

Question	Answer
Match: Selaginella belongs to which group?	Pteridophyte.
Match: Sphagnum belongs to which group?	Moss.
Why is classification important in the animal kingdom?	Classification helps in assigning a systematic position to newly described species.
Which fundamental features are used as the basis of animal classification?	Arrangement of cells, body symmetry, nature of coelom, and patterns of digestive, circulatory, and reproductive systems.
What level of organisation is seen in sponges?	Cellular level of organisation.
What is meant by cellular level of organisation?	Cells are arranged as loose cell aggregates with some division of labour among cells.
Which animals show tissue level of organisation?	Coelenterates.
What is tissue level of organisation?	Cells performing the same function are arranged into tissues.
Which phylum first exhibits organ level of organisation?	Platyhelminthes.
What is organ-system level of organisation?	Organs associate to form functional systems, each concerned with a specific physiological function.
Which animals exhibit organ-system level of organisation?	Annelids, Arthropods, Molluscs, Echinoderms, and Chordates.
What is an incomplete digestive system?	A digestive system with a single opening serving as both mouth and anus.
What is a complete digestive system?	A digestive system with two openings: mouth and anus.
What is an open circulatory system?	Blood is pumped out of the heart and directly bathes the tissues and cells.
What is a closed circulatory system?	Blood circulates through vessels such as arteries, veins, and capillaries.
What is asymmetry in animals?	Any plane passing through the centre does not divide the body into equal halves.
Which animals are mostly asymmetrical?	Sponges.
Define radial symmetry.	Any plane passing through the central axis divides the organism into two identical halves.
Which groups show radial symmetry?	Coelenterates, ctenophores, and echinoderms.
Define bilateral symmetry.	The body can be divided into identical left and right halves in only one plane.

Question	Answer
Which animals exhibit bilateral symmetry?	Annelids, arthropods, and similar animals.
What are diploblastic animals?	Animals with two embryonic layers: ectoderm and endoderm.
What is mesoglea?	An undifferentiated layer present between ectoderm and endoderm.
What are triploblastic animals?	Animals with three germ layers: ectoderm, mesoderm, and endoderm.
What is coelom?	A body cavity lined by mesoderm.
What are coelomates?	Animals possessing a true coelom.
Name some coelomate phyla mentioned in the text.	Annelids, molluscs, arthropods, echinoderms, hemichordates, and chordates.
Which animals are pseudocoelomates?	Aschelminthes.
What are acoelomates?	Animals in which the body cavity is absent.
Give an example of an acoelomate group.	Platyhelminthes.
What is metameric segmentation?	External and internal division of the body into segments with serial repetition of at least some organs.
In which animal is metameric segmentation clearly seen?	Earthworm.
What is notochord?	A mesodermally derived rod-like structure formed on the dorsal side during embryonic development in some animals.
What are chordates?	Animals possessing a notochord.
What are non-chordates?	Animals that do not form a notochord.
What is coelom?	The body cavity lined by mesoderm is called coelom.
Why is coelom important in classification?	Presence or absence of coelom is very important in animal classification.
What are coelomates?	Animals possessing coelom are called coelomates.
Name the coelomate groups mentioned in the text.	Annelids, molluscs, arthropods, echinoderms, hemichordates, and chordates.
What is pseudocoelom?	A body cavity not lined by mesoderm, with mesoderm present as scattered pouches between ectoderm and endoderm.
What are pseudocoelomates?	Animals possessing pseudocoelom.

Question	Answer
Give an example of pseudocoelomates.	Aschelminthes.
What are acoelomates?	Animals in which the body cavity is absent.
Give an example of acoelomates.	Platyhelminthes.
What are triploblastic animals?	Animals in which the developing embryo has a third germinal layer, mesoderm, between ectoderm and endoderm.
Which groups are triploblastic according to the text?	Platyhelminthes to chordates.
What is segmentation?	External and internal division of the body into segments with serial repetition of some organs.
What is metamerism?	The phenomenon of metameric segmentation.
Which animal is given as an example of metameric segmentation?	Earthworm.
What is notochord?	A mesodermally derived rod-like structure formed on the dorsal side during embryonic development.
What are chordates?	Animals with notochord.
What are non-chordates?	Animals that do not form a notochord.
Which groups are included under non-chordates according to the text?	Porifera to echinoderms.
What are members of Phylum Porifera commonly known as?	Sponges.
What type of habitat do most sponges have?	They are generally marine.
What type of symmetry is usually seen in Porifera?	Mostly asymmetrical.
What level of organisation is found in sponges?	Cellular level of organisation.
What is the canal system in sponges called?	Water transport or canal system.
Through which pores does water enter the sponge body?	Ostia.
What is spongocoel?	The central cavity in sponges.