

What is an ocean, and how many does Earth have?

Ocean: an enclosed topographic depression underlain by mafic to ultramafic crust ("oceanic crust") and filled with saline water.

	Greatest depth (m)	Enclosed basin	Active convergent or divergent plate boundary(ies)	Oceanic crust	"Seawater" (Na-Cl-rich & S = ~35 ppt)	"Seawater" (Na-Cl-rich)	Saline water	Conventional understanding
Lakes Huron & Michigan* (taken together)	281	No (outflow ultimately to North Atlantic)	No	No	No	No	No (Freshwater)	Earth's second-largest lake
Lake Baikal*	1642	No (outflow to Angara River to Yenesei River to Arctic)	✓ (distal back-arc rift)	No	No	No	No (Freshwater)	Earth's deepest and oldest lake
Dead Sea* * included only as well-known negative examples	377	✓	No (but in a pull-apart basin along a <i>transform</i> plate boundary)	No	No (S ≥ 300 ppt)	No (Na-Mg-Cl)	✓	Hypersaline lake (chemical analog of Utah's Great Salt Lake; tectonic analog of California's Salton Sea)
Caspian Sea	1025	✓	Maybe? (See Allen et al. 2002 <i>Geology</i> 30: 775-778.)	✓ (a Paratethyan remnant)	No (S = ~ 13 ppt)	No (Na & Cl less dominant)	✓	Earth's largest lake (but arguably Earth's smaller of two, or even three, oceans)
Black Sea	2206	✓ (Bosporus is a channel across continental crust and, at its smallest, is 700 m wide and 36 m deep.)	No (?)	✓ (a Paratethyan remnant)	No (Surface S = ~18 ppt; deep S = ~22 ppt)	✓	✓	Difficult to categorize: A strange part of the Global Ocean? An odd lake? (an ocean?)
Mediterranean Sea	5267	No (Strait of Gibraltar is, at its smallest, 14.3 km wide and 300 m deep.) (... but basin was closed from Global Ocean in Miocene time)	✓	✓ (a (Neo)Tethyan remnant)	✓	✓	✓	Part of the Global Ocean today
Red Sea (included only for comparison)	2211	No (Bab el Mandeb is ~30 km wide and, at its shallowest, 310 m deep.)	✓ (In fact, it's almost entirely plate boundary.)	✓	✓	✓	✓	Part of the Global Ocean
Global Ocean (From the Southern to the Arctic; from the Red Sea to the Baltic)	~11,000	✓	✓	✓	✓	✓	✓	Ocean