

# Introduction to Biology. Lecture 22

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# Outline

- 1 Questions and answers
  - Where we are?
- 2 Animal
  - Animal body



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# Questions and answers

## Where we are?



# Animal motion

*Peristaltic: earthworm*

*Bending: nematode*

*Swimming upside down: horseshoe crab*

*Swimming: horseshoe crab*

*Walking: crab*

*Swimming: ray*

*Water-vascular: starfish*

*Jet: jellyfish*

*Jet: squid*



# Animal

## Animal body



# Blood system

- Open and closed
- Heart
- Hemoglobin and hemocyanin



# Respiration

- Gills
- Lungs
- Tracheas



# Osmoregulation

- Nephridia
- Kidneys



# Nervous system

- Diffuse neurons
- Trunks and circles
- Ganglia
- Brain



# Reproduction and development

- External and internal fertilization
- Direct development or development with metamorphosis



# For Further Reading



Animal.

<http://en.wikipedia.org/wiki/Animal>

