Exploring Unfamiliar Artefacts

Identify the objects and say

what you think they are used for?

Above images are only representative of some unfamiliar artefacts
(paper clip, staple remover, corkscrew opener and eyelash curler).
You may have to search quite a bit to find artefacts that are unfamiliar to students.

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Background

It is natural for children to ask "what is this?", "What is it used for?", when they come across an unfamiliar artefact. The activity of identifying unfamiliar artefacts aims at sensitising students about the close link between "form and function". Typically, the structure of an artefact can be a clue to its function. But it is possible that an artefact might provide multiple affordances and hence multiple possible actions. It is interesting to explore how one makes decisions about the intended function of the artefact. What strategies would enable one in identifying the intended function of a novel artefact?

Children observe adult members of the society using artefacts and learn typical functions from them (Casler & Kelemen, 2005). When given a task to explore unfamiliar artefacts, questions posed by children may reveal a great deal about the characteristics of objects they consider to be conceptually important. Research in the area of D&T education reveals that students use a variety of cognitive strategies such as criticizing, rejecting, seeking or providing justifications for ideas, when exploring unfamiliar artefacts. Additionally the activity also allows students to apply a range of handling strategies such as observation, probing, trying out possible actions and checking predictions. (Ara, Natarajan & Chunawala, 2013).

Adapted from: Ara, F., Natarajan C. & Chunawala, S. (2013) A study exploring the strategies utilised by Indian middle-school students in identifying unfamiliar artefacts. *Design and Technology Education: An International Journal, 14.3*, 47 – 57.

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