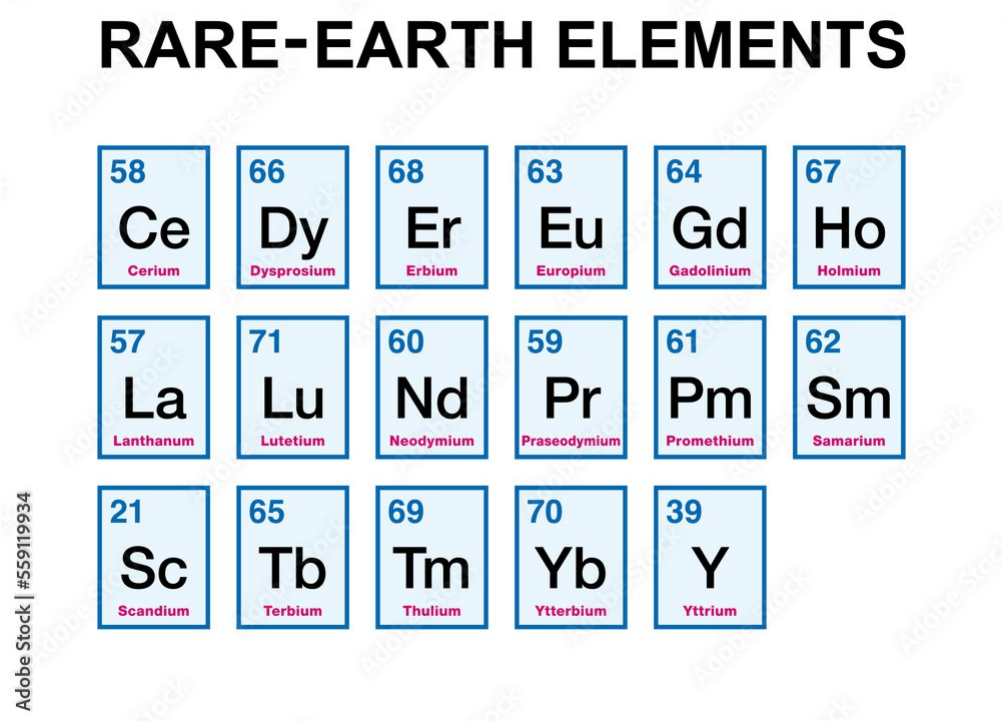
Need for India-Australia Rare Earths Alliance

Prelims – *Current events of national and international importance.*

Why in News?

Recently, India and Australia are deepening their strategic minerals alliance in an effort to counter China's control over the global rare earth supply chain.

- **Rare earth elements (REE) –** It is a group of 17 minerals essential to modern technology, are relatively abundant but costly and complex to extract, particularly heavy rare earths such as terbium, fetch high prices.
- **Uses of REE –** It is used to make powerful magnets, camera, telescope lenses, catalytic converters in cars, making control rods in nuclear reactors.
- REEs and critical metals like lithium are considered vital for achieving energy transition goals and maintaining national security.



- **China's dominance –** China currently accounts for ***over 60% of global rare earth mining*** and nearly 90% of processing output.
- **Export restriction of China –**Imposed export restrictions on 7 rare earth elements – samarium, gadolinium, terbium, dysprosium, lutetium, scandium and yttrium, requiring special export licences.

- **India's reserves –** India holds third-largest reserves globally about 6.9 million tonnes in monazite-rich sands along the coasts of Andhra Pradesh, Odisha, Kerala and Rajasthan's Jalore & Barmer districts.
- But India's production is negligible, contributing less than 1% of global output.
    - **Reasons -** Due to processing constraints, outdated mining methods, and legal restrictions under the ***Atomic Energy Act of 1962.***
- **Need for alternative alliance –** Australia has recently positioned leading alternative supplier, home to major deposits including the Mount Weld mine.
- **India- Australia Partnership** - Australia's advanced mining technologies and established supply chains could help India overcome production bottlenecks.

Australia *ranks as the world's fourth-largest producer of rare earths.*

- Australian firms are expected to participate in upcoming Indian auctions for rare earth mineral blocks.
- **Challenges -** India's strict environmental regulations, low mineral concentrations, and high extraction costs, alongside Australia's need to safeguard its own resource security, could complicate progress.
- **Significance -** India–Australia collaboration as a critical step toward securing rare earth supply chains, potentially positioning both countries as influential players in the sector.

Minerals Security Partnership (MSP) *is a US-led international alliance of 14 countries, including India, established in 2022 to secure critical mineral supply chains.*

Reference

Swarajya| India – Australia Rare earth Elements

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