[ACTIVITY DETAIL]

# 4. Hard or soft?

Classification of objects and materials according to their properties.

## OBJECTIVES

- To sort and classify materials according to their hardness.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.
- Identifying and classifying.

## RESOURCES

Hard & soft collection:

- Plasticine
- Sponge
- Clay (dry)
- Tub of soil or mud
- Tub of sand
- Powder puff
- Stone, rock
- Clay (moist, sealed in a transparent bag)

## DISCUSSION

Discuss the meanings of the words 'soft' and 'hard' with the children. Some items may at first be difficult for the children to sort, and so they can be tested with a finger nail. Soft things can be defined as those your finger or finger nail can make a dent in, whilst hard things can not be dented.

**Note:** *Confusion can arise between softness and flexibility. You may choose to discuss 'bendiness' if children begin to query items with this property. Alternatively, you can ask children if the material can be* ***dented*** *rather than* ***bent****.*

During or after sorting, children can be asked:

- How will you sort things which are soft or hard?
- Why are some things soft?
- Why are some things hard?
- What do we use soft things for?
- What do we use hard things for?

## TASK

Children explore hard and soft materials in the classroom. The exploration can be confined to a table-top display, or children can explore the classroom more widely.

The list of items suggested for sorting is by no means exhaustive. You can easily add to this list with items from home or school.

## VARYING THE TASK

To vary the activity for each new group, use a different set of items each time.

Children sort items into P.E. hoops which have labels reading 'hard' and 'soft'. For more able children, items which have both hard and soft parts can be included in the display, such as a pencil with a rubber on the end, a washing up sponge with a handle, a feather duster, a glue stick, etc. Children can be asked where these things should be placed, hopefully leading to the solution of overlapping the P.E. hoops, so items can be placed in the intersection.