

## Most likely number of contactable alien civilizations is 36

### Level 2 • Upper intermediate

#### KEY

##### 1 Warmer

- b. According to NASA, there are currently five planets classified as dwarf planets: Ceres, Pluto, Makemake, Haumea and Eris. The planets are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
- a. A light year is the distance that light travels in vacuum in one Julian year (365.25 days).
- c. A light year measures 9.46 trillion kilometres.
- b.
- c.

**Teacher's note:** Get the students to do this quiz in teams, and see which team gets the most correct answers.

##### 2 Key words

- insight
- estimate
- equation
- assumption
- reasonable
- conservative
- indication
- habitable
- evolve
- mission

##### 3 Comprehension check

- F – It has suggested that there are **36 or more** intelligent civilizations in our galaxy. Thirty-six is a conservative number. They say there are between 4 and 211 but that 36 is the most likely number.
- T
- F – The team worked with the assumption that, within a few **billion** years, intelligent life would automatically form on Earth-like planets.
- F – The team said that we would need to survive at least another **6,120 years** to hold a conversation with another intelligent life form.
- F – He says that they would have **similarities in appearance** to life on earth and we wouldn't be very surprised by them.
- T

##### 4 Space vocabulary

(possible answers)

alien, astrobiological, astronomer, astrophysics, Earth, Enceladus, Europa, galaxy, Jupiter, light year, little green man, Mars, Milky Way, mission, moon, planet, Saturn, solar system, space, spaceship, star, Titan, universe

##### 6 Space quotes

- mankind
- frontier
- Control
- Earth
- star
- beyond
- forty-two

**Teacher's note:** You could ask students to choose one quote from the seven here or another of their own choosing and research it further, reporting back with their findings.