

PlanetCards Quiz

Easy:

1. Which planet is farthest from the Sun? (Pluto)
2. Which moon is closest to the Sun? (The moon)
3. What is the name of Pluto's moon? (Charon)
4. Is Venus or Saturn closest to the Sun? (Venus)
5. What is the name of the asteroid that is shaped like a meat bone? (Cleopatra)
6. Which planet is known for its ring system? (Saturn)
7. Is Earth the largest planet in the Solar System? (no)
8. How many planets are there in the Solar System? (8)
9. Which is bigger: the Moon or the Earth? (The Earth)
10. Where is the hottest place in the Solar System? (The Sun)
11. Which is further away: the clouds or the Moon? (The Moon)
12. Which planet is heaviest? (Jupiter, the Sun is a star)
13. Which Planet is red? (Mars)
14. Which is bigger, the Sun or the Earth? (The Sun)
15. Is Mars made of chocolate? (Yes, and caramel)
16. There is a dwarf planet with the same name as Mickey Mouse's dog. What is it called?? (Pluto)
17. Is the Milky Way made of milk? (No)
18. What is the sun? - a star, a planet, a black hole? (star)
19. What is an asteroid? (a small rocky body in orbit around the Sun)
20. What is the central and largest body in the solar system? (The Sun)
21. How many planets are there in the solar system? (eight /without Pluto)
22. On which planet is 71% of the surface covered by water?

Medium:

23. Which planet moves the fastest around the Sun? (Mercury)
24. How big is the Sun as seen from Pluto? (like a pinhead in an outstretched arm)
25. On how many planets do we know there is life? (1 = Earth)
26. Is the day long or short on Mercury? (far = longer than the year)
27. Is there ice on the Moon? (Yes, at the poles)
28. Is there ice on Mars? (Yes, e.g. at the poles)
29. Is the surface of Enceladus young or old? (young - only 100 million years old)
30. When will Phobos fall to the surface of Mars? (in 50 million years)
31. Does Ceres and all the other asteroids combined weigh more or less than the moon? (more)
32. On which moon is there a sea of ice? (Europe)
33. What do you call rocks from space that land on Earth? (meteorites, see "Mathilde")
34. How big is Ida's moon Dactyl? (1.5 km)
35. What do comets consist of? (dirty ice)
36. Which planet has the shortest orbit around the Sun? (Mercury)
37. What is the largest Moon in the Solar System (Ganymede)

38. What is an astronomical unit (The average distance between the Earth and the Sun, 150 million km)
39. What is the Milky Way? (The galaxy in which the solar system is located)
40. How many days does it take the Earth to travel around the Sun? (365 days)
41. Which planet has a moon named Triton? (Neptune)
42. Which planet shines so brightly that it is also called the morning star? (Venus)
43. Which planet moves the fastest around the Sun? (Mercury)
44. On which planet is the atmosphere 100 times denser than Earth's - and there is a strong greenhouse effect? (Venus)
45. What is the name of the largest asteroid in the asteroid belt between Mars and Jupiter? (Ceres)

Hard:

46. How many Apollo astronauts have walked on the Moon? (12 – and there haven't been any since ...1972)
47. Which planet is the hottest? (Venus)
48. How many moons does Jupiter have? (>60)
49. Where is the best chance of finding life: Pluto, Mercury or Europa? (Europe)
50. How long have there been living organisms on Earth? (>3.5 billion years)
51. Were Phobos and Deimos once asteroids? (Yes)
52. How many kilograms of moon rock did the Apollo astronauts bring home? (382 kg)
53. What is the air pressure on the surface of Venus? (90 times Earth's)
54. Are there fragments of Vesta that have fallen to Earth? (Yes)
55. Are there asteroids that are dangerous and can fall to Earth? - Do you know one? (Yes – e.g. Eros and other Near Earth Objects)
56. When did Shoemaker-Levy9 crash into Jupiter? (1989)
57. How often does Halley's Comet come past the Sun – and the Earth (every 76 years)
58. What is the name of the large crater on Mimas? (Herschel)
59. How much of the Earth's surface is covered by water? (71%)
60. On which planet does the sun rise in the west and set in the east? (Venus)
61. Callisto and the three other large Jupiter moons revolve (like the Moon) in the base rotation. What does bottom rotation mean? (That the Moon faces the same side as the Earth)
62. What are Saturn's rings made of? (dirty ice and pebbles)
63. Why can't you see the surface of Titan from Earth? (Dense cloud cover)
64. What is special about Iapetus? (It is pitch black on one side and chalk white on the other.)
65. How many moons of Saturn do we know? (more than 30 – as of 2023 counting: 146)
66. What is Uranus's moon, Ariel, and most other moons outside Jupiter made up mostly of? (ice)
67. How big is the wind system that you can see in the picture of Neptune? (About the size of Earth)
68. When a comet like Shoemaker-Levy9 crashes onto the surface of Jupiter, it's pretty violent. How much energy is released? (more than the total nuclear weapons stockpile on Earth).
69. What will happen to Triton when it gets too close to Neptune? (it will be shattered by tidal forces and form a ring like Saturn's)
70. When did Voyager 2 fly by Proteus? (1989)

71. Who was the first living space traveller? (Laika - a dog on board Sputnik 2)
72. Which planet has rings? (Saturn, Neptune, Uranus)
73. What is a shooting star? (A fish fillet food/ a meteor passing down into the Earth's atmosphere)
74. How long will it take to travel to the Kuiper belt (at least 12 years, NASA's New Horizons space probe is expected to reach Pluto in the year 2015).
75. Are there planets outside the solar system around distant stars? (Yes)
76. Which globe revolves around the Earth? (The Moon)
77. Where in the solar system are the most powerful volcanoes found? (On Io)
78. Where is the largest volcano in the solar system? (Mars - Olympus Mons)
79. Which spacecraft has visited Uranus? (Voyager 2)
80. Which ring planet is turned on its side?
81. Neptune's winds are the strongest in the solar system. How strong is the wind? (2000 km/h)
82. What are Mars' two moons called? (Phobos and Deimos=)
83. When was Pluto discovered? (1912 Tom Bambaugh)
84. Which planet's atmosphere contains 96% carbon dioxide? (both Mars' and Venus' atmosphere contain 95-96% CO₂ but at very different pressures.)
85. Which planets have no moons (Venus and Mercury)

Very difficult:

86. Where are the most powerful volcanoes in the Solar System? (Io – volcanoes spew 500km up so that lava and gas completely escape the planet)
87. On Earth, the continents move around between each other. On which moon of Jupiter could this also have happened? (Ganymedes)
88. When was the solar system formed? (4.56 billion years ago, see Rhea)
89. Why doesn't Tethys bump into Calypso and Telesto when they are all moving in the same orbit around Saturn? (Because they have the same speed)
90. Where is it bright all summer? (On Uranus' surface and north of the polar circle, e.g. northern Greenland and Alaska)
91. Oberon is old, how can you tell? (Many craters)
92. Why does Miranda look so special? (Huge meteor impacts have blown Miranda apart several times)
93. Pluto is not actually a planet – so what is it? (One of many asteroids in the outer asteroid belt outside Neptune's orbit)

Expert [these questions cannot be answered in the texts on the cards]

94. Do aliens exist? (We actually don't know that)
95. What is the name of the closest star to Earth? (The Sun)
96. Can you live anywhere outside of Earth without a space suit? (no)
97. How big is the Universe? (the visible universe is about 93 billion light years, 1 light year is 9461 billion km)
98. Are there celestial bodies in our Solar system that are not in the PlanetCards game? (yes – lots of moons, asteroids and even some dwarf planets, incl. Haumea, Makemake and Eris)

99. Has any astronaut stood on the Moon and seen the Earth rise? (No, it cannot be done as the Moon always faces the same side towards the Earth).
100. Is there water ice on all planets? (No, Mercury is too close to the Sun)
101. What makes Mars look red? [choice: a) rain and clouds b) fire from volcanoes c) iron in the martian crust] (c – iron in the martian crust)
102. Mercury is closer to the Sun than Venus - why is Venus the hottest? (Intense greenhouse effect)
103. How does Earth differ from the other planets? - (The only planet with enough oceans, the only planet with people, the only planet with a breathable atmosphere).