

# Answers

1. We use our brains 24 h a day	T
2. Children must acquire their native language before a second language is learned. If they do not do so neither language will be fully acquired	F
3. Boys have bigger brains than girls	T
4. If pupils do not drink sufficient amounts of water (=6–8 glasses a day) their brains shrink	F
5. It has been scientifically proven that fatty acid supplements (omega-3 and omega-6) have a positive effect on academic achievement	F
6. When a brain region is damaged other parts of the brain can take up its function	T
7. We only use 10% of our brain	F
8. The left and right hemisphere of the brain always work together	T
9. Differences in hemispheric dominance (left brain, right brain) can help explain individual differences amongst learners	F
10. The brains of boys and girls develop at the same rate	F
11. Brain development has finished by the time children reach secondary school	F
12. There are critical periods in childhood after which certain things can no longer be learned	F

13. Information is stored in the brain in a network of cells distributed throughout the brain.	T
14. Learning is not due to the addition of new cells to the brain	T
15. Individuals learn better when they receive information in their preferred learning style (e.g., auditory, visual, kinaesthetic)	F
16. Learning occurs through modification of the brains' neural connections	T
17. Academic achievement can be affected by skipping breakfast	T
18. Normal development of the human brain involves the birth and death of brain cells	T
19. Mental capacity is hereditary and cannot be changed by the environment or experience	F
20. Vigorous exercise can improve mental function	T
21. Environments that are rich in stimulus improve the brains of pre-school children	F
22. Children are less attentive after consuming sugary drinks and/or snacks	F
23. Circadian rhythms ("body-clock") shift during adolescence, causing pupils to be tired during the first lessons of the school day	T
24. Regular drinking of caffeinated drinks reduces alertness	T
25. Exercises that rehearse co-ordination of motor-perception skills can improve literacy skills	F
26. Extended rehearsal of some mental processes can change the shape and structure of some parts of the brain	T

27. Individual learners show preferences for the mode in which they receive information (e.g., visual, auditory, kinaesthetic)	T
28. Learning problems associated with developmental differences in brain function cannot be remediated by education	F
29. Production of new connections in the brain can continue into old age	T
30. Short bouts of co-ordination exercises can improve integration of left and right hemispheric brain function	F
31. There are sensitive periods in childhood when it's easier to learn certain things	T
32. When we sleep, the brain shuts down	F