/ not so good? Why? Tell them they are in a market place. They need to choose one material. Which material would they buy and why?	Should we? What might happen if? Why do we think?
3. Hot seating.	Where teachers or children are placed 'in role' as experts to answer questions from their peers.	To explore problems and make reasoned decisions. To ask questions and listen carefully. To listen and respond appropriately.	Hot seat a member of each sport (one person from each group). The children discuss and decide what questions they are going to ask (they can be written up on a poster/whiteboard to act as a reminder). Examples of questions the children can be encouraged to ask: What is your sport? What do you need to be able to do to be good in your sport? What material would they buy to make their sports clothing? Why? If this material is expensive, is there a different material they might buy instead? How could they improve the less expensive material?	What would you choose? Why? What might you? How could you?
4.Miming Movement and 5. Freeze frame.	Pairs/ groups/ individuals mime movement allowing them to explore different types/ ways of moving and how this might be affected by different circumstances. A freeze-frame is a frozen moment. Group act out a phenomenon, on hearing a cue e.g. freeze, clap the group/ individual stops and holds their position.	To explore and develop ideas on how properties of different materials affect their use and behaviour.	 Have a number of cards with different sports on. Have a second set of cards of sponsors e.g. Rowntree's jelly; Cadbury's chocolate; Ikea – wood; Virgin's – balloon. Children in groups (4) choose a (unknown to rest of group) Sports card. Ask the children to mime playing that sport. Class works out what it might be. Ask children to take a second (unknown to rest of group) sponsor card. Their equipment is now made of whatever that card sponsors e.g. jelly or chocolate, wood or latex. Ask the group to mime their sport with their new equipment. Ask the group to 'freeze' at different points and explain what is happening. What can the other teams tell them about the material? What 	What can you see? What does that tell you? What happens if? Is it/ or?





	This allows the group to examine and reflect on what is happening at that moment.		do they see? What does that tell them about the sponsored material? What questions might they ask? Is it heavy/ light? Flexible/ rigid. What might happen if they put the object into water? What difference does it make to the sport? What do they think the sponsor material is?	
6. Modelling	Modelling is a way of physically creating a model of an object and exploring how it works/ acts.	To explore what ifs through modelling To explore the suitability of different materials for different objects	Two sets of cards. The first set of cards provides the words of opposite adjectives e.g. Flexible and rigid/hard and soft/wet and dry/metallic and non-metallic /magnetic and non-magnetic/shiny and dull/rough and smooth A second set of cards with random nouns on e.g. tracksuit/training shoes/ball/stick/racquet/ javelin In pairs children select one card from each set of cards. The children then enact the opposite words using their noun e.g. magnetic/non magnetic tracksuit bottoms. The rest of the group/ class observe and try to guess what the noun and opposite words are	What do they think the object is made from? What makes them think? Is it or? Can they describe the material? How do they know? What might happen if?
Modelling (2)	Modelling is a way of physically creating a model of an object and exploring how it works/ acts.	To explore ideas of how materials change through modelling.	Children in a small group (5) Model some chocolate (be prepared for a range of models e.g. chocolate orange segments/ chocolates in a box/ matchmakers). What do the other groups think they are? How do they know? What would happen if the chocolate was placed in different places e.g. on the window sill/ in the fridge? On the window sill on a hot day? In someone's pocket? What do they notice? How is it the same/ different? How would you be different if you were a piece of wood, piece of stone, ice?	What can you tell me about the material? What makes them think? Is it or? How does the material change? How do they know? What might happen if?



7. Mind Movies	Using audio and/ or visual	To visualise and	Children in groups of three.	What can you
	stimuli to support the	speculate on how it	Tell the children they are at the Olympics doing a sport of their	hear/ see/ feel?
	children to imagine	would be in different	choiceask them to discuss what the consequences would	How do you know
	themselves in different	material worlds	be of	this place is like
	places/ situations.		1. Everything becoming magnetic	that?
	Group/s listen to a		Everything becoming soft and sponge-like	Is it hot/ cold?
	description/ sounds of a		3. Everything becoming metallic	How do you
	location. Whilst their eyes		Everything being made of plastic	know?
	are shut the group/s can		5. Everything being made of paper	
	be asked questions about		Everything being made of rock.	
	what they can hear/see		Ask them to mime their sport in 'normal' conditions then one	
	so they can build up their		where a material changes (from option $1 - 6$). Ask rest of	
	own picture in their mind.		class to suggest what has been changed to a different	
			material.	
8. Mini-	The teacher tells the	To familiarise	Josiah Wedgewood.	What did he do?
historical play	group a story –which	themselves with	Children take on parts and enact as story unfolds.	Why do you think
	could be scripted. During	scientists of the past	Imagine you were 6 years old (child chosen to be 6 year old	he?
	the story members of the	To explore ideas on	Josiah) suffered from small pox, dad died (father) but older	What did he do
	group become the	scientific thinking	brother (3 brothers/ 2 sisters) in family offered you an	that makes him
	characters in the story –		apprenticeship in family pottery businessJosiah watches	remembered?
	they could be given a		carefully to see how the pots might be improved.	How would he
	prop/ costume item to			feel?
	signify who they are or a		What might you suggest to your older brother as the	
	simple line to say. There		apprentice(learner potter) to improve it	
	might be moments in the			
	story when whole groups		Connection with the way we commemorate special	
	are engaged or moments		eventsand that people with disability (Josiah had a leg	
	when they could offer		amputated) can still succeed.	
	their thoughts on the			
	events of the story e.g. a			
	meeting, I nrough this			
	enacting the story is			
	brought to life.			