

Stages. For intermediate divisions *sub* is prefixed to the name of the division next above. Still lower subdivisions are termed *zones*, and receive special designations from a characteristic fossil. Subdivisions of zones, corresponding to the vertical distribution of species, have been recently called *hemeræ*, from the Greek for *day*. In place of any of the above terms, the word *time* may be used in its usual sense whenever it is thought convenient. It is substituted beyond for the word *æon*.

I. ARCHÆAN TIME. — The beginning of Archæan time was without life; but before it closed conditions had been reached that admitted of the existence of protophytic and protozoic life.

II. PALEOZOIC TIME. — Characterized by the more ancient kinds of life, closing with the period of the great Coal formations of Europe and America, so named from *παλαιός*, *ancient*, and *ζώνη*, *life*.

III. MESOZOIC TIME. — The life of mediæval types or kinds; closes with the period of the Chalk or Cretaceous formation, so named from *μέσος*, *middle*, and *ζώνη*.

IV. CENOZOIC TIME. — The life of more modern types, continuing to the present time, so named from *καινός*, *recent*, and *ζώνη*.

The term Paleozoic was proposed by Sedgwick in 1838, and preferred and adopted by Murchison the same year in place of his own name *Protozoic*, it "involving no theory." For the terms Mesozoic and Cenozoic, and the upper limit of the Paleozoic, the science is indebted to Professor John Phillips, of Oxford, England. Cenozoic is sometimes written Cainozoic or Kainozoic. But in English, derivatives from the Greek diphthong *αι* become *æ* or *e*, as in *Ethiopia*, *Eolian*, *Egypt*, *Etna*, *ether*, *hematite*; and *κ* becomes *c*, as in *center*, *circle*, *calyx*, *camel*, and multitudes of other words. Lyell's names for divisions of the Tertiary, namely, Eocene, Miocene, Pliocene — are examples of both cases, the *ce* in each being *και* in Greek.

The following table contains some of the subdivisions of inferior grade :

I. ARCHÆAN TIME.

There are the two divisions, the AZOIC and the ARCHÆOZOIC, but they are not distinguishable in the rocks. The rocks have been divided into —

1. LAURENTIAN.
2. HURONIAN.

II. PALEOZOIC TIME.

1. *Eopaleozoic Section.*

1. CAMBRIAN, OR CAMBRIC, ERA.
 1. Lower Cambrian, or Georgian Period.
 2. Middle Cambrian, or Acadian Period.
 3. Upper Cambrian, or Potsdam Period.
2. LOWER SILURIAN, OR LOWER SILURIC, ERA.
 1. Canadian Period.
 2. Trenton Period.