

# Legend for 1:1 000 000 and 1:2 500 000 Surface Geology

## CENOZOIC UNITS (mainly unconsolidated deposits)

### Quaternary

- Qa Channel and flood plain alluvium; gravel, sand, silt, clay
- Qb Volcanic rocks, predominantly mafic
- Qd Dunes, sand plain with dunes, coastal dunes
- Qe Estuarine, tidal delta deposits; coastal mud flats
- Qi Carbonate sediments
- Qrc Colluvium and/or residual deposits; boulder, gravel, sand
- Qrl Residual sediments and calcrete
- Qs Quaternary clastic sediments, undivided
- Qt Lake and swamp deposits; mud, silt, evaporites, limestone, minor sand
- Qv Volcanics, undivided

### Cenozoic

- Cza Alluvial deposits; typically incised by current drainage
- Czb Volcanic rocks, predominantly mafic
- Czc Consolidated siliclastic rocks
- Czd Mafic intrusive rocks
- Cze Estuarine and delta deposits
- Czf Felsic to intermediate volcanic rocks
- Czg Felsic intrusive rocks
- Czi Carbonate sediments
- Czk Calcrete
- Czl Laterite, ferruginous duricrust
- Czo Coal measures
- Czq Spring deposits
- Czrb Black soil plains
- Czs Sand plain
- Czu Cenozoic sediments, undivided
- Czw Mixed sediments and volcanic rocks
- Czx Bauxite
- Czz Silcrete

## SEDIMENTARY ROCKS AND LOW-GRADE METAMORPHIC ROCKS

mudstone, siltstone, sandstone, conglomerate (s), limestone (l), coal measures and graphitic sediments (o), volcanogenic sediments (j), mixed sediments and volcanic rocks (w), chemical sediments (c)

## IGNEOUS ROCKS

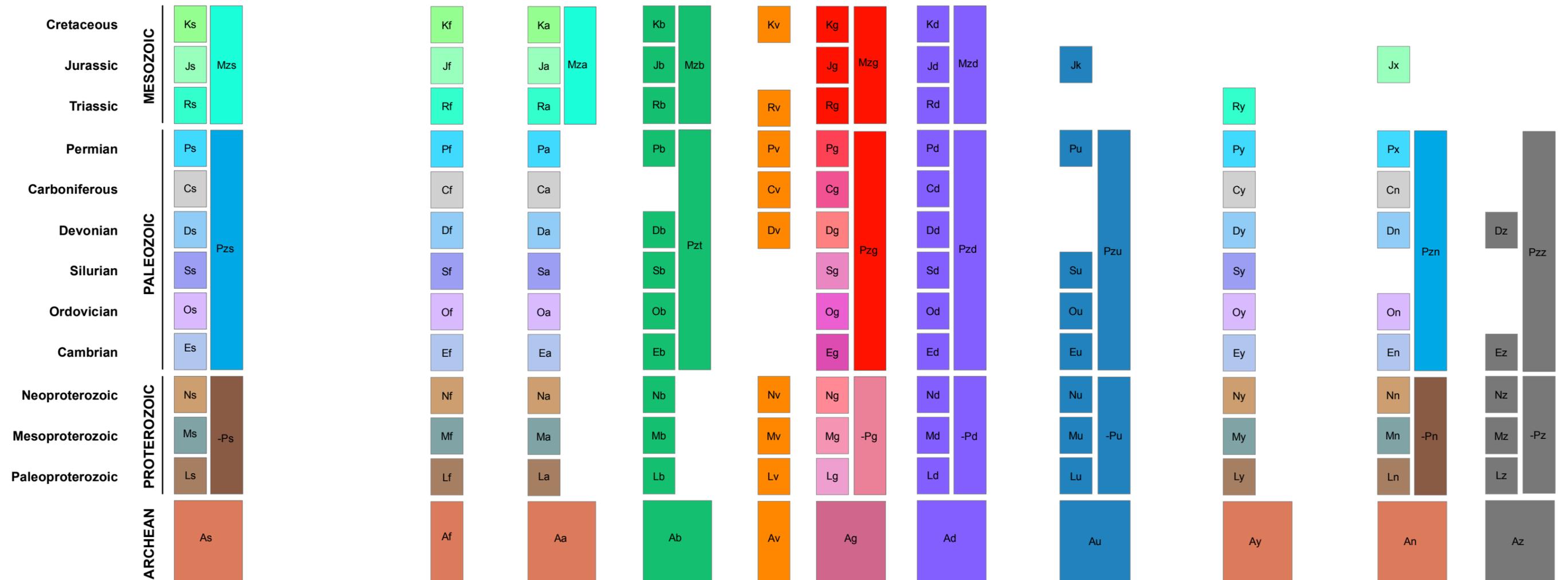
### Volcanic rocks

### Intrusive rocks

- |                        |                     |                            |                        |                           |                        |                                                 |
|------------------------|---------------------|----------------------------|------------------------|---------------------------|------------------------|-------------------------------------------------|
| <b>Felsic</b>          | <b>Intermediate</b> | <b>Mafic to ultramafic</b> | <b>Felsic to mafic</b> | <b>Felsic</b>             | <b>Mafic</b>           | <b>Mafic to ultramafic</b>                      |
| (f), metamorphosed (r) | (a)                 | metamorphosed (t)          | (v)                    | (g), mixed intrusives (i) | (d), metamorphosed (t) | (u), metamorphosed (e), alkaline ultrabasic (k) |

## METAMORPHIC ROCKS

- |                                                    |                                 |                          |
|----------------------------------------------------|---------------------------------|--------------------------|
| <b>Low-medium grade</b>                            | <b>High-grade</b>               | <b>Fault/shear rocks</b> |
| metacarbonate (m), siliciclastic (y), hornfels (h) | metamorphics (n), complexes (x) | (z), quartz vein (q)     |



Note: Geological units which span multiple time periods have symbols showing the oldest and youngest time periods. e.g. Cambrian to Ordovician sedimentary rocks = EO; Paleoproterozoic to Mesoproterozoic high grade metamorphics = LMn