

## Symbiosis & Social Behaviour

Complete the glossary words and questions in advance of the online session on 7<sup>th</sup> February 2018.

<b>Key Area 5 Symbiosis &amp; Key Area 6 Social Behaviour</b>	
Symbiosis	
Altruistic behaviour	
Cooperative hunting	
Host	
Keystone species	
Kin selection	
Mutualism	
Reciprocal altruism	
Vector	

1. A species of ant which is found in Latin America inhabits the thorns of a tropical shrub known as Acacia. The ants receive nectar and shelter from the plant. The plant receives protection from the ants.

This is an example of:

- a) parasitism;
  - b) predation;
  - c) grazing;
  - d) mutualism.
2. Symbiosis is the term used to describe close interactions between organisms. For each of the statements below indicate which type of symbiosis it describes.
    - a) One species benefits and the other is harmed.
    - b) Both species in the interaction benefit.
  3. State one way in which honey bees are of economic importance in crop production.
  4. Primates are social animals which often live in large groups. They display characteristic behaviours which enable group living.
    - a) Give one example of appeasement behaviour.
    - b) Name one factor which will affect the social structure of a group of primates.

5. Select the correct definitions (list Y) for the three terms (list X).

**List X**

1. Social hierarchy
2. Kin selection
3. Reciprocal altruism

**List Y**

- a) A behaviour in which an organism acts in a manner that temporarily reduces its fitness while increasing another organism's fitness with the expectation that the other organism will act in a similar manner later on.
- b) Society in which some individuals are dominant to others who are submissive to the dominant ones.

6. Match the terms in list X with their description in list Y.

**List X**

1. Cooperative hunting
2. Dominance hierarchy
3. Ritualised threat gesture
4. Subordinate response

**List Y**

- a) Social signal used by the leader in a dominance hierarchy to assert authority.
- b) Social signal used by low-ranking member of a social hierarchy to indicate acceptance of the dominant leader.
- c) System of social organisation where the members are graded into a rank order.
- d) Type of foraging behaviour employed by a group of predators resulting in mutual benefits.