Unit 28 · Animal Behavior

WORKSHEET

Full marks 35

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 35

1 Key words [4]

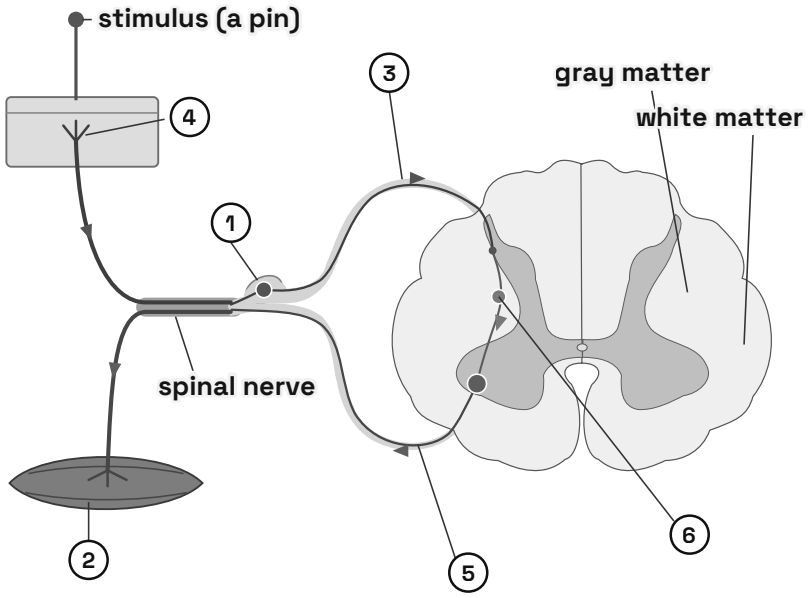
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

anadromous	ethology	habituation	hierarchy	imprinting	innate	kinesis
menotaxis	potamodromous	tropism				

The study of animal behavior, especially in the wild, is called _____. Behavior controlled by genes, done right the first time without learning, is _____ behavior. An animal that learns to stop responding to a harmless stimulus repeated again and again shows _____. Goslings that follow the first moving object they see after hatching show _____. A change in speed or rate of turning, but not direction, in response to a stimulus is a _____. Moving at a fixed angle to the sun, the light compass response, is _____. The ranking of animals in a group, the pecking order in hens, is a dominance _____. Fishes that live in the sea and swim up rivers to breed are _____.

2 Label the diagram [3]

The diagram shows the reflex arc of pulling the hand away from a pin. Write the names of the parts 1 to 6. Each carries 0.5 mark.



1. _____ 2. _____

3. _____ 4. _____

5. _____ 6. _____

3 Multiple choice [5]

Choose the correct option for each of the following questions.

i. Which type of taxis is also called the light compass response? [1]

a. telotaxis
b. mnemotaxis
c. menotaxis
d. tropotaxis

ii. The Himalayan monal spends summer high on the mountains and comes down in winter. What kind of migration is this? [1]

a. latitudinal
b. longitudinal
c. altitudinal
d. vagrant

iii. Dolma's cat runs to the kitchen whenever it hears the fridge door open. What kind of behavior is this? [1]

a. innate behavior
b. a reflex
c. learned behavior (conditioning)
d. a taxis

iv. Where is the cell body of a sensory neuron of a spinal nerve? [1]

a. in the dorsal root ganglion
b. in the ventral horn of the gray matter
c. in the ventral root
d. in the white matter

v. A woodlouse with one eye painted over walks round and round in circles under a lamp. Which kind of orientation does this show it normally uses? [1]

a. klinotaxis
b. tropotaxis
c. telotaxis
d. mnemotaxis

4 Very short answers [3]

Write very short answers to the following questions.

a. Who first described the pecking order, and in which animal? [1]

b. In a herd of Asian elephants, who leads? [1]

c. Why do you feel the pain of a pinprick only after your hand has moved? [1]

5 Short answers [9]

Write short answers to the following questions.

a. Differentiate between a taxis and a kinesis, with one example of each. [2]

b. Fishes in a stream turn and face into the current. Name this behavior, and give two ways it helps them. **[2]**

c. Differentiate between dominance and leadership. **[2]**

d. Write the significance of reflex action, and name one spinal and one cranial reflex. **[3]**

6 Long answers **[8]**

Write long answers to the following questions.

a. What are the advantages and disadvantages of bird migration? **[4]**

b. Describe the types of fish migration, with one example of each of any four. **[4]**

7 Think **[3]**

The hilsa used to swim up the Koshi and Narayani into Nepal to spawn, but is now rarely caught there. Using what you know of its migration, suggest why, and one way the problem could be eased.

8 Activity: The knee jerk (not marked)

Work with a partner, as in the unit, and fill in the table.

Question	What you found
What happens when the tendon below the kneecap is tapped?	
Can you stop it?	
Pulling hard on your hooked fingers, is the kick bigger or smaller?	
Which is the receptor, and which the effector?	

Is the knee jerk a spinal or a cranial reflex? Why?