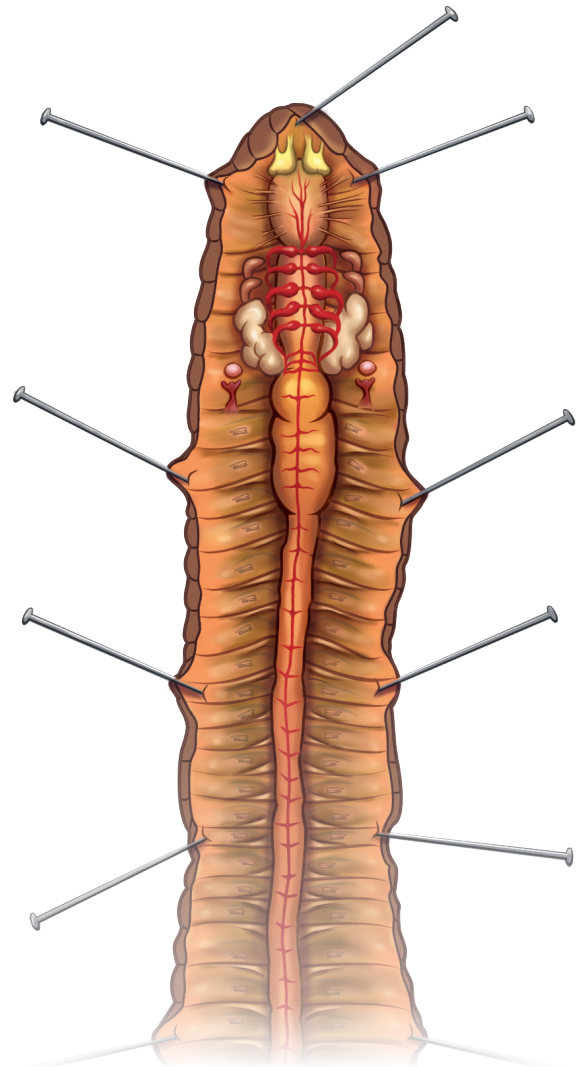
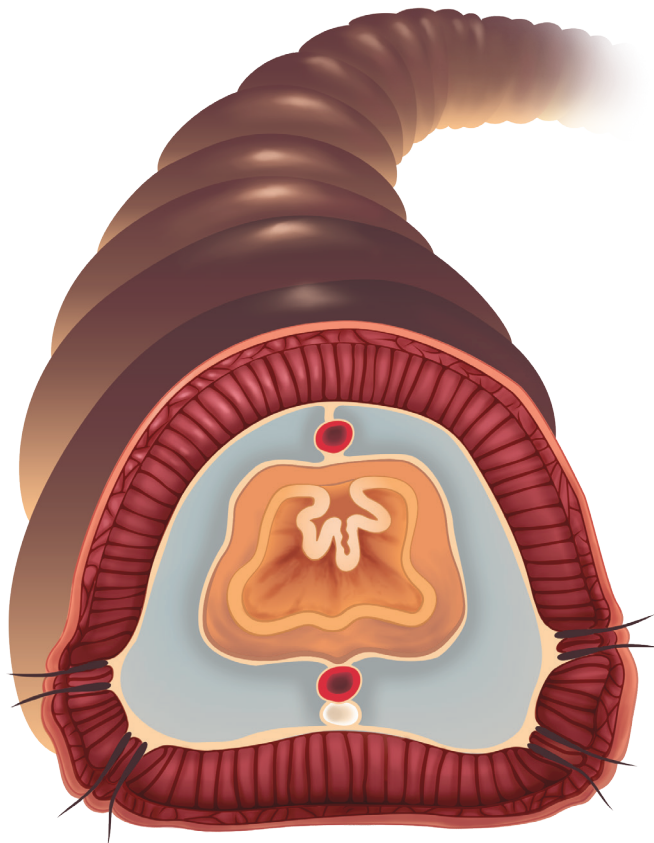
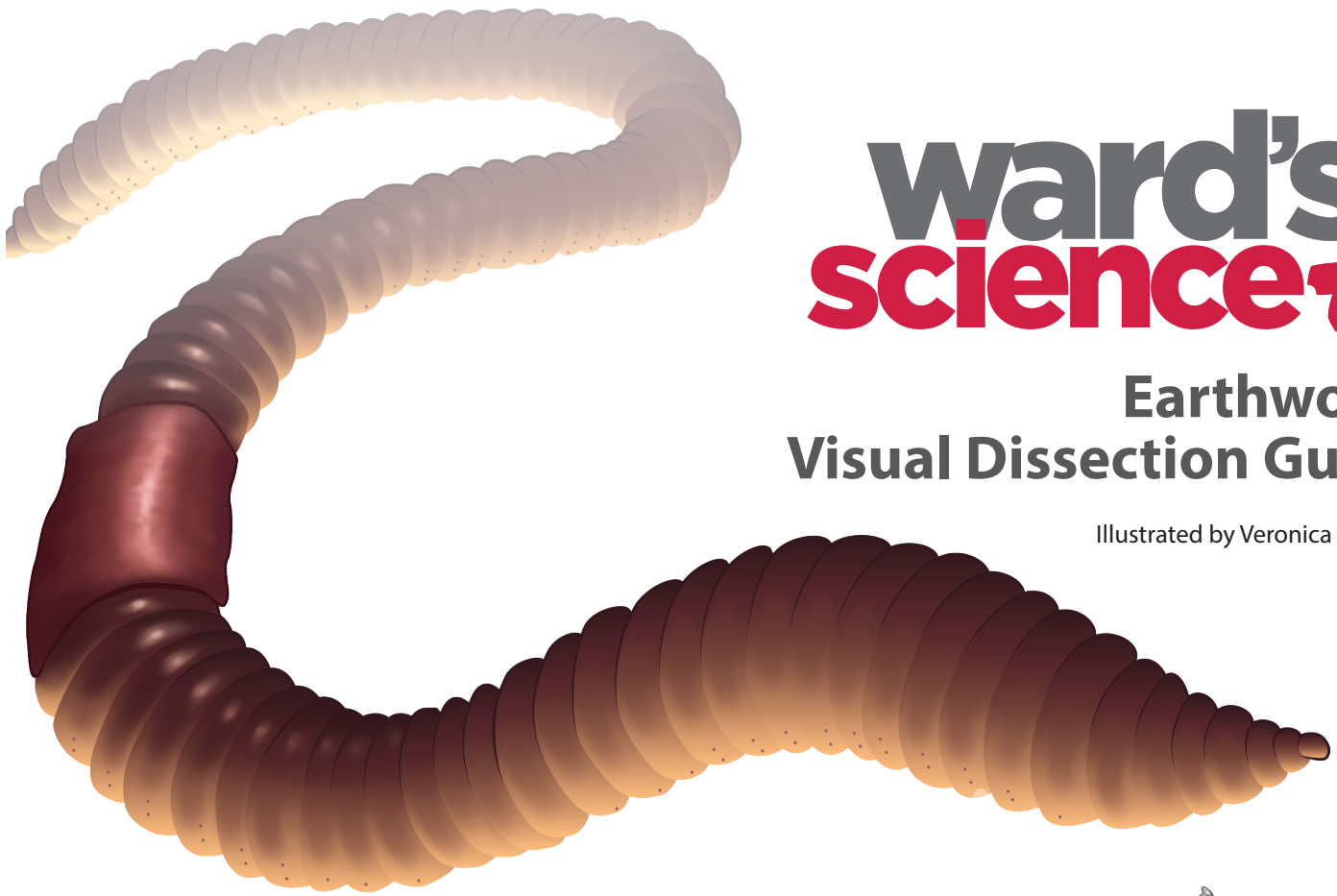


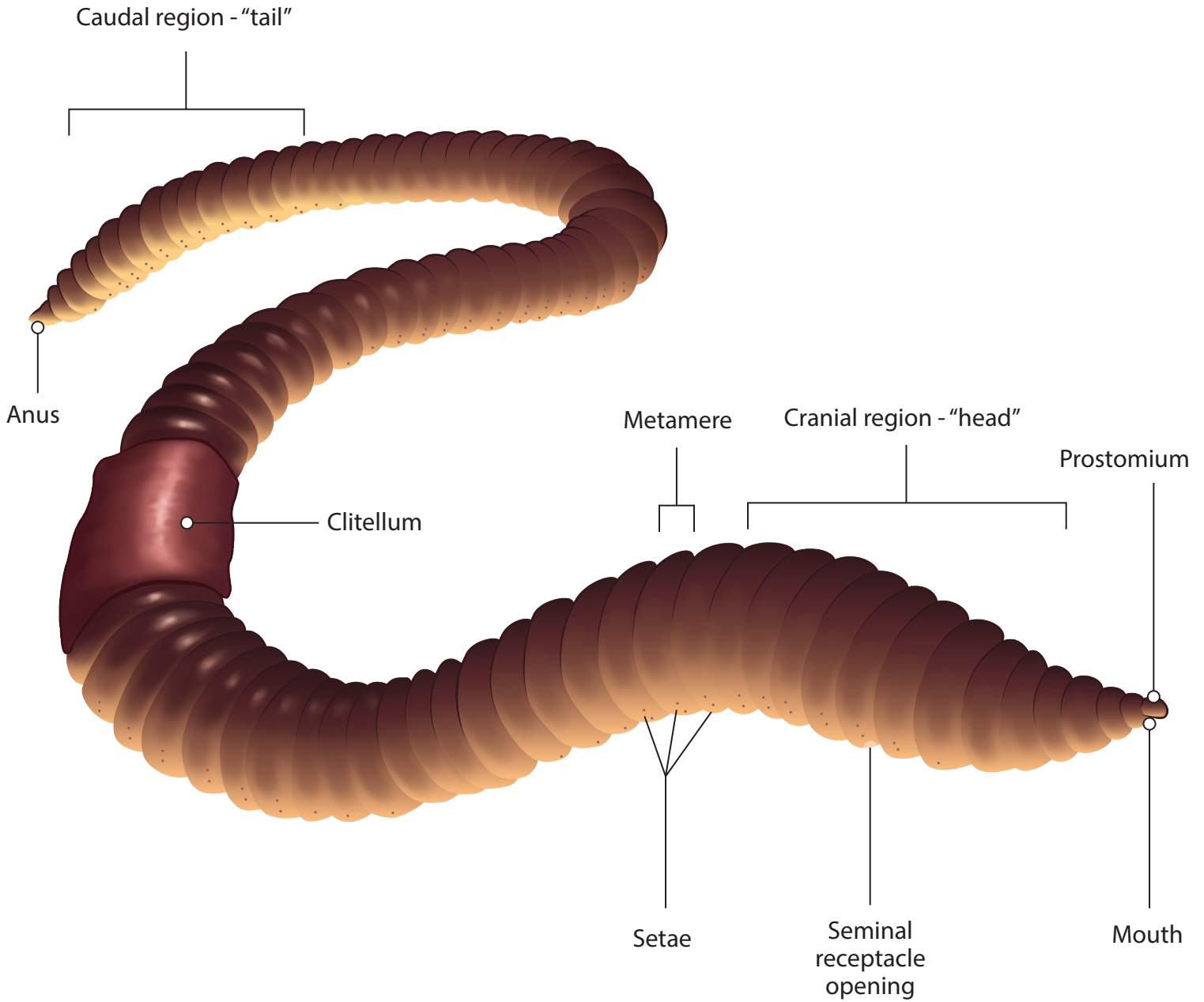
# ward's science+

## Earthworm Visual Dissection Guide

Illustrated by Veronica Zoekler

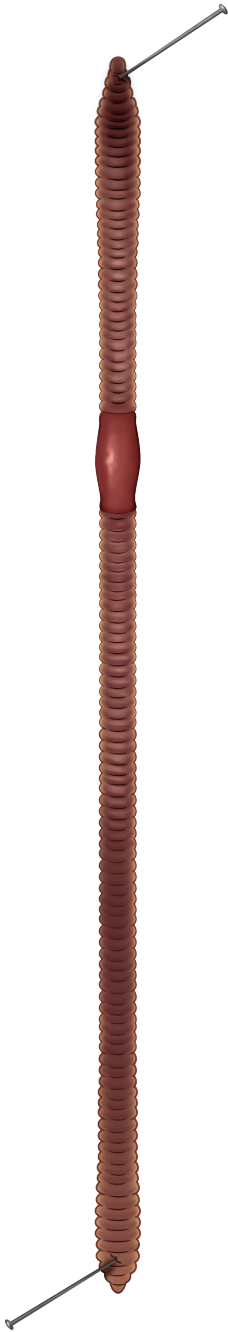


# External Anatomy



# Incisions for Dissection

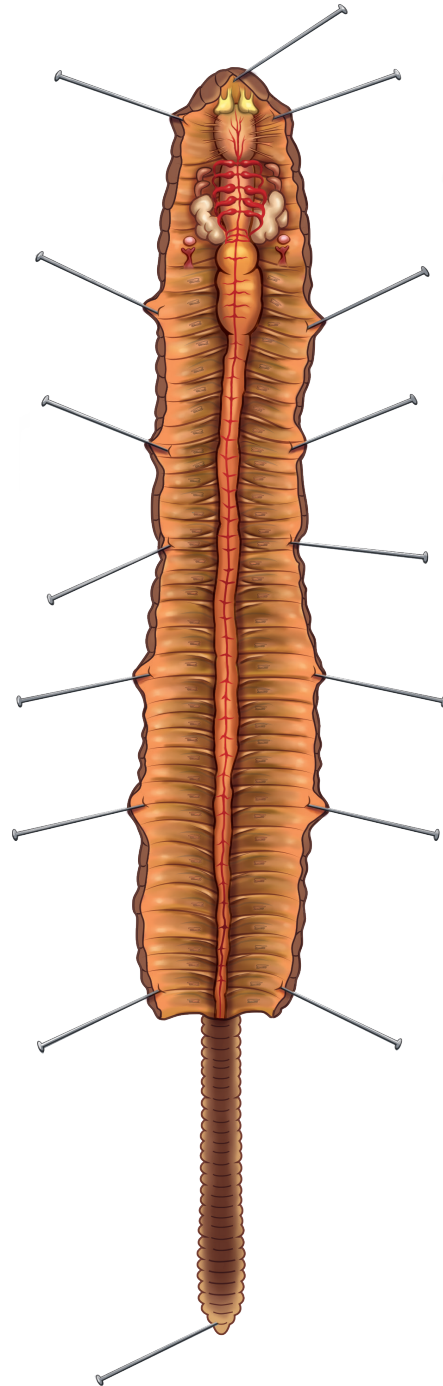
**A** Lay the worm dorsal side up. Pin the cranial and caudal ends.



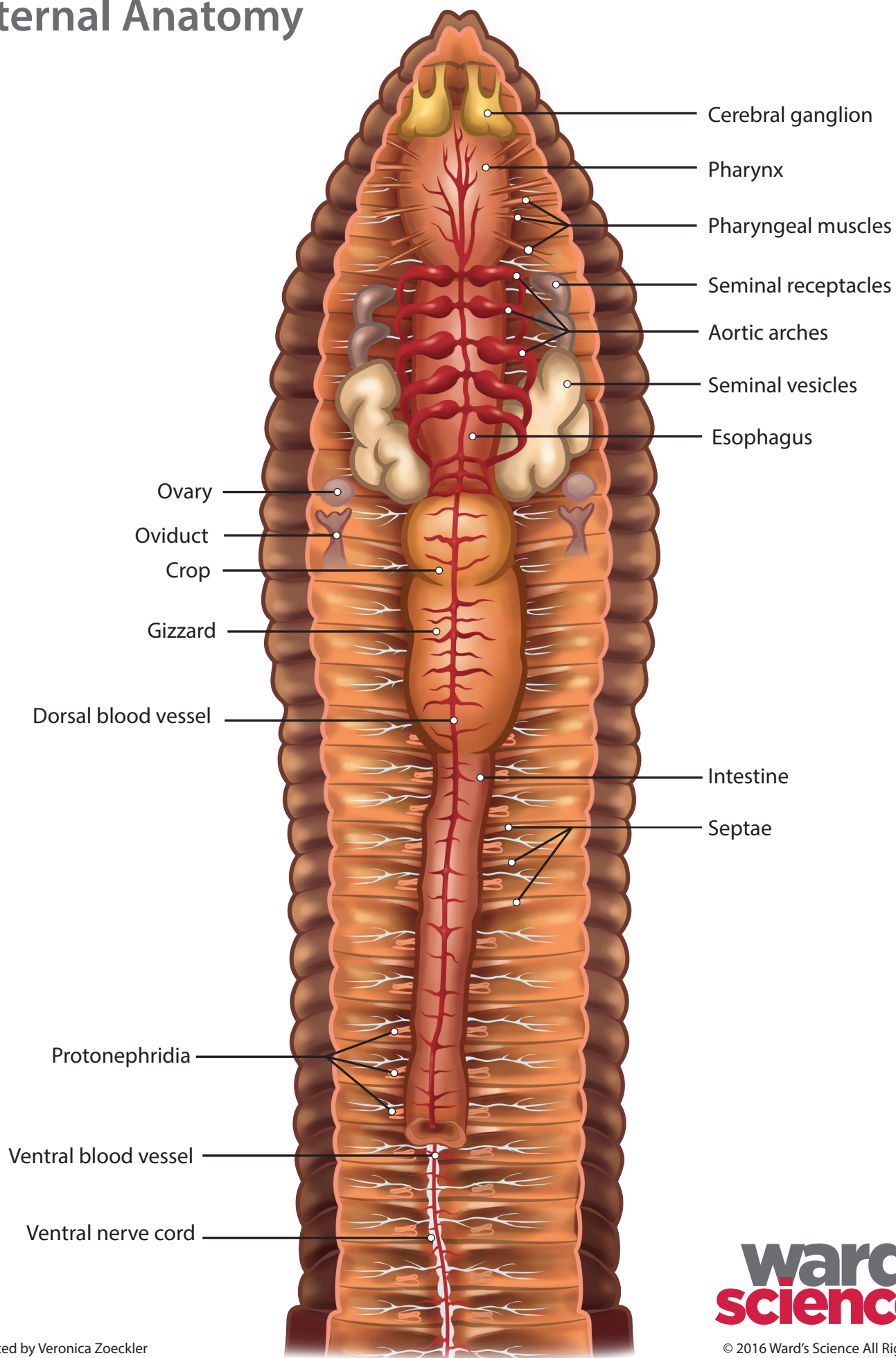
**B** Incise beyond the clitellum, then extend the cut to both ends, from the middle out. Take great care to cut no more than 1/16 of an inch deep into the worm.



**C** With forceps, grasp the edges of the skin carefully. Pull the skin back so that it can be pinned down revealing the internal anatomy of the worm. Take care not to tear or pin any internal organs.



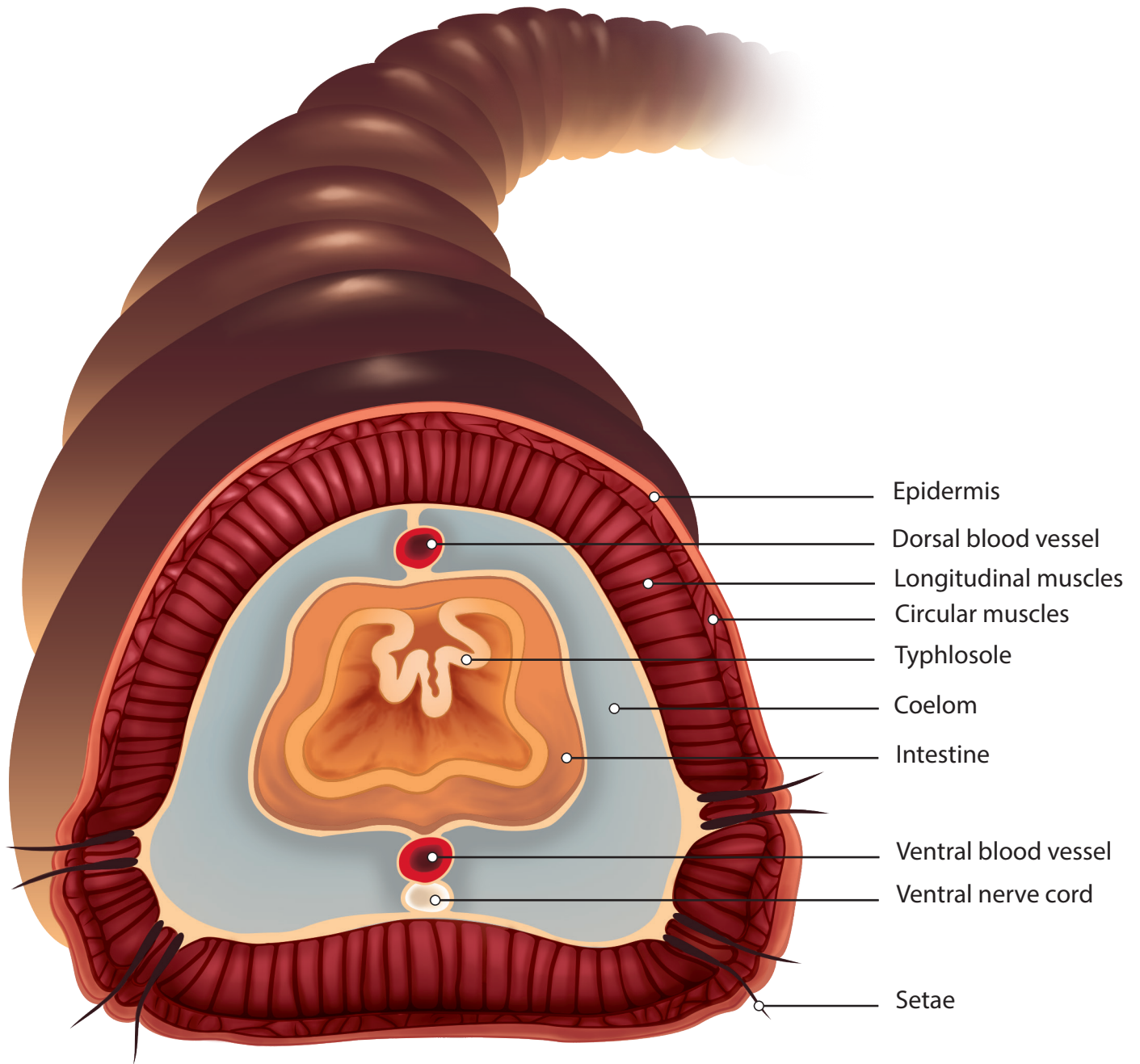
# Internal Anatomy





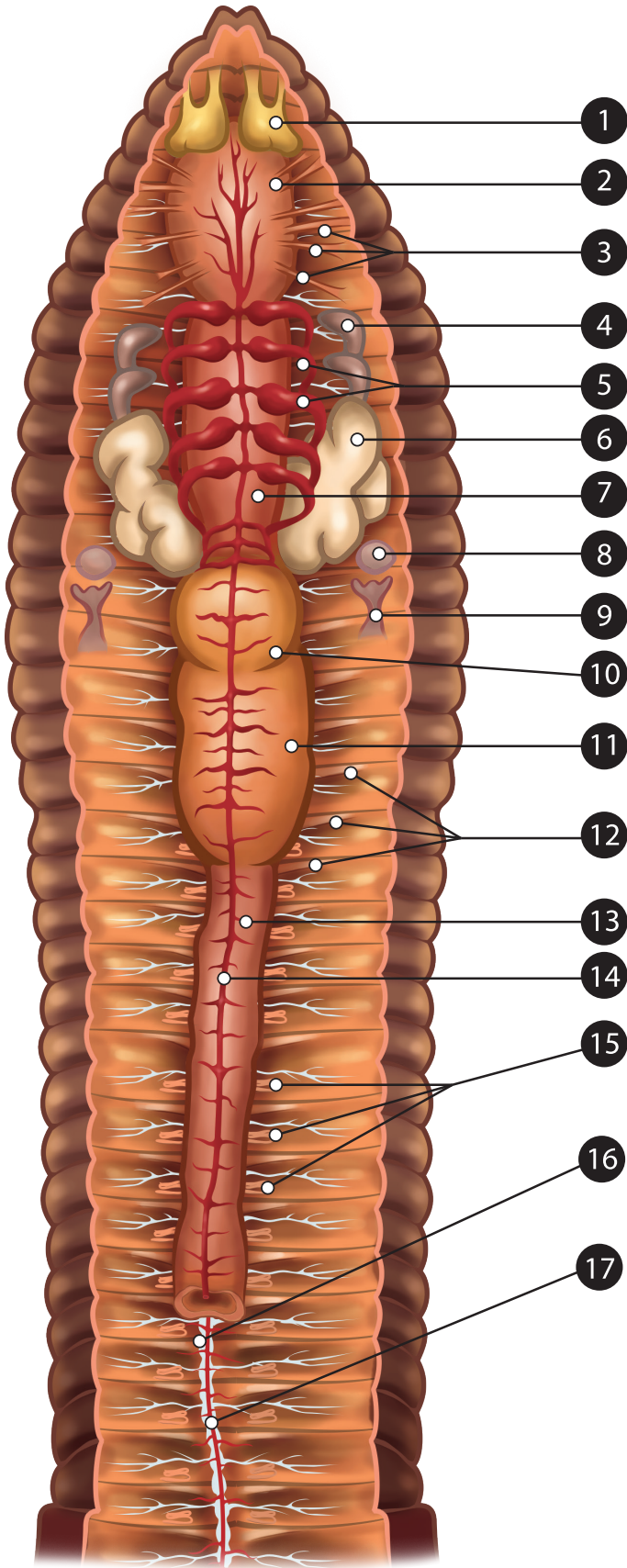
# Cross Sectional Anatomy

(segment posterior to clitellum)

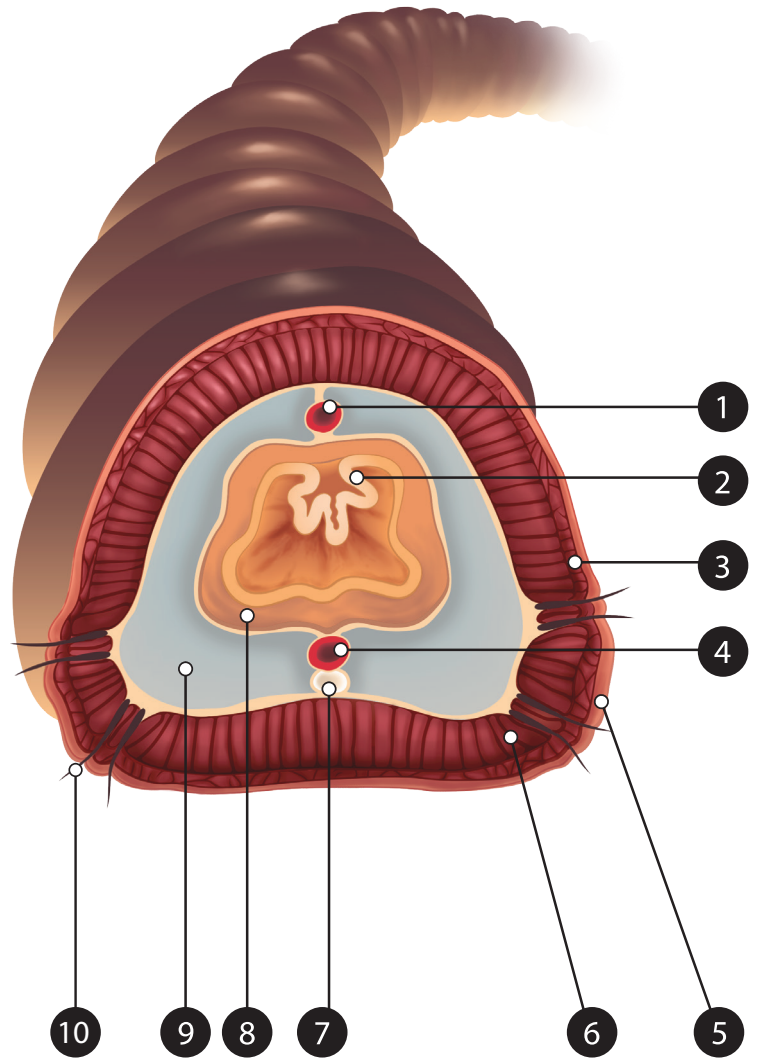


# Quiz

## Internal Anatomy



## Cross Section



# Quiz | Answer Key

## Internal Anatomy

1. Cerebral ganglion
2. Pharynx
3. Pharyngeal muscles
4. Seminal receptacles
5. Aortic arches
6. Seminal vesicles
7. Esophagus
8. Ovary
9. Oviduct
10. Crop
11. Gizzard
12. Septae
13. Intestine
14. Dorsal blood vessel
15. Protonephridia
16. Ventral nerve cord
17. Ventral blood vessel

## Cross Section

1. Dorsal blood vessel
2. Typhlosole
3. Circular muscles
4. Ventral blood vessel
5. Epidermis
6. Longitudinal muscles
7. Ventral nerve cord
8. Intestine
9. Coelom
10. Setae