Animals are <u>multicellular eukaryotic</u> organisms that form the <u>biological kingdom</u> Animalia. With few exceptions, animals <u>consume organic material</u>, <u>breathe oxygen</u>, are <u>able to move</u>, can <u>reproduce sexually</u>, and grow from a hollow sphere of cells, the <u>blastula</u>, during <u>embryonic development</u>. Over 1.5 million <u>living</u> animal <u>species</u> have been <u>described</u>—of which around 1 million are <u>insects</u>—but it has been estimated there are over 7 million animal species in total. Animals range in length from 8.5 millionths of a metre to 33.6 metres (110 ft) and have <u>complex interactions</u> with each other and their environments, forming intricate <u>food webs</u>. The category includes <u>humans</u>, but in colloquial use the term <u>animal</u> often refers only to non-human animals. The study of non-human animals is known as <u>zoology</u>.

Most living animal species are in the <u>Bilateria</u>, a <u>clade</u> whose members have a <u>bilaterally symmetric</u> body plan. The Bilateria include the <u>protostomes</u>—in which many groups of <u>invertebrates</u> are found, such as <u>nematodes</u>, <u>arthropods</u>, and <u>molluscs</u>—and the <u>deuterostomes</u>, containing the <u>echinoderms</u> and <u>chordates</u> (including the <u>vertebrates</u>). Life forms interpreted as early animals were present in the <u>Ediacaran biota</u> of the late <u>Precambrian</u>. Many modern animal phyla became clearly established in the <u>fossil record</u> as <u>marine species</u> during the <u>Cambrian</u> explosion which began around 542 million years ago. 6,331 groups of <u>genes</u> common to all living animals have been identified; these may have arisen from a single <u>common ancestor</u> that lived <u>650 million years ago</u>.

<u>Aristotle divided animals</u> into those with blood and those without. <u>Carl Linnaeus</u> created the first hierarchical <u>biological classification</u> for animals in 1758 with his <u>Systema Naturae</u>, which <u>Jean-Baptiste Lamarck</u> expanded into 14 <u>phyla</u> by 1809. In 1874, <u>Ernst Haeckel</u> divided the animal kingdom into the multicellular **Metazoa** (now <u>synonymous</u> with Animalia) and the <u>Protozoa</u>, single-celled organisms no longer considered animals. In modern times, the biological classification of animals relies on advanced techniques, such as <u>molecular phylogenetics</u>, which are effective at demonstrating the evolutionary relationships between animal taxa.

Humans make use of many other animal species for food, including <u>meat</u>, <u>milk</u>, and <u>eggs</u>; for materials, such as <u>leather</u> and <u>wool</u>; as <u>pets</u>; and as <u>working animals</u> for power and transport. Dogs have been <u>used in hunting</u>, while many terrestrial and aquatic animals are hunted for sport. Nonhuman animals have appeared in art from the earliest times and are featured in mythology and religion.