Uses of Everyday Materials:

Changing Shape

Aim:

To find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching by changing the shape of objects.

I can explain how the shapes of objects made from some materials can be changed.

Success Criteria:

I can tell you four ways the shapes of some objects can be changed.

I can demonstrate four ways to change the shape of some objects.

Key/New Words:

Change, squashing, bending, twisting, stretching, squash, bend, twist, stretch.

Resources:

Lesson Pack

Objects to be manipulated: play dough, pipe cleaners, tea towels, socks, plastic bottle, elastic bands, drinking straws and sponges.

Preparation:

Gather the resources above for children to explore, per group.

Differentiated Changing Shape Activity
Sheet per child

Prior Learning:

It will be helpful if children are familiar with the meaning of the words squashing, bending, twisting and stretching.

Learning Sequence



Changing the Shape of Materials: In pairs, children think about how the shape of objects made from some materials can be changed, using the questions on **Lesson Presentation** as prompts. Talk through the questions and share examples of changing the shape of objects, for example squashing a cardboard box.





Squashing, Bending, Twisting and Stretching: Go through the different ways in which materials can be manipulated. Encourage children to do each action with their hands. Are children able to demonstrate each of the actions?





Instructions: Explain how to try and change the shape of the objects on the tables and record what you find on the activity sheets. (You may want to demonstrate the plastic bottle yourself as there may be sharp edges if the bottle splits.)





Changing Shape: Children take part in the activities on the tables and record their findings on the differentiated **Changing Shape Activity Sheet**. Are children able to tell you four ways in which the shape of some objects can be changed? Are children able to demonstrate each of the actions?





Children explore the objects and record which can be bent, squashed, twisted and stretched.



Children explore the objects and record which can be bent, squashed, twisted and stretched. Then they find 3 objects which cannot be changed in this way.



Children explore the objects and record which can be bent, squashed, twisted and stretched. Then go on to explain why they think some materials can be changed in this way and others cannot.



Can You... Discuss some of the questions on the **Lesson Presentation**. Explain that not all objects can change shape in the ways children have explored today and discuss why they think this is.

Taskit

Changeit: Children could change the shape of object, taking pictures of the object before and after. These could be displayed for others to try and guess the technique used to change the shape of the object.

Guessit: Children could change the shape of an object, take pictures and ask others to guess the object which has been changed.

Filmit: Children could make a short film explaining how the shape of some objects can be changed.