Radiate. ‘With rays’, a word used to describe the head of a god or emperor when it is shown with a crown imitating the rays of the sun. In Roman Imperial art radiate heads are first found on posthumous portraits, and then become the sign of a double denomination (dupondius, antoninianus, double aureus etc.) on Roman coins. In the later Roman Empire there are also signs that the emperor is being equated with Sol the sun god, but this ends after Constantine I with the acceptance of Christianity as the official religion of the Roman state (cf. Laureate).

Raking. The word used to describe the cornice/geison and sima on the slope of a gable or pediment, as opposed to the horizontal one.

Rampin. A 19th century French consul who acquired the head of the so-called ‘Rampin rider’ in Athens and sent it to Paris (the connection between the head and the torso of the rider was not established until shortly before the Second World War). A cast of the body has now been joined to the head in the Louvre Museum, and a cast of the head has been joined to the body in the Acropolis Museum, Athens.

Red figure. A technique of vase painting developed from black figure at Athens c. 530 B.C. (cf. Bilingual). In this technique the figures are of an orange/red colour, and the background is black. Incision is rare and details are rendered either by ‘relief lines’ or by lines drawn in a diluted glaze or slip (see Slip) which are slightly lighter in colour. In addition to Athens, several centres in Etruria and the south of Italy (Magna Graecia) produced a great deal of red figure pottery in the later fifth and fourth centuries B.C. (see Oxygenating fire, Reducing fire).

Reducing fire. The second stage in firing pottery in a kiln to produce the black figure and red figure styles of decoration. After a first stage of firing when fresh air was allowed to enter the kiln, all entrances for air were blocked to exclude oxygen. This induced a change from ferric oxide to ferrous oxide in the iron-bearing clay used in this process, and at this stage all parts of the vase (except those covered with other pigments) turned black. The reducing stage was continued until sintering had occurred on all areas that were to remain black (cf. Oxygenating fire).

Refinement. In architecture, a variation from the horizontal or vertical, or from strict regularity of plan, which is designed to improve the appearance of a building by creating an optical illusion. This is sometimes necessary because the human eye does not always absorb information correctly. For instance, the horizontal lines of a gabled building may appear to sag, and this can be corrected by creating a very slight upward curvature of stylobate and architrave. An appearance of greater height can be achieved by making columns and walls lean inward slightly (see Batter), and the uppermost parts of a building may be made to seem more imposing by giving them a slight outward tilt. It is also not uncommon to find that the intercolumniations at the ends of a row of columns are smaller than the others (see Contraction).

Regia. ‘Royal (house)’, the house which King Numa built at Rome, according to Roman tradition. Wherever its original site was, in the later Republic the name of Regia was applied to a building in the Forum in which the Vestal Virgins lived under the supervision of the Pontifex Maximus and of the Rex Sacrorum or ‘King of Sacred Matters’.

Regio (pl. regiones). A district of a city (which might be further subdivided into vici). During the Republic Rome was divided into four regions. This system was changed by Augustus, in whose reign the city was divided into fourteen regions. In the 7th century A.D. this was replaced by an ecclesiastical division into seven regions.

Regula. A narrow strip set beneath the taenia of a Doric architrave, having six guttae carved upon its lower side.

Relief. The projection of the representational or decorative part of a carving from its background. By convention, if less than half of a figure projects, it is said to be in low relief (basso rilievo in Italian); if half projects, it is medium relief (mezzo rilievo); and if more than half projects it is in high relief (alto rilievo).

Relief line. In red figure vase painting internal details are rendered either with a strong black line which stands up from the surface of the vase and can be felt by the finger, or with a less prominent line in diluted
slip. The former is called a relief line because it stands out from the surface of the vase. Lines of this kind are occasionally found in black figure where one light area needs to be distinguished from another.

**Relieving arch (or discharging or safety arch or triangle).** Sometimes an arch or triangle, filled in with stone or brickwork or with concrete, may be noticed above an opening in a wall such as a doorway or window. This is a true relieving (or discharging) arch or triangle, formed with the intention of lightening the load at that point. Sometimes, however, arches of this kind are found in Roman concrete work in unbroken stretches of the wall. In such cases they cannot be relieving arches, but must have been incorporated for a different purpose, perhaps to avoid excessive settling of the mass of concrete during the drying-out stage.

**Reserved area.** When a figure or a detail of a figure is left unpainted within an area of dark decoration, that part of the design is said to be ‘reserved’. In red figure vase painting, of course, the figures are all reserved. Lines can also be produced in this technique, and gradually it replaced incision as a means of separating one dark area from another.

**Respond.** In architecture, a pilaster on a wall which is aligned with (i.e. ‘responds to’) a column in front of it; also a pilaster or pier supporting one end of a ceiling beam or an architrave, or the springing of an arch, ‘responding’ to a similar pilaster or pier at the other end.

**Retiarius.** A gladiator whose weapons consisted of a trident and net, and who had otherwise only a covering for his left arm as a protection. He was set to fight against a more conventionally armed gladiator, a *murmillo*, who wore a Gallic helmet decorated at the crest with a fish.

**Reticulatum, see Opus.**

**Reverse.** The less important side of a coin, as opposed to the obverse. Since in minting the lower die was the one which was less likely to suffer damage, the reverse side is likely to be the one which was struck by the upper or punch die, and in doubtful cases this is sometimes used as a criterion to decide which side of a coin should be called the reverse.

**Revetment.** ‘Clothing’, a facing, plain or decorative, applied to a wall built of some other material; or a wall of firm material supporting a mass of earth or water, as in the case of a dam.

**Rhyton.** ‘Pourer’, the name given to a funnel or other vessel in the shape of an animal’s horn, which might be used as a drinking cup, or for collecting and pouring liquids at religious ceremonies.

**Rhodian.** The island of Rhodes has given its name to a number of things. During the archaic period Rhodes was the home of some distinctive styles of vase painting (see Fikellura, Wild Goat). In the classical period a weight standard used for coinage at many mints came to be called Rhodian (it may have begun as a reduction of the Attic weight standard but gained a life of its own). Rhodian sculptors became famous in the Hellenistic period, and the sculptural style called ‘Pergamene’, if it can be attributed to artists from any particular area, was probably the creation of Rhodian artists to a greater extent than those of any other city. In architecture an internal peristyle which had one end with a higher entablature and roof than the other three, giving it greater prominence, was called Rhodian.

**Robbing trenches.** In the course of archaeological excavations it is common to find evidence, from changes in the consistency or colour of the soil, that the stones of an ancient wall or building have been removed for reuse. It is often possible, once this has been recognised, to reconstruct the plan of an ancient building from the signs of the trenches or pits that were left after the stones had been taken away.

**Rogus.** A Roman funeral pyre (cf. Ustrinum).

**Rosette.** A decorative pattern which first appears on Greek pottery in the archaic period, often roughly executed as an approximate circle with indentations suggesting leaves, and radial divisions marked by incision. Rosettes appear at a later date as architectural decorations, either carved or made in metal and affixed to buildings.

**Rosso antico.** A marble of Egyptian origin, of a red colour with white veining.

**Rostrum.** ‘Beak’, the beak or bill of a bird, and hence the ‘beak’ of a warship, namely its prow with its ram. At Rome the speakers' platform in the Forum was decorated with ships' beaks after a naval victory in 338 B.C., and was therefore called the ‘beaks' or Rostra; this use of the word was extended to other
speaking platforms or stages afterwards. In English it is used in the same sense, but in the singular form 'rostrum'.

**Rotunda.** A circular building. The word is always used of Roman buildings (*e.g.* the circular part of Hadrian's Pantheon), but when speaking of Greek architecture before the Roman period the Greek *tholos* is used instead.

**Roundel.** An architectural moulding semicircular in section; also a painting or a piece of relief sculpture set in a circular frame (*cf.* Medallion, Tondo).