

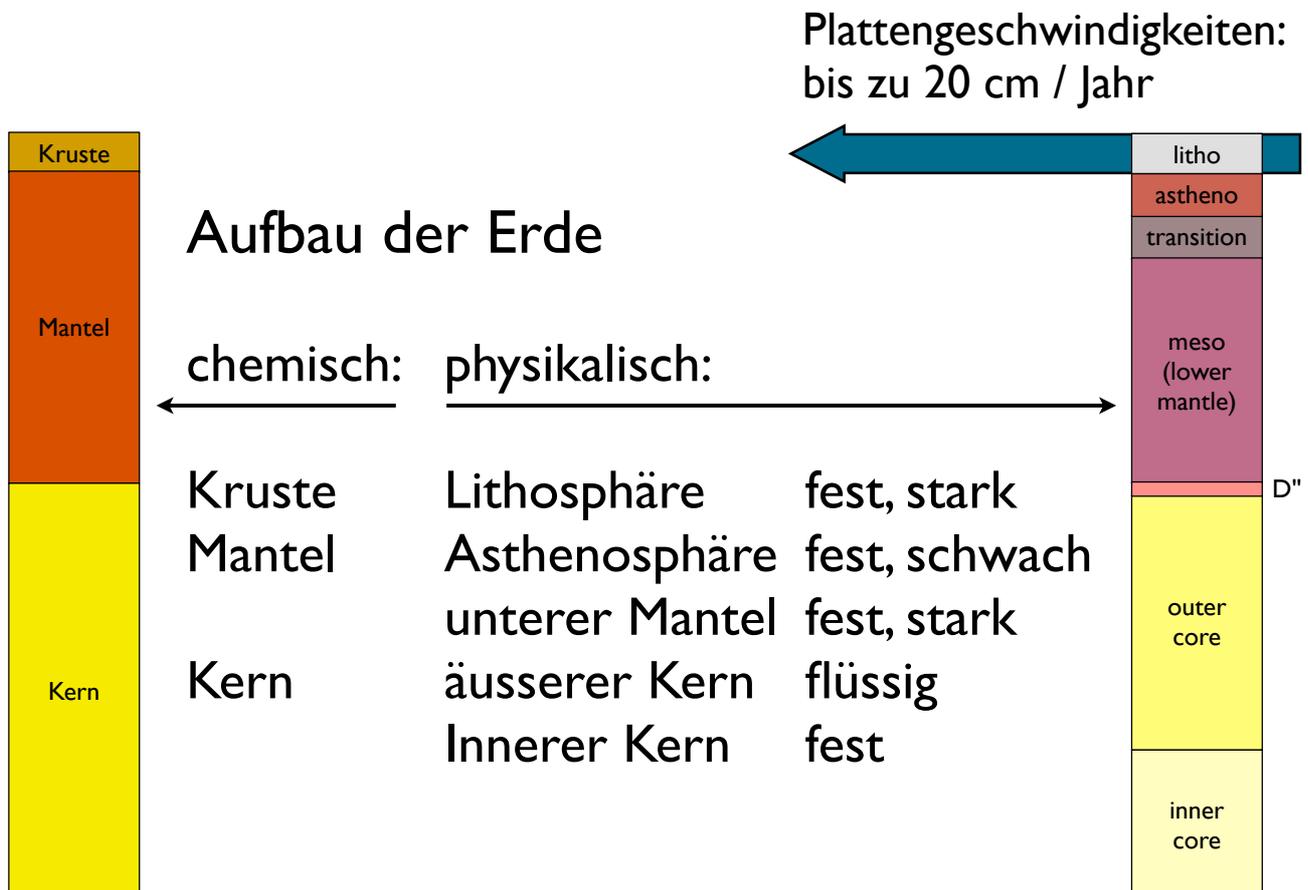
Zusammenfassung

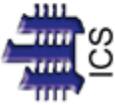
13.7 Ga Urknall

4.7 Ga Sonnensystem und Erde entstehen

~225 Ma Pangäa bricht auseinander

| | Zusammensetzung | Dicke Volumen | Dichte (kg / m ³) | Alter |
|---------------------|-----------------|---------------------|----------------------------------|------------|
| kontinentale Kruste | Granodiorit | 35 - 40 km | 2700 | ≤ 4 Ga |
| ozeanische Kruste | Basalt | ~ 7km | 3000 | ≤ 200 Ma |
| Mantel | Peridotit | 82% des Erdvolumens | 3000-5000 | ± Erdalter |
| Kern | Fe-Ni-Legierung | | 11'000 | ± Erdalter |





INTERNATIONAL STRATIGRAPHIC CHART

International Commission on Stratigraphy



| eon | era | system period | series | epoch | stage | age Ma | GSSP | | | | |
|---------------|-------------|---------------|---------------|--------------|---------------|--------------|---------------|-------------|-----------|-------------|---|
| Phanerozoic | Mesozoic | Cretaceous | Upper | Lower | Maestrichtian | 65.5 ± 0.3 | 📍 | | | | |
| | | | | | Campanian | 70.6 ± 0.6 | 📍 | | | | |
| | | | | | Santonian | 83.5 ± 0.7 | 📍 | | | | |
| | | | | | Coniacian | 85.8 ± 0.7 | 📍 | | | | |
| | | | | | Turonian | ~ 88.6 | 📍 | | | | |
| | | | | | Cenomanian | 93.6 ± 0.8 | 📍 | | | | |
| | | | | | Cenomanian | 99.6 ± 0.9 | 📍 | | | | |
| | | | | | Albian | 112.0 ± 1.0 | 📍 | | | | |
| | | | | | Aptian | 125.0 ± 1.0 | 📍 | | | | |
| | | | | | Barremian | 130.0 ± 1.5 | 📍 | | | | |
| | Paleozoic | Carboniferous | Pennsylvanian | Lower | Bashkirian | ~ 133.9 | 📍 | | | | |
| | | | | | Middle | Serpukhovian | 140.2 ± 3.0 | 📍 | | | |
| | | | | | Upper | Viséan | 145.5 ± 4.0 | 📍 | | | |
| | | | | | Permian | Guadalupian | Tournaisian | 328.3 ± 1.6 | 📍 | | |
| | | | | | | | Wuchiapingian | 345.3 ± 2.1 | 📍 | | |
| | | | | | | | Changhsingian | 359.2 ± 2.5 | 📍 | | |
| | | | | | Mesozoic | Jurassic | Upper | Lower | Induan | 251.0 ± 0.4 | 📍 |
| | | | | | | | | | Olenekian | ~ 249.5 | 📍 |
| | | | | | | | | | Anisian | ~ 245.9 | 📍 |
| | | | | | | | | | Ladinian | 237.0 ± 2.0 | 📍 |
| Camnian | ~ 228.7 | 📍 | | | | | | | | | |
| Nonian | 216.5 ± 2.0 | 📍 | | | | | | | | | |
| Rhaetian | 203.6 ± 1.5 | 📍 | | | | | | | | | |
| Hettangian | 199.6 ± 0.6 | 📍 | | | | | | | | | |
| Sinemurian | 196.5 ± 1.0 | 📍 | | | | | | | | | |
| Pliensbachian | 189.6 ± 1.5 | 📍 | | | | | | | | | |
| Paleozoic | Triassic | Upper | Lower | Toarcian | 183.0 ± 1.5 | 📍 | | | | | |
| | | | | Aalenian | 175.6 ± 2.0 | 📍 | | | | | |
| | | | | Bajocian | 171.6 ± 3.0 | 📍 | | | | | |
| | | | | Bathonian | 167.7 ± 3.5 | 📍 | | | | | |
| | | | | Callovian | 164.7 ± 4.0 | 📍 | | | | | |
| | | | | Oxfordian | 161.2 ± 4.0 | 📍 | | | | | |
| | | | | Kimmeridgian | ~ 155.6 | 📍 | | | | | |
| | | | | Tithonian | 150.8 ± 4.0 | 📍 | | | | | |
| | | | | Paleozoic | Paleozoic | Devonian | Upper | Lower | Famennian | 359.2 ± 2.5 | 📍 |
| | | | | | | | | | Frasnian | 374.5 ± 2.6 | 📍 |
| Givetian | 385.3 ± 2.6 | 📍 | | | | | | | | | |
| Eifelian | 391.8 ± 2.7 | 📍 | | | | | | | | | |
| Emsian | 397.5 ± 2.7 | 📍 | | | | | | | | | |
| Pragian | 407.0 ± 2.8 | 📍 | | | | | | | | | |
| Lochkovian | 411.2 ± 2.8 | 📍 | | | | | | | | | |
| Pridoli | 416.0 ± 2.8 | 📍 | | | | | | | | | |
| Ludfordian | 418.7 ± 2.7 | 📍 | | | | | | | | | |
| Gorstian | 421.3 ± 2.6 | 📍 | | | | | | | | | |
| Paleozoic | Silurian | Wenlock | Upper | Lower | Homerian | 422.9 ± 2.5 | 📍 | | | | |
| | | | | | Sheinwoodian | 426.2 ± 2.4 | 📍 | | | | |
| | | | | | Telychian | 428.2 ± 2.3 | 📍 | | | | |
| | | | | | Aeronian | 436.0 ± 1.9 | 📍 | | | | |
| | | | | | Rhuddanian | 439.0 ± 1.8 | 📍 | | | | |
| | | | | | Hirnantian | 443.7 ± 1.5 | 📍 | | | | |
| | | | | | Katian | 445.6 ± 1.5 | 📍 | | | | |
| | | | | | Sandbian | 455.8 ± 1.6 | 📍 | | | | |
| | | | | | Darriwilian | 460.9 ± 1.6 | 📍 | | | | |
| | | | | | Dapingian | 468.1 ± 1.6 | 📍 | | | | |
| Paleozoic | Ordovician | Upper | Middle | Lower | Florian | 471.8 ± 1.6 | 📍 | | | | |
| | | | | | Tremadocian | 478.6 ± 1.7 | 📍 | | | | |
| | | | | | Stage 10 | 488.3 ± 1.7 | 📍 | | | | |
| | | | | | Stage 9 | ~ 492 * | 📍 | | | | |
| | | | | | Palbian | ~ 496 * | 📍 | | | | |
| | | | | | Guzhangian | ~ 499 | 📍 | | | | |
| | | | | | Drumian | ~ 503 | 📍 | | | | |
| | | | | | Stage 5 | ~ 506.5 | 📍 | | | | |
| | | | | | Stage 4 | ~ 510 * | 📍 | | | | |
| | | | | | Stage 3 | ~ 515 * | 📍 | | | | |
| Paleozoic | Cambrian | Terreneuvian | Series 2 | Series 3 | Fortunian | ~ 521 * | 📍 | | | | |
| | | | | | Stage 2 | ~ 528 * | 📍 | | | | |
| | | | | | Stage 1 | 542.0 ± 1.0 | 📍 | | | | |

This chart was drafted by Gabi Ogg. Intra Cambrian unit ages with * are informal, and awaiting ratified definitions. Copyright © 2008 International Commission on Stratigraphy

* Definition of the Quaternary and revision of the Pleistocene are under discussion. Base of the Pleistocene is at 1.81 Ma (base of Calabrian), but may be extended to 2.59 Ma (base of Gelasian). The historic "Tertiary" comprises the Paleogene and Neogene, and has no official rank.

Subdivisions of the global geologic record are formally defined by their lower boundary. Each unit of the Phanerozoic (~542 Ma to Present) and the base of Ediacaran are defined by a basal Global Standard Section and Point (GSSSP), whereas Precambrian units are formally subdivided by absolute age (Global Standard Stratigraphic Age, GSSA). Details of each GSSP are posted on the ICS website (www.stratigraphy.org).

Numerical ages of the unit boundaries in the Phanerozoic are subject to revision. Some stages within the Cambrian will be formally named upon international agreement on their GSSP limits. Most sub-Series boundaries (e.g., Middle and Upper Aptian) are not formally defined.

Colors are according to the Commission for the Geological Map of the World (www.cgmw.org). The listed numerical ages are from 'A Geological Time Scale 2004', by F.M. Gradstein, J.G. Ogg, A.G. Smith, et al. (2004; Cambridge University Press) and 'The Concise Geologic Time Scale' by J.G. Ogg, G. Ogg and F.M. Gradstein (2008).

| eon | era | system period | Age Ma | GSSP | | |
|-----------------|---------|---------------|------------------|------------|------|---|
| Precambrian | Archean | Eoarchean | 4000 | 📍 | | |
| | | | 3600 | 📍 | | |
| | | | 3200 | 📍 | | |
| | | | 2800 | 📍 | | |
| | | | Neoproterozoic | Siderian | 2500 | 📍 |
| | | | | | 2300 | 📍 |
| | | | | | 2050 | 📍 |
| | | | | | 1800 | 📍 |
| | | | Meso-proterozoic | Statherian | 1600 | 📍 |
| | | | | | 1400 | 📍 |
| 1200 | 📍 | | | | | |
| 1000 | 📍 | | | | | |
| Neo-proterozoic | Tonian | 850 | 📍 | | | |
| | | 635 | 📍 | | | |
| | | 542 | 📍 | | | |
| | | Ediacaran | 542 | 📍 | | |