

Kingdom Animalia Summary Quiz

1. What is the most basic of all the animal phyla?
The cnidarians
2. Which is seen as more of a complex example of symmetry, radial or bilateral?
Bilateral
3. What benefits does a cnidarian gain from showing radial symmetry?
Access to food from all directions
4. What benefits are there to animals having bilateral symmetry?
 - **They can become streamlined so as to move easier**
 - **They can develop posterior and anterior ends so as to aid movement and create more sensitive areas**
5. What does it mean to be triploblastic?
This phyla shows 3 body layers that contain cells: ectoderm, mesoderm and endoderm
6. Which is more simple, a triploblastic acoelomate or a triploblastic coelomate individual?
A triploblastic acoelomate
7. What advantages does a coelomate have over an acoelomate?
 - **This allows an individual to increase in size without being limited by its surface area**
 - **More space for the development of organs and complex body systems**
 - **Separates the locomotion muscles from the gut muscles**
 - **Can function as an effective hydrostatic skeleton if fluid filled**
8. Which is the most highly developed gut system, the gut cavity, the branching gut with only one opening or a one way gut with a mouth and an anus? Why is it an advantage?
The one way through gut allows for regional specialisation and prevents food waste being mixed with incoming food
9. What does it mean to be metamerically segmented?
The body is divided into structurally similar segments with their own coelomate space with basic organs such as excretory and nervous structures
10. What is cool about the cnidarians that the other phyla don't have?
They have stinging cells called cnidocytes
11. As the animals have become more complex, in evolutionary terms, has there been a move towards exclusively extracellular digestion or to more intracellular digestion?
Towards displaying only extracellular digestion, allowing for more specialised digestive regions
12. Due to their triploblastic nature, Platyhelminthes are larger than Cnidarians and contain more metabolically active cells. Despite lacking a vascular system, how do they ensure all cells have access to oxygen and metabolites?
 - **They are dorso-ventrally flattened to achieve a high surface area to volume ratio**
 - **They have a short diffusion distance from body surface to body cells**