

Model 2 – Symbiosis

Organism 1	Organism 2	Description of the relationship	Symbiotic Relationship
Dog	Flea	The flea feeds on blood from the dog. There is no benefit to the dog and the itching and bites may lead to infection.	
Fungus	Algae	The photosynthetic algae provide food for the fungus, which in turn provides a suitable living environment for the algae.	
Termite	Cellulose-digesting bacteria	The bacteria in the gut of the termite breakdown and feed on some of the cellulose taken in by the termite. The termite would be unable to digest cellulose without these bacteria and they gain an additional source of nutrition from the surplus digested cellulose.	
Shark	Remora	The Remora fish swim alongside the shark and take scraps of food that the shark drops during feeding. The shark does not eat the Remora and appears unaffected by its presence.	
Cattle	Cattle egret	The cattle egret follows herds of cattle and eats the insects that the cattle stir up as they move through the grassland. The cattle appear to be unaffected by the egrets.	
Human	Tapeworm	The tapeworm lives in the small intestines where it feeds and grows, robbing the human of essential nutrients.	

9. Refer to the information given in Model 2.

a. In the dog and flea relationship, is there a benefit for one of the organisms or for both?

b. Is either the dog or the flea harmed by this relationship?

c. Which other relationship in Model 2 is similar to that between the dog and flea?