

Year 11 Biology.

INSIDE NATURE'S GIANTS: CAMELS.

PART 1

1. How long can a camel survive without drinking?
2. How many camels roam wild in Australia?
3. Over how many years do their numbers double?
4. Why were camels originally brought to Australia?
5. When a camel is kneeling, how much surface area is in contact with the ground?
6. What is another name for the camel's sternum?
7. What is the benefit of convection currents?

PART 2

8. How thick is the camel's skin?
9. Of what is its hump composed?
10. What would happen to the camel if its fat was evenly spread over all of its body and not just located in the hump?
11. Does the hump absorb heat from the air?
12. Why is this important?
13. Where did camels evolve?
14. What do the papillae in the camel's mouth do?
15. What does its long neck enable it to do?
16. What % of all desert plants is the camel able to eat?

PART 3

17. When/why would a camel inflate the extension of its soft palate?
18. Is the camel a foregut or hindgut fermentor?

19. What is the benefit in re-chewing its food?
20. When fully hydrated, how many litres of saliva does a camel produce per day?
21. Where does the water go that is absorbed from the digestive juices?
22. Why is this ability of the camel to recycle its water so important?
23. Do camels produce much sweat? Why is this important?
24. What is the range that a camel's body temperature may fluctuate?

PART 4

25. Is brain tissue more or less sensitive to high temperatures than the rest of the body?
26. What do turbinates in the camel's nose do?
27. Is a camel's bladder smaller or larger than a human's bladder?
28. Do camels produce large volumes of urine? Why is this important?
29. Do camel kidneys reabsorb some or most of the water they filter? Why?
30. How many litres of water can a camel drink at one time?
31. How many litres can a human drink before it becomes dangerous?
32. In humans, if we take up too much water into our bloodstream, what happens to our red blood cells?
33. What shape are camel red blood cells?
34. Do camel red blood cells burst when it drinks a large volume of water?
35. Do camels have hooves or soft toes?
36. What is hidden inside a camel's foot?
37. When the Achilles' tendon is fully flexed, what does it store? How does this assist the camel?
38. Are camels well adapted to their desert environment?