

2. *Note the nature of the animal's outer body wall (the exoskeleton), the substance of it (chitin), its hardness, smoothness, and hairiness.*

3. *Note the main divisions of the body—head, thorax, and abdomen.*

*Shape.*—Finding the body of the grasshopper to be of a certain shape (and having knowledge besides of the activities of the living animals) the question is, does this suit the animal's activities, for example, in crawling among the grass, leaping, or flying through the air?

*Colour.*—Observing the grasshopper to have a certain general coloration, the question is, does this suit its needs, for example, as a protection; and the young grasshoppers being a brighter green than the older ones, why so, or for what possible purpose?

*Size.*—Noticing that the animals have a certain range of size, would there be disadvantages (providing its conditions of living were the same) in being larger?

*Dimensions.*—What is the advantage (if there is any) in the animal's body having a greater diameter in the depth than it has in the width?

*Body Wall.*—What good purpose is served the animal in its having a hard, chitinous exoskeleton? If it is smooth, what advantage is there in this? If there are hairs, what purpose may they serve?

*Body Divisions.*—What is the significance of the fact that the body has three very well distinguished regions—a head, a thorax, and an abdomen? It must mean that the different regions have distinct functions to perform.

And so, throughout the study, seek to find nature's meanings and purposes.