

What Do You Know about Crayfish Adaptations?

1. Describe five interesting crayfish adaptations. Use complete sentences and include how they help the crayfish survive in their freshwater ecosystems. You might also add illustrations.

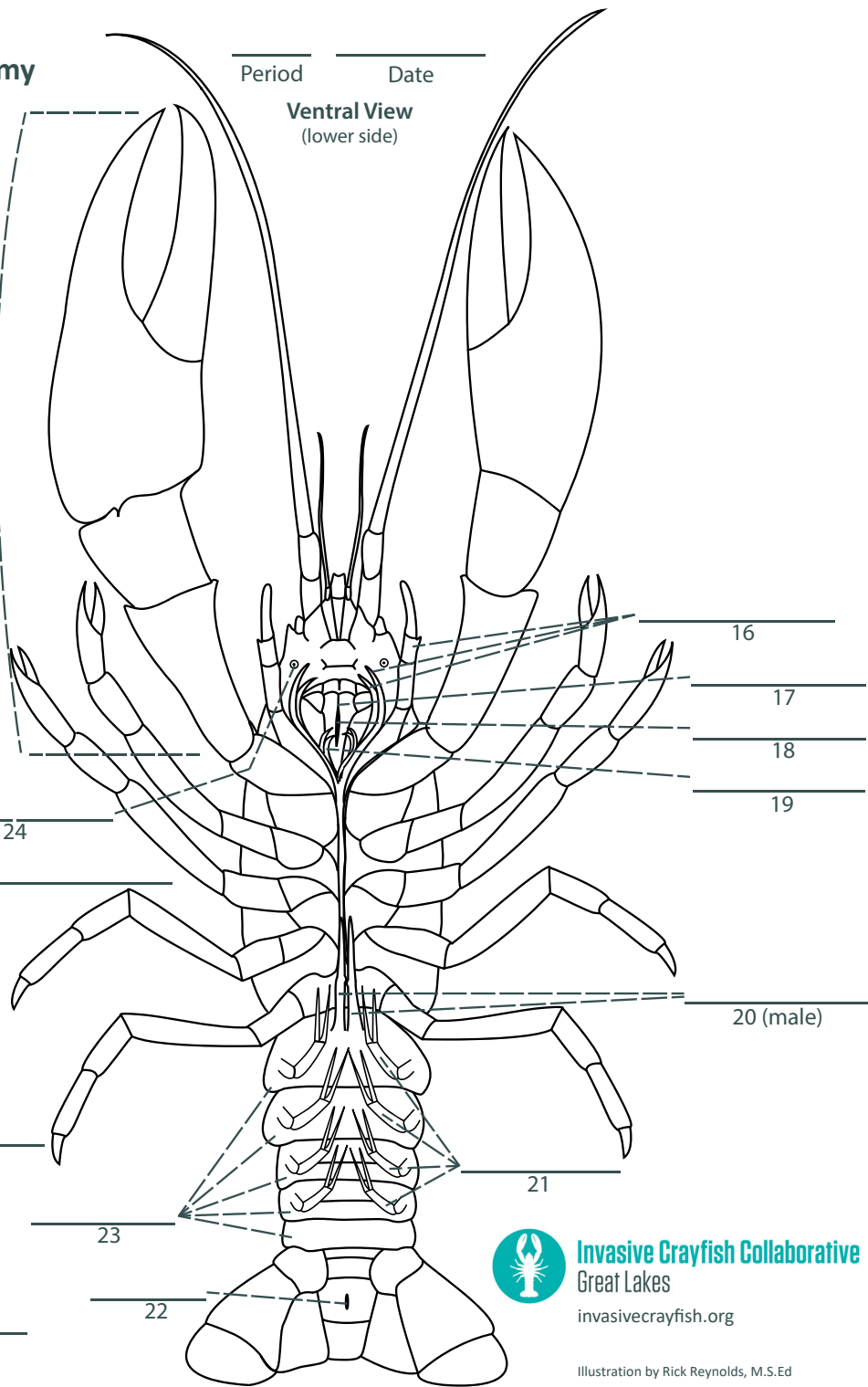
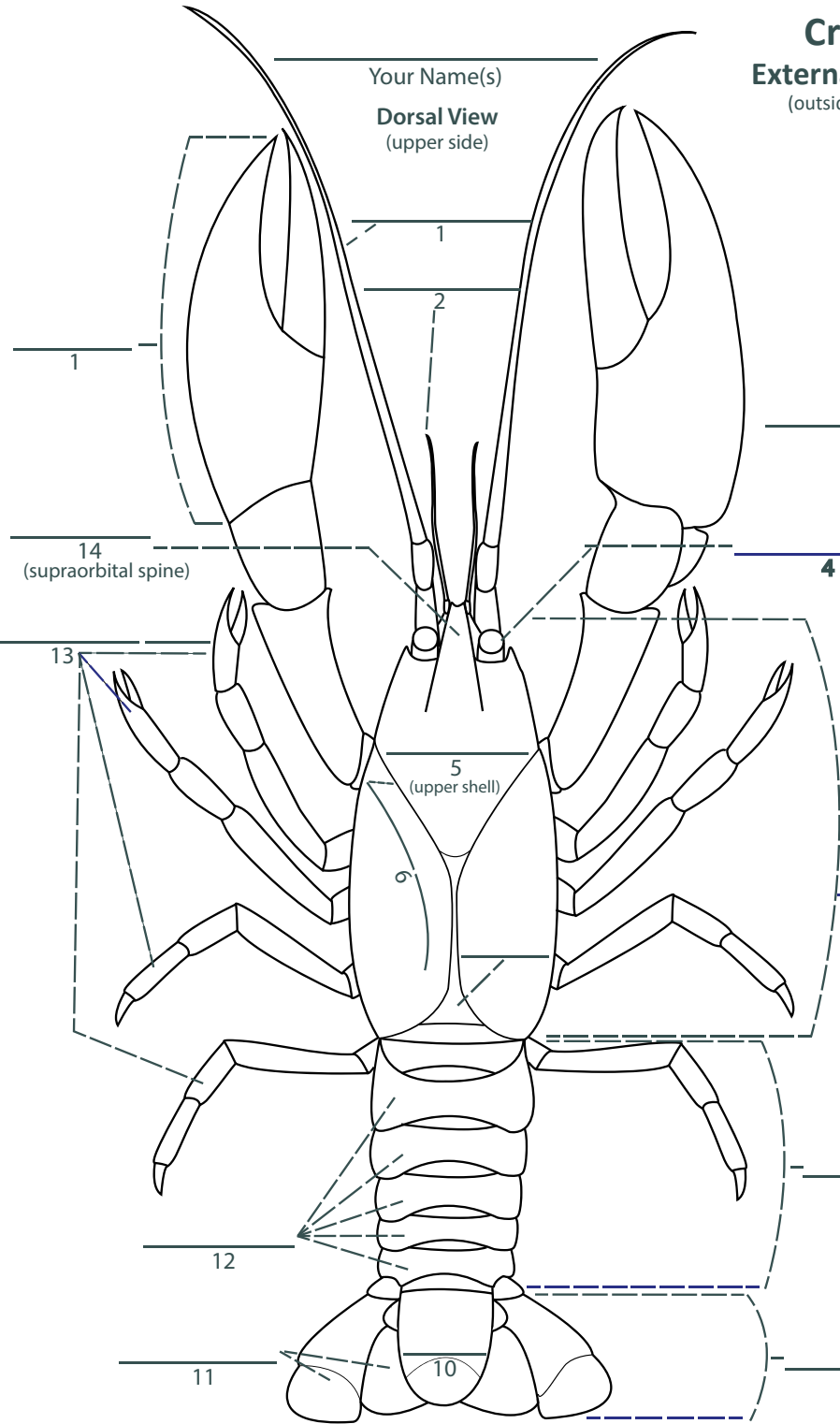
2. How could you divide a crayfish up into parts to explain what it is to someone who has never seen one? You might also add an illustration below or on the back of this sheet.

3. How do swimmerets compare to walking legs?

Crayfish
External Anatomy
(outside structures)

Your Name(s) _____
Dorsal View
(upper side)

Period _____ Date _____
Ventral View
(lower side)



Invasive Crayfish Collaborative
Great Lakes
invasivecrayfish.org

Illustration by Rick Reynolds, M.S.Ed

Crayfish External Anatomy

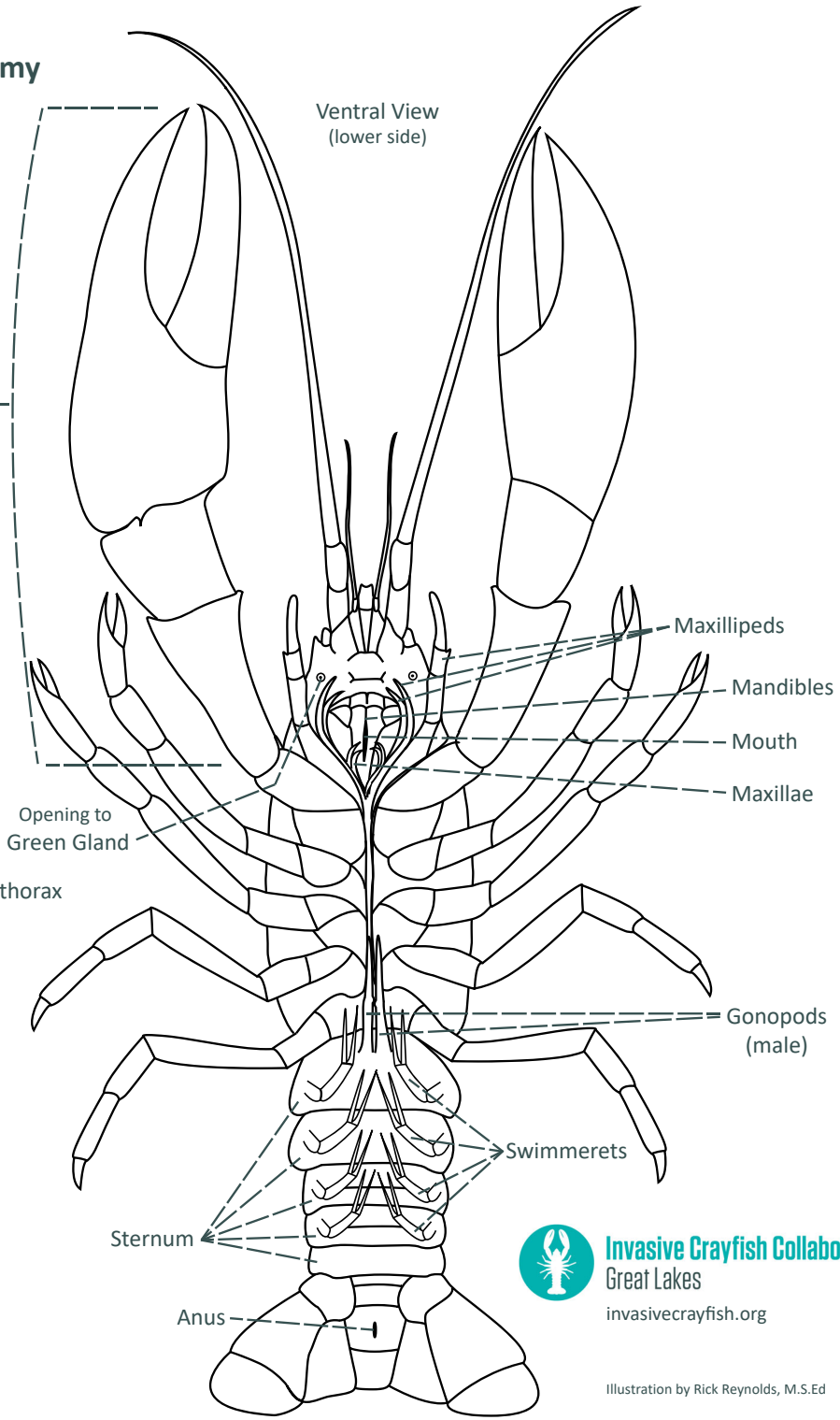
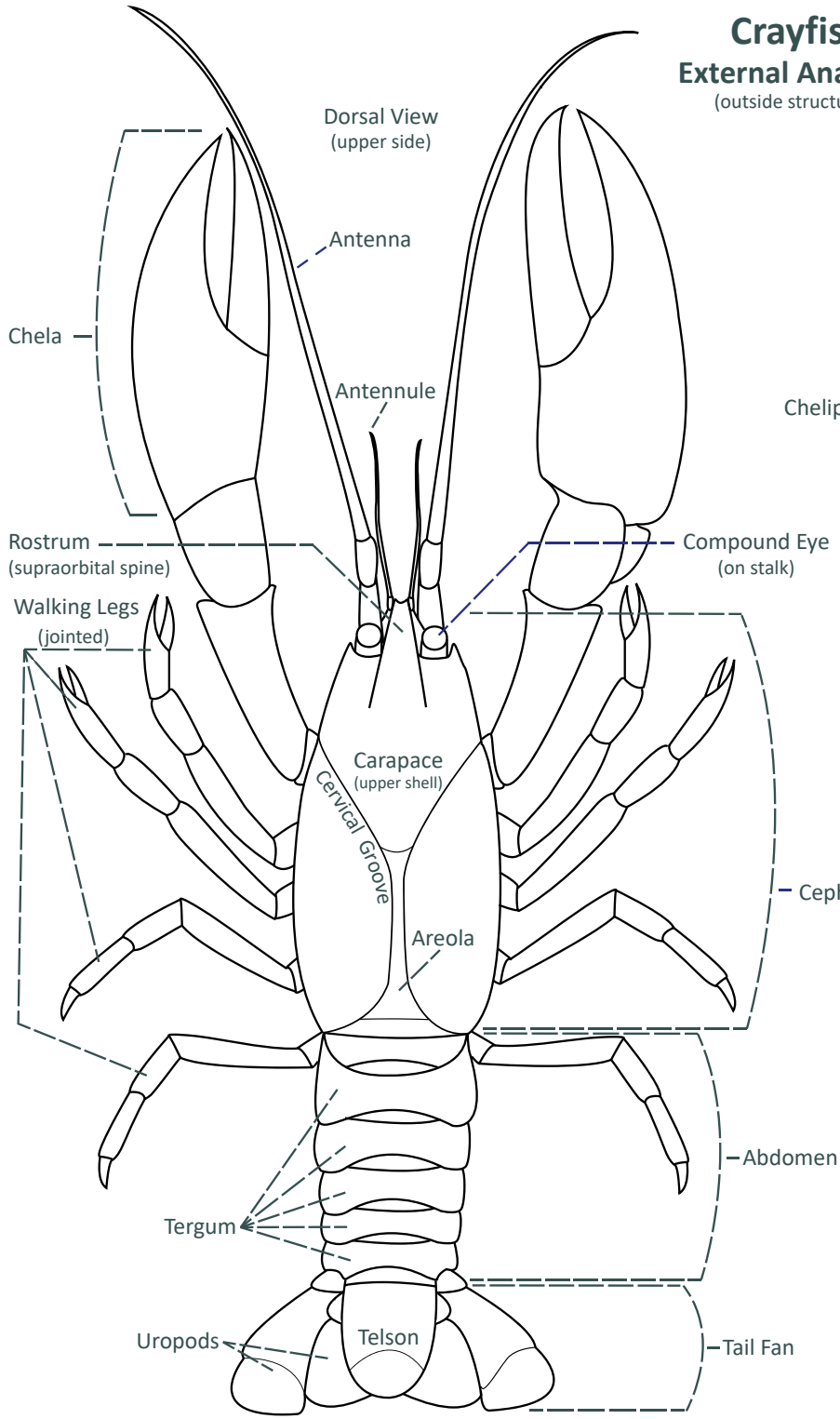
(outside structures)

Abdomen	Tail area with segments; swimmerets, telson, and uropods are attached to it
Antenna	One of two long sensory organs at front of crayfish (antennae : two or more)
Antennule	One of two short antennae
Anus	End of digestive tract; located on lower part of telson
Carapace	Upper protective exoskeleton (shell) of cephalothorax
Cervical Groove	Indentation in carapace between head region and thorax region
Cephalothorax	Combined head and thorax; contains the heart, gills, stomach, and other organs
Chela	One of two big claws used for defense and food handling (chelae : two or more)
Cheliped	One of two long legs with chela
Compound Eye	Two eyes made up of many small eyes; located on stalks
Gonopods	Modified swimmerets of males; used to pass sperm to females
Green Gland	One of a pair of organs used to remove waste products and balance salt levels in blood; two openings to them are on the lower side of the head
Mandible	One of two strong jaws used to crush food
Maxillae	First pair of maxillae helps hold, tear, and pass food to mouth; second pair helps draw water over the gills (used to get oxygen from the water)
Maxillipeds	One of three pairs of feeding appendages; attached to jaws
Mouth	Opening at start of digestive tract
Rostrum	Beak-like structure above eyes; also called the supraorbital spine
Swimmerets	Five pairs of short appendages on bottom of abdomen used for swimming; females also use them to hold their eggs and young crayfish.
Tail Fan	The telson and four uropods; used for swimming backwards—fast!
Telson	Center section of tail fan
Tergum	Upper protective plates of abdomen
Sternum	Lower protective plates of abdomen
Uropods	Two pairs of appendages on tail fan that surround the telson
Walking Legs	Four pairs of jointed legs; the gills are attached to them

Crayfish

External Anatomy

(outside structures)



Invasive Crayfish Collaborative
Great Lakes
invasivecrayfish.org

Illustration by Rick Reynolds, M.S.Ed

Name(s): _____ Period: ____ Date: _____

Comparing Adaptations

Compare the structural and behavioral adaptations of two species using words and illustrations.

Species 1: _____ Different Adaptions

Adaptations in Common

Species 2: _____ Different Adaptions