

CAM 19 - TEST 2 - PART 4

Tardigrades

DICTATION

For my 1. _____ on 2. _____, I chose to study 3. _____. These are 4. _____ — or to be more 5. _____ — near-6. _____ animals. There are well over a thousand 7. _____ 8. _____ of these tiny animals, which 9. _____ to the 10. _____ Tardigrada. Most 11. _____ 12. _____ in 13. _____ from 0.05 to 1 millimetre, though the largest 14. _____ can grow to be 1.2 millimetres in 15. _____. They are also sometimes called 'water bears': 'water' because that's where they 16. _____ best, and 'bear' because of the way they move. 'Moss 17. _____' is another name for tardigrades because of the way they look when 18. _____ from the 19. _____. They were first 20. _____ in Germany in 1773 by Johann Goeze, who 21. _____ Tardigrada.

As I say, there are many 22. _____ species of tardigrade — too many to 23. _____ here — but, generally speaking, the different species 24. _____ similar physical 25. _____. They

have a 26. _____ which is 27. _____, and also 28. _____ — a bit like a 29. _____ — and the body 30. _____ four 31. _____. Each 32. _____ has a pair of legs, at the end of which are between four and eight 33. _____ 34. _____. I should also say that some 35. _____ don't have any 36. _____: what they have are 37. _____, and these work by 38. _____ of 39. _____. They 40. _____ the 41. _____ to 42. _____ to surfaces or to 43. _____ its 44. _____. Within the body, there are no 45. _____, or any 46. _____ for 47. _____ at all. Instead, 48. _____ and also blood are 49. _____ in a 50. _____ that 51. _____ of the body.

As far as the tardigrade's 52. _____ is 53. _____, the best way I can 54. _____ this is that it looks 55. _____ 56. _____ — a bit 57. _____ even — though many of the websites I looked at 58. _____ its 59. _____ as cute, which isn't exactly very 60. _____. The tardigrade's 61. _____ is a kind of 62. _____ that can open 63. _____ to 64. _____ teeth-like 65. _____ known as 'stylets'. These are 66. _____ enough to 67. _____ plant or animal cells.

So, where are tardigrades 68. _____? Well, they live in every part of the world, in a 69. _____ of 70. _____: most 71. _____, on the 72. _____ of a lake, or on many 73. _____ of plants or in very 74. _____ environments. There's been some interesting 75. _____ which has 76. _____ that tardigrades are 77. _____ of 78. _____ 79. _____ and very high 80. _____, and they're also able to 81. _____ temperatures as low as 82. _____ -200 83. _____ 84. _____, or highs of more than 148 degrees centigrade, which is 85. _____ hot.

It has been said that tardigrades could 86. _____ long after 87. _____ have been 88. _____, even in the event of an 89. _____ hitting the 90. _____. If 91. _____ become too 92. _____ and tardigrades are 93. _____ of 94. _____, they 95. _____ a 96. _____ called cryptobiosis. They 97. _____ a little ball, called a tun — that's T-U-N — by 98. _____ their 99. _____ and legs, and their 100. _____ drops to less than one percent of normal levels. They can stay in this 101. _____ for decades, and if 102. _____ to water, then they will 103. _____ to life in a 104. _____ of a few hours. While in this state of 105. _____, tardigrades 106. _____ a 107. _____ that 108. _____ their DNA. In 2016, scientists 109. _____ two tardigrades that had been 110. _____

for more than 30 years. There was a 111. _____ that, in 1948, a 120-year-old tun was 112. _____, but this 113. _____ has never been 114. _____. There are 115. _____ several tests 116. _____ in 117. _____, to 118. _____ how long tardigrades might be able to 119. _____ there. I believe the 120. _____ 121. _____ is 10 days.

So, erm, moving on. 122. _____ their diet, tardigrades 123. _____ liquids 124. _____ survive. Although they have 125. _____, they don't use these for 126. _____. They 127. _____ the juices from 128. _____, or 129. _____ 130. _____ from 131. _____, but some species 132. _____ other tardigrades, from other species or within their own. I 133. _____ this isn't 134. _____, given that tardigrades are 135. _____ 136. _____ of liquid and are 137. _____ with a type of 138. _____.

Finally, I'd like to mention the 139. _____ 140. _____ of tardigrades. It is 141. _____ that they have been in 142. _____ for 143. _____ half a billion years and, in that time, they have 144. _____ five 145. _____ 146. _____. So, it will 147. _____ come as no 148. _____ to you, that tardigrades have not been 149. _____ by the International Union

for Conservation of Nature and are not on any **150.** _____ list. Some **151.** _____ have **152.** _____ them as **153.** _____.

Does anyone have any questions they'd like to ask?