SUSTAINABLE STIMULI

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Des explores how a simple West African artefact can be the stimulus for a plethora of ideas, making it an exceptional sustainable classroom resource. They cannot be used for boiling water, but nonetheless these multi-coloured, recycled plastic kettles are produced in their tens of thousands, if not millions, in large modern factories in Africa. What are they used for and why are they so popular?

Figure 2 suggests some ideas for beginning to explore this artefact. Further images, ideas and background information on the kettles can be freely downloaded to use with your class, showcasing the versatility of one simple artefact.

Using artefacts

The wise use of artefacts in the classroom can engage all learners, especially those who have strengths in kinaesthetic learning (touch, shape, feel), and can gain the attention of reluctant learners.

Selecting suitable artefacts needs careful consideration to avoid stereotyping, as they may only provide a partial representation of a place, but used appropriately they can be a long-lasting key source material to stimulate work across the curriculum.

Teachers also need to be well prepared for using any artefact, with secure background knowledge and by considering:

- 1. Why am I using this artefact?
- **2.** How will this particular artefact extend my pupils' understanding of a particular place/theme/issue?
- **3.** What is the context in which this artefact is used?

Stimulus item

The plastic kettles shown in Figure 1 are found widely in West African countries such as Mauritania, Guinea, Sierra Leone, Liberia, Ghana, Cameroon, Mali, Niger and Burkina Faso; most households, restaurants, workplaces and mosques have at least one.



Figure 1: Investigating the artefact. Photo © B&C Educational.

Enquiry questions	Initial answers	Suggested activities	Deeper questions
What?	A kettle made from recycled plastic	Write a short description of the plastic kettle	Where do you think the plastic comes from?
Where?	Used in many countries in West Africa	Complete an outline map of West Africa naming and locating the cities and countries mentioned	Why aren't they used in Europe? Why not in other developing countries?
Why?	For carrying water, but particularly for ritual ablution and for hygiene in local toilets.	Find out about domestic water supply in one of the countries named in the article. Explain how the use of plastic kettles in collecting and storing water helps to meet Global Goal 6: Clean Water and Sanitation. Find out about the ritual of Al Woudou.	Why don't people use taps and sinks in their own homes? Why don't people use toilet paper in the local toilets? Is this fair that there are these differences?
How?	How are these made?	Find other items that are made by injection moulding and compare their uses.	They are made by injection moulding, how is this done? What are the pros and cons of this method of manufacture?
Who?	They are made in large modern factories, including in Lagos, Nigeria, and Dakar, Senegal.	Write the story of a kettle's life, from being formed in a factory to its daily use	What would happen if these factories did not produce the plastic kettles?
When?	They are currently in production and use	Imagine you are re-designing the kettle. What changes would you make, what materials would you use, and what improvements could you make? Consider cost, market, volume, usability, source of materials, ease of manufacture and sustainability issues.	They are based on the traditional design of a metal kettle. Why do you think this is?

Figure 2: Suggested activities using an enquiry approach.

WEB RESOURCES

Download images, ideas and background information: www.geography.org.uk/pg Dr Des Bowden was head of geography at Newman University Birmingham, and is now co-director (with Pam Copeland) of B&C Educational Ltd (www.primaryschool-resources.com).