

## Creating shapes

The word 'sculpture', from the Latin verb *sculperere* means 'to carve' or 'to cut'. It also refers to the practice of moulding pliable<sup>1</sup> material such as clay or wax, thus justifying the description of sculpture as 'the plastic art'.

## Sculpting methods

There are different ways of making a sculpture.

– By **removing material** until the desired shape is obtained (glyphic<sup>2</sup> method). In **carving**,<sup>3</sup> the sculptor starts with a solid mass of material and reduces it systematically to the desired form. After he has outlined the main masses and planes that define the outer limits of the forms, he works progressively on the details of the final work.

– By **giving shape** to an object (plastic method), through modelling or casting.

**Modelling** or building up an object consists in manipulating soft materials like clay, wax, papier-mâché, plastilina, polyurethane foam, silicone rubber, etc. so as to obtain figurines, pottery, ceramics.

Modelling is also the first stage for producing an object in more permanent material (e.g. bronze). This process is called **casting**<sup>4</sup> and consists in melting<sup>5</sup> metals (titanium, super alloys,<sup>6</sup> nickel, copper, bronze, brass, silver, gold) at high temperatures, forging<sup>7</sup> them, heat-treating and finally machining<sup>8</sup> them to shape.

– By **constructing** pieces in a variety of ways. This method includes, for example, **assembling** pieces with different shapes with welder or glue<sup>9</sup> or **projecting laser-light** to obtain the solid picture of the object (hologram). This category also includes **mobiles**, that is hanging or free-standing structures of wire, rods<sup>10</sup> and sheet metal, that, when disturbed, move and create new patterns.

Other non-traditional forms of sculpture can be obtained by using natural elements like **sound**, **light** and **land**.

## Types of sculptures

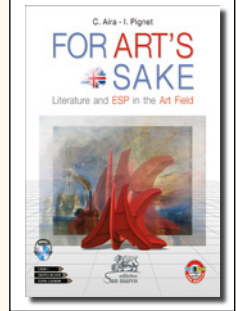
Depending on its future placement a sculpture can be in the round or a relief.

A sculpture **in the round** is an object standing free in the open or inside a building which can be viewed from multiple directions. In some cases the spectator is also invited to walk under and through it.

A **relief** always needs a supporting surface to which it is juxtaposed as an adornment. It can be a **high-relief** or **low-relief** according to whether it projects from the surface or is carved onto it.

### GLOSSARY

- 1 malleable
- 2 related to the art of carving or engraving
- 3 (to carve) art of cutting into a special shape
- 4 (to cast) making an object by pouring hot metal or plastic into a shaped container
- 5 (to melt) liquefying
- 6 metals resulting from a mixture of other metals
- 7 (to forge) giving form by heating and hammering
- 8 producing by machine
- 9 adhesive substance
- 10 long, thin bars of wood, metal, or plastic



**ACTIVITIES**

**Reading comprehension**

1 Look at the pieces above and, using the captions, identify the following characteristics.

- Sculpting method (carved, modelled, etc.)
- Material (clay, metal, wood, etc.)
- Type of sculpture (in the round piece, high-relief, etc.)
- Sculpting method (carved, modelled, etc.)
- Who made the work and when



**A** Dish with bamboo leaves, style of Ogata Kenzan, 17<sup>th</sup>-18<sup>th</sup> century, ceramics.



**B** Lorenzo Ghiberti, Florence Baptistery East Doors, 1425-1452, bronze.



**C** Alberto Giacometti, *Woman on Cart I*, 1966, bronze, Old City Hall, Hostelbro.



**D** Anonymous, *Cerere*, clay, Stibbert Garden, Florence.

**Vocabulary**

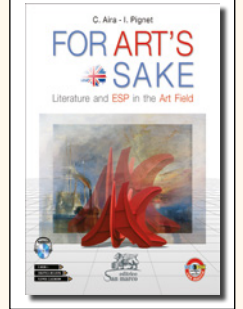
2 Find the Italian equivalent for each method of making sculptures.

- 1 Carving .....
- 2 Casting .....
- 3 Welding .....
- 4 Modelling .....
- 5 Assembling .....
- 6 Gluing .....

3 Match the following materials with the corresponding picture.

- 1 Papier-mâché
- 2 Wire
- 3 Clay
- 4 Copper





## Listening comprehension

4 Listen to the recording and fill in the blanks with the missing words.

### BRONZE CASTING

Bronze, the 1 ..... of copper and tin, is traditionally used in casting because it resists exposure and captures even the 2 ..... details. According to the hardness required, the proportions of 3 ....., usually nine to one, can be changed. Casting can be done either using moulds made of compact sand or else using 4 ..... models. The wax method is called the process of *cire perdue*, a French phrase meaning 'lost wax'. A clay model is built on a metal 5 ..... and covered with a layer of wax which varies in 6 ..... according to the width required for the metal. When the whole is fired, the wax 7 ..... and is expelled through ducts prepared for this purpose. Then molten bronze is 8 ..... in to replace the lost wax, and when the 9 ..... is removed after cooling the metal object is ready for the finishing touches. Originally the new bronze sculpture is 10 ....., but soon gets a green or red 'patina'.

## Speaking

5 In pairs ask and answer questions about the process of *cire perdue*. Use the text in the previous exercise as a guide and follow the hints below.

- Meaning of the word
- The function of the metal armature
- The thickness of the wax
- The consequence of firing the whole
- How the lost wax is replaced
- What happens after the metal cools