

Wentworth (1922) Scale (sediment grain size)			
Size (mm)	Wentworth grade	Folk, 1954	Phi ( $\phi$ ) scale <sup>1</sup>
> 256	Boulder	"gravel"	-8
> 64	Cobble		-6
> 4	Pebble		-2
> 2	Granule		-1
> 1	Very coarse sand	sand	0
> 1/2	Coarse sand		1
> 1/4	Medium sand		2
> 1/8	Fine sand		3
> 1/16	Very fine sand		4
> 1/32	Coarse silt	"mud"	5
> 1/64	Medium silt		6
> 1/128	Fine silt		7
> 1/256	Very fine silt		8
< 1/256	Clay		> 8
This parameter is NOT porosity: $\phi = -\log_2(\text{mm})$			
<sup>1</sup> Krumbein & Sloss, 1951			

### Comments:

NOTE that  $\phi$  is not the well logging symbol for porosity but is a size scale.

This table compares the physical size of grains in two scales ( $\phi$ , the log of millimeters (mm), by Krumbine & Sloss (1951)), and Wentworth's (1922) actual size in millimeters (mm)), to the descriptive scales of Wentworth (1922) and Folk (1954). The table tries to show how our descriptive methods have changed over time and intends to make us aware that as we delve into past publications, we may have to refer to resources like this table to "recalibrate" ourselves to methods which may not be in current usage or publication.

### References:

Alden, Andrew, 2012, Sediment grain size categories:

[http://geology.about.com/od/sediment\\_soil/a/sedimentsizes.htm](http://geology.about.com/od/sediment_soil/a/sedimentsizes.htm); accessed 06/18/2012.

Folk, R.L., 1954, The distinction between grain size and mineral composition in sedimentary-rock nomenclature, *Journal of Geology*, **62** (4) (July), pp.334-359.

Krumbein, W.C., and Sloss, L.L., 1951, *Stratigraphy and Sedimentation*, 479 p., San Francisco, W.H. Freeman & Co.

Wentworth, C.K., 1922, A scale of grade and class terms for clastic sediments, *Journal of Geology*, **30**, pp.377-392.

*This document is intended to be updated periodically as necessary to include new and corrected information.*

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