

LABORATORY EXERCISE 29 DISSECTION OF THE SHEEP BRAIN

Instructional Suggestion

Rather than have students dissect sheep brains, you might want to provide the class with samples of whole sheep brains and sectioned brains for examination. This should extend the use of the available specimens.

Laboratory Report Answers

PART A

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| 1. | The human cerebral hemispheres are relatively larger than those of the sheep. | 5. | The olfactory bulbs of the sheep brain are larger than those of the human brain. |
| 2. | There are more convolutions and sulci in the human cerebrum. | 6. | The olfactory, optic, and trigeminal nerves seem to be most highly developed in the sheep brain. |
| 3. | The human cerebrum with its larger size and greater number of convolutions is more complex and thus able to carry on more complex functions. | 7. | The senses of smell and sight and the sensory functions associated with the trigeminal nerve are highly developed. |
| 4. | The human cerebellum is divided in the midline (vermis) into two hemispheres, whereas the sheep cerebellum is not divided. | | |



Critical Thinking Application Answers

PART B

- 1–6. Answers will vary. The sheep brain and the human brain features are more similar than different. Therefore a complete list of similar features would be very long. Among similar features include two cerebral hemispheres, medulla oblongata, pineal gland, midbrain, thalamus, hypothalamus, pons, olfactory bulb, four ventricles, and others. (Note only 6 answers are needed.) Mammal brains have more similarities than differences.