

ON THE

CHARACTERS OF MINERALS.

THE characters of minerals are of different kinds, viz. *External, Chemical, Physical, Geognostical, and Geographical.*

1. *External Characters*,—are those which we discover by means of our senses, in the aggregation of minerals, and which have no reference to their relation to other bodies, or to chemical investigations.

2. *Chemical Characters*,—are those which are afforded by the complete analysis of the mineral, by trials with the various re-agents, the blowpipe, and the pyrometer.

3. *Physical Characters*,—are those physical phenomena which are exhibited by the mutual action of minerals and other bodies; such are the magnetic and electric properties exhibited by some minerals.

4. *Geognostical Characters*,—are those derived from various geognostic relations of minerals.

5. *Geographical Characters*,—are derived from the geographical distribution of minerals.

We shall first consider the **External Characters**, and then the others, in the order already mentioned.

A

EXTERNAL CHARACTERS OF MINERALS.

The External Characters of Minerals are either *generic* or *specific*. The Generic Characters are certain properties of minerals used as characters, without any reference to their differences, as colour, lustre, or weight. The differences among these properties form the Specific Characters, as adamantine lustre, and glassy or vitreous lustre. The generic characters are divided into *general* and *particular*: Under the first, are comprehended those that occur in all minerals, whether solid, friable, or fluid: under the second, those which occur only in particular classes of minerals. In the following tabular view, the External Characters are arranged nearly in a natural succession, and in the order in which they are employed in the descriptions of minerals.

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A

TABULAR VIEW
OF THE
GENERIC EXTERNAL CHARACTERS
OF
MINERALS.

GENERAL GENERIC EXTERNAL CHARACTERS.

1. COLOUR.
2. The Cohesion of the Particles, according to which minerals are distinguished into

	Solid,	Friable,	Fluid
	Particular generic characters of Solid minerals.	Particular generic characters of Friable minerals.	Particular generic characters of Fluid minerals.
Characters for the sight.	Aspect of the fracture. External aspect.	External shape.	The lustre.
	Lustre of the fracture.	The Lustre.	
	The fracture. Shape of the fragments.	Aspect of the particles.	

Particular generic characters of Solid minerals.		Particular generic characters of Friable minerals.	Particular generic characters of Fluid minerals.
Characters for the sight.	Aspect of the distinct concretions.	Shape of the distinct concretions. Surface of the distinct concretions. Lustre of the distinct concretions.	Transparency.
	General aspect.	The transparency. The streak. The soiling.	
Characters for touch.		The hardness. The tenacity. The frangibility. The flexibility. The adhesion to the tongue.	Fluidity.
		The friability.	
For the hearing.		The sound.	

Remaining general generic external characters.

- For the touch.
- For the smell.
- For the taste.
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3. The Unctuosity.

4. The Coldness.

5. The Weight.

6. The Smell.

7. The Taste.

TABULAR

TABULAR VIEW

OF THE

DIFFERENT GENERIC AND SUBORDINATE SPECIFIC EXTER-
NAL CHARACTERS

OF

MINERALS.

GENERAL GENERIC EXTERNAL CHARACTERS.

I. COLOUR.

1. *The different Chief or Principal Colours and their varieties.*

A. WHITE. Weiss. Blanc. Albus.

a. Snow-white. Schneeweiss. Blanc de neige. Ni-
veo-albus.*b. Reddish-white.* Röthlichweiss. Blanc rougeatre.
Rubescenti-albus.*c. Yellowish-white.* Gelblichweiss. Blanc jaunatre,
Flavescenti-albus.*d. Silver-white.* Silberweiss. Blanc d'argent. Ar-
genteo-albus.*e. Greyish-white.* Graulich-weiss. Blanc grisatre.
Canescenti-albus.*f. Greenish-white.* Grünlich-weiss. Blanc verda-
tre. Viridescenti-albus.*g. Milk-white.* Milchweiss. Blanc de lait. Lac-
teo-albus.*h. Tin-white.* Zinnweiss. Blanc d'étain. Stannec-
albus.

B. GREY.

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B. GREY. Grau. Gris. Griseus.

- a. Lead-grey.* Bleigrau. Gris de plomb. Plumbeo-griseus.
- α. Common-lead grey.* Gemeines bleigrau. Gris de plomb commun.
- β. Fresh lead-grey.* Frisches bleigrau. Gris de plomb fraîche.
- γ. Blackish lead-grey.* Schwärzlich bleigrau. Gris de plomb noirâtre.
- δ. Whitish lead-grey.* Weisflich bleigrau. Gris de plomb albatre.
- b. Bluish-grey.* Bläulichgrau. Gris bleuâtre. Cærulescenti-griseus.
- c. Pearl-grey.* Perlgrau. Gris de perle. Margaritino-griseus.
- d. Smoke-grey.* Rauchgrau. Gris de fumée. Fumoso-griseus.
- e. Greenish-grey.* Grünlichgrau. Gris verdâtre. Viridescenti-griseus.
- f. Yellowish-grey.* Gelblichgrau. Gris jaunâtre. Flavescenti-griseus.
- g. Ash-grey.* Aschgrau. Gris de cendre. Cinereo-griseus.
- h. Steel-grey.* Stahlgrau. Gris d'acier. Chalybeo-griseus.

C. BLACK. Schwarz. Noir. Niger.

- a. Greyish black.* Graulichschwarz. Noir grisâtre. Canescenti-niger.
- b. Iron black.* Eisenschwarz. Noir de fer. Ferro-niger.
- c. Velvet black.* Sammet schwarz. Noir de velours. Atro-niger.
- d. Pitch black, or brownish black.* Bräunlichschwarz. Noir brunâtre. Brunescanti-niger.
- e. Raven black, or greenish black.* Rabenschwarz oder grünlich schwarz. Noir verdâtre. Viridescenti-niger.

f. Bluish

f. Bluish black. Bläulichschwarz. Noir bleuâtre.
Cœrulescenti-niger.

D. BLUE. Blau. Bleu. Cœruleus.

a. Blackish-blue. Schwarzlich blau. Bleu noirâtre.

b. Azure-blue. Lazurblau. Bleu d'azur. Azureo-cœruleus.

c. Violet-blue. Veilchenblau. Bleu violet. Viola-ceo-cœruleus.

d. Lavender-blue. Lavendelblau. Bleu de lavande, Lavendula-cœruleus.

e. Plum-blue. Pflaumenblau. Bleu de prune, Pruneo-cœruleus.

f. Berlin-blue, or Prussian blue. Berlinerblau. Bleu de Prusse. Berolino-cœruleus.

g. Indigo-blue. Indigblau. Bleu d'indigo. Indico-cœruleus.

h. Smalt-blue. Schmalteblau. Bleu de smalt. Smaltino-cœruleus.

i. Duck-blue. Entenblau.

k. Sky-blue. Himmelblau. Bleu de ciel. Cœlesti-cœruleus.

E. GREEN. Grün. Verd. Viridis.

a. Verdigris-green. Spangrün. Verd de gris. Ærugineo-viridis.

b. Celandine-green. Seladongrün. Verd celadon, ou de mer. Celadono-cœruleus.

c. Mountain-green. Berggrün. Verd de montagne, Montano-viridis.

d. Leek-green. Lauchgrün. Verd de poireau ou de prase. Prasino-viridis.

e. Emerald-green. Schmaragdgrün. Verd emeraude, Smaragdino-viridis.

f. Apple-green. Apfelgrün. Verd de pomme. Pomaceo-viridis.

g. Grass

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- g. Grass green.* Grasgrün. Verd de pré. Grami-
neo-viridis.
- h. Blackish green.* Schärtzlichgrün. Verd noiratre.
Nigrescenti-viridis.
- i. Pistachio-green.* Pistaziengrün. Verd de pistache.
Pistacio-viridis.
- k. Asparagus-green.* Spargelgrün. Verd d'asperge.
Asparago viridis.
- l. Olive-green.* Olivengrün. Verd d'olive. Oliva-
ceo viridis.
- m. Oil-green.* Oelgrün. Verd d'huile. Oleario-
viridis.
- n. Siskin-green.* Zeisiggrün. Verd serin. Acan-
thino viridis.

F. YELLOW. Gelb. Jaune. Flavus.

- a. Sulphur-yellow.* Schwefelgelb. Jaune de sou-
fre. Sulphureo-flavus.
- b. Brass-yellow.* Messinggelb. Jaune de laitton.
Orichalceo flavus.
- c. Straw-yellow.* Strohgelb. Jaune de paille. Stra-
mineo-flavus.
- d. Bronze-yellow.* Speissgelb. Jaune de bronze.
Æneo-flavus.
- e. Wax-yellow.* Wachsgelb. Jaune de cire. Ce-
reo-flavus.
- f. Honey-yellow.* Honiggelb. Jaune de miel. Mel-
leo-flavus.
- g. Lemon-yellow.* Citrongelb. Jaune de citron.
Citrino-flavus.
- h. Gold-yellow.* Goldgelb. Jaune d'or. Aureo-
flavus.
- i. Ochre-yellow.* Ockergelb. Jaune d'ochre. Ochra-
ceo-flavus.
- k. Wine-yellow.* Weingelb. Jaune de vin. Vinea-
flavus.
- l. Pea-yellow.* Erosengelb.

k. Cream,

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- l. Cream, or Isabella yellow.* Isabelgelb. Jaune isabelle. Isabelino-flavus.
m. Orange yellow. Oraniengelb, oder Pommeranzgelb. Jaune d'orange. Aurantio-flavus.

G. RED. Roth. Rouge. Ruber.

- a. Aurora, or morning red.* Morgenroth. Rouge d'aurore. Auroreo-ruber.
b. Hyacinth red. Hyazinthroth. Rouge d'hyacinthe ou ponceau. Hyacinthino-ruber.
c. Tile red. Ziegelroth. Rouge de brique. Lateritio-ruber.
d. Scarlet red. Scharlachroth. Rouge ecarlate. Scarlatino-ruber.
e. Blood red. Blutroth. Rouge de sang. Sanguineo-ruber.
f. Copper red. Kupferroth. Rouge de cuivre. Cupreo-ruber.
g. Flesh red. Fleischroth. Rouge de chair. Carneoruber.
h. Carmine red. Karminroth. Rouge de carmin. Carminco-ruber.
i. Cochineal red. Koschenillroth. Rouge de cochenille. Coccineo-ruber.
k. Crimson red. Kermesinroth. Rouge cramoisi. Carmesino-ruber.
l. Rose red. Rosenroth. Rouge rose. Roseo-ruber.
m. Peach-blossom red. Pfirsichbluthroth. Rouge de fleurs de pecher. Persicino ruber.
n. Columbine red. Kolumbinroth. Rouge columbin. Columbino-ruber.
o. Cherry red. Kirschroth. Rouge cerise. Cerasino-ruber.
p. Brownish red. Braunlichroth. Rouge brunatre. Brunescenti-ruber.

B

H. BROWN,

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H. BROWN. Braun. Brun. Brunus.

- a. Reddish brown.* Röthlichbraun. Brun rouge-atre. Rubescenti-brunus.
- b. Clove brown.* Nelkenbraun. Brun de geroïles. Caryophyllino-brunus.
- c. Hair brown.* Haarbraun. Brun de cheveux. Capillari-brunus.
- d. Broccoli brown.* Kohlbraun. Brun de chou. Brassicino-brunus.
- e. Chesnut brown.* Kastanienbraun. Brun de cha-taigne. Castaneo-brunus.
- f. Yellowish brown.* Gelblichbraun. Brun jaunatre. Flavescenti-brunus.
- g. Pinchbeck brown.* Tombackbraun. Brun de tom-bac. Tombacino-brunus.
- h. Wood brown.* Holzbraun. Brun de bois. Ligno-brunus.
- i. Liver brown.* Leberbraun. Brun de foie. Hepa-tico-brunus.
- k. Blackish brown.* Schwärzlichbraun. Brun noir-atre. Nigrescenti-brunus.

2. *The Intensity of the Colours.* Die höhe der farben. L'intensité des couleurs. Vis colorum.

- A. DARK. Dunkel. Foncée. Obscurus.
- B. DEEP. Hoch. Relevée. Eminens.
- C. LIGHT. Lichte. Claire. Clarus.
- D. PALE. Blass. Pâle. Pallidus.

3. *The delineations, or patterns, formed by the colours.* Die Farbenzeichnung. Dessesins de couleurs. Pictura colorum.

- A. DOTTED. Punctirt. Pointillé. Punctati.
- B. SPOTTED. Gefleckt. Tacheté. Maculati.
- C. CLOUDED. Gewolkt. Nuagé. Nubiformis.
- D. FLAMED.