

Tobermory High School

Standard Grade Biology

Animal Survival

Responding to the Environment

1. Name three environmental factors which can affect an animal's behaviour. (3)
2. Why is it important to an animal to be able to respond to these stimuli? (1)
3. Describe three main features of rhythmical behaviour. (3)
4. Pick one animal and describe its rhythmical behaviour. (3)
5. The following table describes the amount of time a blackbird spends performing different activities during 2 separate hours in the day.

Activity	Amount of time per hour	
	8-9am	5-6pm
Feeding	15min	45min
Singing	20min	5min
Preening	5min	0min
Other activities	20min	10min

- (a) Calculate the percentage of time in each hour spent feeding. (2)
 - (b) Express, as a ratio, the amount of time spent singing in the morning compare to the evening. (1)
 - (c) Construct a pie chart for each period of the time given in the table to compare the activities. (4)
6. Read the following passage then answer the question based on it.

Nocturnal animals are active at night whereas other adopt a diurnal way of life, taking advantage of the daylight hours. There are different reasons for each pattern of behaviour. Owls normally hunt at night time to avoid competition from other predatory birds whereas hawks use their sharp vision in daylight to spot prey from great heights. Frogs need humidity and are night-active to avoid too much water loss by dehydration. Snakes need daytime warmth to hunt efficiently. Mice come out at night time to avoid predators which hunt by sight whereas squirrels rely on good eyesight to move acrobatically among the trees.

- (a) Construct a table to divide the animals into 2 separate groups. (2)
- (b) From the passage, give one advantage of being active at night. (1)

Total = 20