

# Breaking News English.com

**Japan finds enough rare earth metals to last 700 years – 14th April, 2018**

## Level 4

Researchers have found reserves of rare-earth metals (REMs) to meet global demand for up to 700 years. Scientists surveyed the Pacific Ocean floor 2,000 kilometers southeast of Tokyo. They say the REMs have "the potential to supply these metals on a semi-infinite basis to the world". Researchers believe the area has over 16 million tons of REMs. There is, "great potential...for some of the most critically important elements in modern society".

There are a total of 17 rare-earth metals. These elements have fairly unknown names, like europium and terbium. Their use has greatly increased with our need for high-tech products. REMs are widely used in hybrid vehicles, wind turbines, disc drives, portable electronics and many other products. Around 90 per cent of REMs used in advanced electronics currently come from China. The new discovery near Japan could bring down prices.

## Level 5

Researchers have found enough reserves of rare-earth metals (REMs) to satisfy global demand for up to 700 years. Scientists surveyed the deep-sea mud on the Pacific Ocean floor about 2,000 kilometers southeast of Tokyo. They say their find, "has the potential to supply these metals on a semi-infinite basis to the world". Researchers from two universities in Tokyo estimate the area contains more than 16 million tons of rare-earth metals. They added there is "great potential...for some of the most critically important elements in modern society".

There are 17 rare-earth metals in the periodic table. These chemical elements have relatively unknown names, like europium and terbium. Their uses, applications and demand have greatly increased with our need for high-tech products. REMs are widely used in electric motors for hybrid vehicles, wind turbines, hard disc drives, portable electronics, microphones, speakers and many other products. Around 90 per cent of REMs used to manufacture advanced electronics currently come from China. The new discovery near Japan could bring down prices.

## Level 6

Japanese researchers have discovered enough reserves of rare-earth metals (REMs) to satisfy global demand for up to 700 years. Oceanographers surveyed the deep-sea mud on the Pacific Ocean floor near Japan's Ogasawara Islands, which are about 2,000 kilometers southeast of Tokyo. Scientists say the minerals find, "has the potential to supply these metals on a semi-infinite basis to the world". Researchers from Waseda University and the University of Tokyo estimate the area they mapped contains more than 16 million tons of rare-earth metals. They added that the area offers "great potential as ore deposits for some of the most critically important elements in modern society".

A rare-earth metal is one of a set of seventeen chemical elements in the periodic table. They have what many of us would consider to be relatively unknown names, like europium, promethium scandium and terbium. The uses, applications, and demand of rare-earth elements have greatly increased with our reliance on high-tech products. They are widely used in the production of electric motors for hybrid vehicles, wind turbines, hard disc drives, portable electronics, microphones, speakers and a whole array of other products. Around 90 per cent of the world's supply of REMs used to manufacture advanced electronics currently comes from China. The discovery near Japan could bring down prices.