Osiris Rex

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In news: NASA's OSIRIS-REx began its journey back from
asteroid Bennu.

More information on spacecraft-

- The Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer (OSIRIS-REX) started its two-year long journey back to Earth.
- It is NASA's first mission to visit a near-Earth asteroid, survey its surface and collect a sample from it.
- In October 2020, the spacecraft briefly touched asteroid Bennu, from where it collected samples of dust and pebbles.
- Bennu is considered to be an ancient asteroid that has not gone through a lot of composition-altering change through billions of years.
- This means that below its surface lie chemicals and rocks from the birth of the solar system.
- It is as tall as the Empire State Building, located about 200 million miles away from the Earth.
- It is named after an Egyptian deity.
- It is a B-type asteroid, implying that it contains significant amounts of carbon and various other minerals.
- Because of its high carbon content, the asteroid reflects about four per cent of the light that hits it.
- Around 20-40 percent of Bennu's interior is empty space and scientists believe that it was formed in the first 10 million years of the solar system's creation, implying that it is roughly 4.5 billion years old.
- The surface of the asteroid is covered in massive boulders.

- There is a slight possibility that Bennu might strike the Earth in the next century, between the years 2175 and 2199.
- NASA will also distribute a part of the samples to laboratories worldwide and will reserve about 75 per cent of the samples for future generations.