

# [Ap bio ch. 51 vocab](https://assignbuster.com/ap-bio-ch-51-vocab/)

Behaviorwhat an animal does and how it does itEthologya research field which originated in the 1930s with naturalists who tried to understand how a variety of animals behave in their natural habitats ONAP BIO CH. 51 VOCAB SPECIFICALLY FOR YOUFOR ONLY$13. 90/PAGEOrder NowFixed action pattern (FAP)a sequence of behaviorial acts that is essentially unchangeable and usually carried to completion once initiatedSign stimulusan external sensory stimulus that triggers an FAPBehavioral ecologythe research approach based on the expectation that animals increase their Darwinian fitness by optimal behaviorSearch imagea set of key characteristics that will lead an animal to the desired objectOptimal foragingthe concept that natural selection will favor animals that choose foraging strategies that maximize the differential between benefits and costsLearningformally defined as the modification of behavior resulting from specific experiencesMaturationa process which has ongoing developmental changes in neuromuscular systemsHabituationa very simple type of learning that involves a loss of responsiveness to stimuli that convey little or no informationImprintinglearning that is limited to a specific time period in an animal's life and that is generally irreversibleCritical perioda limited phase in an individual animal's development when learning of particular behaviors can take placeAssociative learningthe ability of many animals to learn to associate one stimulus with anotherClassical conditioninga type of associative learning well known from the laboratory studies of Russian physiologist Ivan Pavlov in the early 1900s; learning to associate an arbitrary stimulus with a reward or punishment; (Dogs learn to associate a bell with food, so they salivate when the bell ringsOperant conditioningalso called trial-and-error learning; an animal learns to associate one of its own behaviors with a reward or punishment and then tends to repeat or avoid that behaviorPlaya behavior that many mammals and some birds engage in that has no apparent external goal but involves movements closely associated with goal-directed behaviorsCognitionthe ability of an animal's nervous system to perceive, store, process, and use information gathered by sensory receptorsCognitive ethologythe study of animal cognition that attempts to illustrate the connection between data processing by nervous systems and animal behaviorCognitive mapsinternal representations, or codes, of the spatial relationships among objects in their surroundingsKinesisinvolves a simple change in activity rate in response to a stimulusTaxisa more or less automatic, oriented movement toward or away from some stimulusMigrationregular movement over relatively long distancesSocial behaviorany kind of interaction between two or more animals, usually of the same speciesSociobiologya relatively new discipline which applies evolutionary theory as a foundation for the study and interpretation of social behaviorAgonistic behaviora contest involving both threatening and submissive behavior determines which competitor gains access to some resource, such as food or a mateDominance hierarchya clear " pecking order"; within a group, alpha, beta, and so on down the line to the omega, or lowest, animalTerritoryan area that an individual defends, usually excluding other members of its own speciesParental investmentdefined as the time and resources an individual must expend to produce offspringLeka small area in which males display communallyPromiscuousmating with no strong pair-bonds or lasting relationshipsMonogamousa relationship in which the mates remain together for a longer period; one male mating with one femalePolygamousa relationship in which the mates remain together for a longer period; most often involves a single male and many females called polygnyPolyaundrywhen, in some species, a single female mates with several malesPheromoneschemical signals that are especially common among mammals and insects and often relate to reproductive behaviorAltruismwhen, on occasion, animals behave in ways that reduce their individual fitness and increase the fitness of the recipient of the behaviorInclusive fitnessdescribes the total effect an individual has on proliferating its genes by producing its own offspring and by providing aid that enables other close relatives to increase the production of their offspringCoefficient of relatednessthe proportion of genes that are identical in two individuals because of common ancestorsKin selectionthe individual's altruism can result in more genes identical to its own in the next generation if it aids a sibling rather than a cousin; this mechanism of increasing inclusive fitnessReciprocal altruismfor example, when a baboon may help an unrelated companion in a fight, or a wolf may offer food to another wolf even though they share no kinship; a sort of exchange of aid