

The following are the characters in question :

1. Aspect or Lustre.
2. Colour.
3. Streak.
4. Form.
5. Structure.
6. Hardness.
7. Specific Gravity.
8. Relative Malleability.
9. Magnetism.
10. Taste, &c.

1. *Aspect or Lustre*.—We have here to consider, first: the *kind*; and, secondly, the *degree* or *intensity* of the lustre, as possessed by the mineral under examination. The kind of lustre may be either *metallic*, as that of a piece of copper, silver, &c.; or *sub-metallic*, as that of most kinds of anthracite coal; or *non-metallic*, as that of stones in general. Of the non-metallic lustre there are several varieties, as, more especially: the *vitreous* or glassy lustre—example: rock-crystal; the *resinous* lustre—ex.: native sulphur; the *pearly* lustre—ex.: talc; the *silky* lustre (usually accompanying a fibrous structure)—ex.; fibrous gypsum; the *stony* aspect; the *earthy* aspect, &c. These terms sufficiently explain themselves. Occasionally, two kinds of non-metallic lustre are simultaneously present, as in obsidian, which exhibits a “resino-vitreous” aspect; and the lustre in some zeolites is pearly within, and vitreous externally. In mica, and some few other minerals, there is frequently a *pseudo-metallic* lustre. This may be distinguished from the metallic lustre properly so-called, by being accompanied by a degree of translucency, or by the powder of the mineral being white or light-colored: minerals of a true metallic aspect being always opaque, and their powder being always black or dark-colored. So far as regards the metallic and the non-metallic lustres, there are very few minerals which exhibit (in their different varieties) more than one kind. Thus, galena, the common ore of lead, copper pyrites, &c., always present a metallic lustre; whilst, on the other hand, quartz, feldspar, calc-spar, gypsum, &c., are never found otherwise than with a non-metallic aspect. Hence, by means of this easily-recognized character, we may divide all minerals into two broad groups; and thus, if we pick up a specimen