

What are Rare Earth Elements (REE)?

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About Rare Earth Elements (REE):

- REE are a set of **seventeen elements in the periodic table**. These include the **fifteen lanthanides** on the periodic table **plus scandium and yttrium**.
- REE **are all metals**, and the group is often **referred to as the “rare earth metals**.
- Although called “rare”, **they are actually found relatively abundantly** in the Earth’s crust.
- **Why they are called “rare”?** These metals are **very difficult to mine** because it is unusual to find them in concentrations high enough for economical extraction.
- These metals have **many similar properties**, and that often **causes them to be found together in geologic deposits**.
- They are **also referred to as “rare earth oxides”** because many of them are typically sold as oxide compounds.
- **Applications:**

- REE and alloys that contain them are **used in many devices that people use every day** such as computer memory, DVDs, rechargeable batteries, cell phones, catalytic converters, magnets, fluorescent lighting and much more.
 - Rare earths are **used as catalysts, phosphors, and polishing compounds.**
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Q1) What are lanthanides?

Lanthanides are the members of the 15 naturally occurring metallic chemical elements, whose atomic numbers fall between 57 (Lanthanum) and 71 (Lutetium). These elements have their 4f sublevel filled. Lanthanides have similarities in their physical and chemical properties and have many industrial and scientific uses

Source: [CSIR scientists identify rare-earth element deposit in Anantapur](#)

Source: <https://vajiramandravi.com/current-affairs/what-are-rare-earth-elements-ree/>

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