Info Gap: Distances in the Solar System

Problem Card 1

Estimate:

1. How many Earths side by side would have the same width as the Sun?
2. How many Earths would it take to equal the mass of the Sun?

Info Gap: Distances in the Solar System

Data Card 1

- The distance from Earth to the Sun is approximately 1.496×10^8 km.
- The diameter of the Sun is 1.392×10^6 km.
- The diameter of Earth is 1.28×10^4 km.
- The mass of the Sun is 1.989×10^{30} kg.
- The mass of Earth is 5.98×10^{24} kg.

Info Gap: Distances in the Solar System

Problem Card 2

Estimate:

1. How many times as far away from Earth is the planet Neptune compared to Venus?
2. How many copies of the planet Mercury would it take to equal the mass of Neptune?

Info Gap: Distances in the Solar System

Data Card 2

- The average distance from Earth . . .
  - to Mercury is 7.73×10^7 km.
  - to Venus is 4×10^7 km.
  - to Neptune is 4.3×10^9 km.
- The mass of Mercury is 3.3×10^{23} kg.
- The mass of Venus is 4.87×10^{24} kg.
- The mass of Neptune is 1.024×10^{26} kg.

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