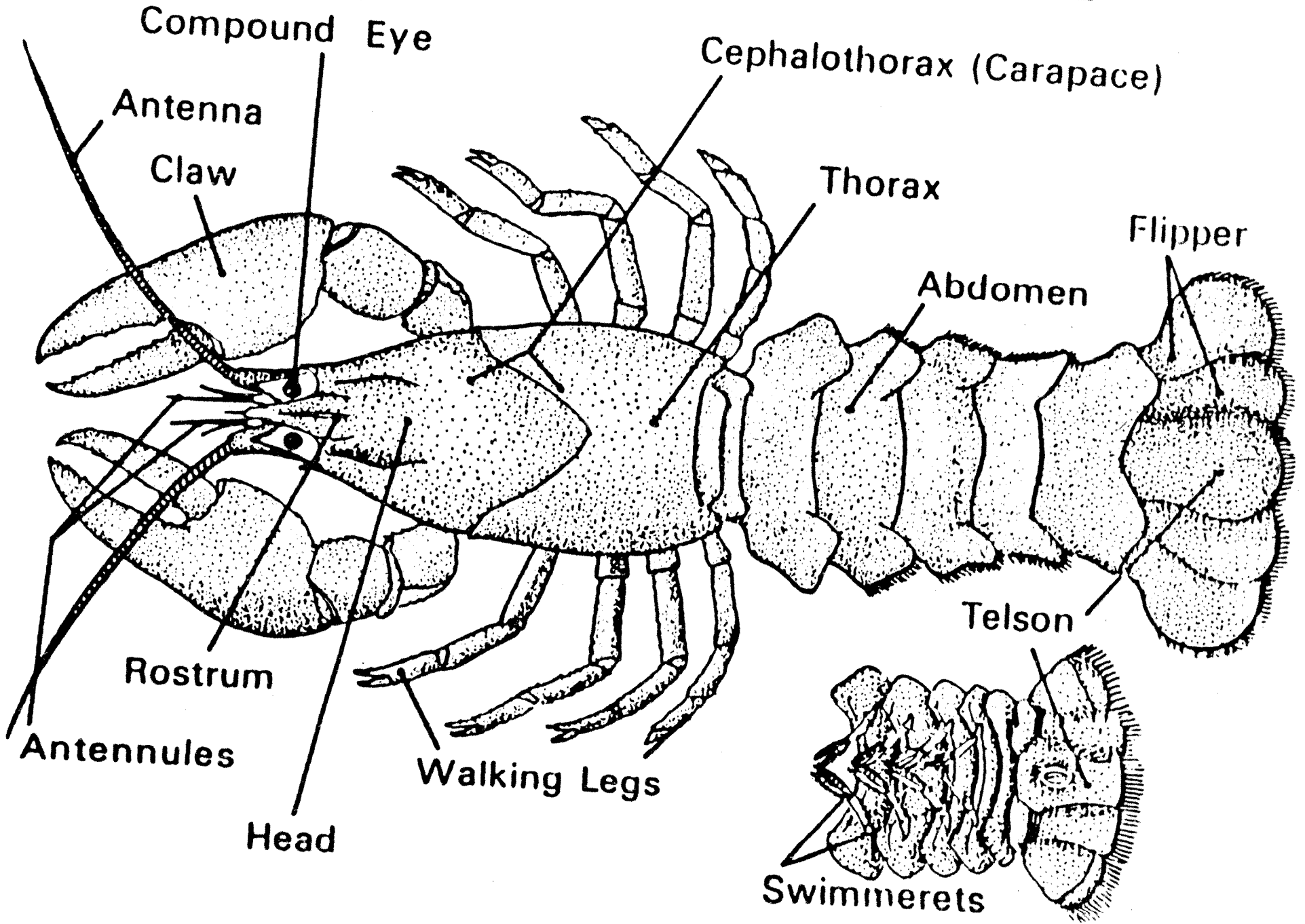


CRAYFISH, EXTERNAL STRUCTURE



NAME: _____

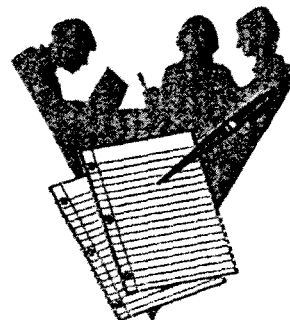
CRAYFISH SAFETY RULES

We are about to begin a study of a fascinating animal – the crayfish (also known as the crawdad or crawfish). Before we actually begin to work with our specimens, we'll need to take a few moments to read and discuss some valuable information about crayfish.

1. Your crayfish are living organisms and because of this should be treated with care and respect.
2. Do not leave your crayfish unattended in the plastic bins or on desktops. A fall can be fatal to the crayfish.
3. Food should never be placed in the pool. In fact it is a good idea to rinse your crayfish off after a feeding session so that food particles are washed away. Food will rot, causing the water to become foul, and this can kill the crayfish.
4. Do not use soap to clean the pool or feeding tubs. A thorough washing with water and a clean cloth or paper towel should be sufficient.
5. When replacing the water in the pool or tubs, be sure that it is not too warm. Water too high in temperature is more harmful than water of a low temperature.
6. Do not place the crayfish in a sunny location for an extended period of time. The sun can heat water rapidly.
7. If you feel uncomfortable picking up a crayfish, ask a friend for help. Do not attempt it on your own until you feel confident about it. Remember a fall can be fatal to a crayfish. Watch carefully when your teacher demonstrates the proper way to pick up a crayfish. Be sure to use only this method. It is the safest for you and your crayfish.
8. Be a responsible and considerate scientist. This includes being diligent about making daily notations in your science journal and treating your animal with care and respect.

I am ready to treat my crayfish with care and respect.

Student signature: _____



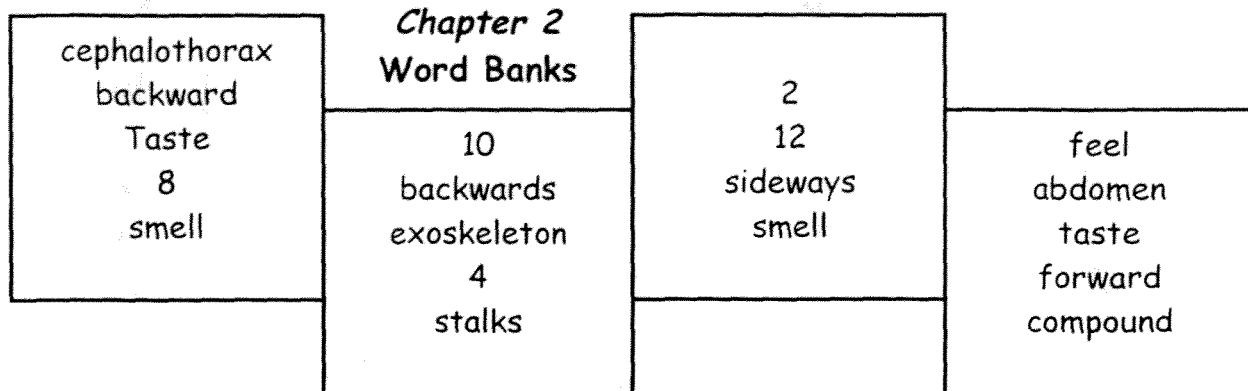
Crayfish Study Guide (Text by P. Grimm)

pink 2 - 3 hard outer shell crabs shrimp 6 - 8	Chapter 1 Word Banks	lobsters gills 500 white 16	black 1 world 20 crustaceans red
	green 30,000 3 water chimneys		

Choose a word from each Chapter's "Word Banks" to complete the sentences.

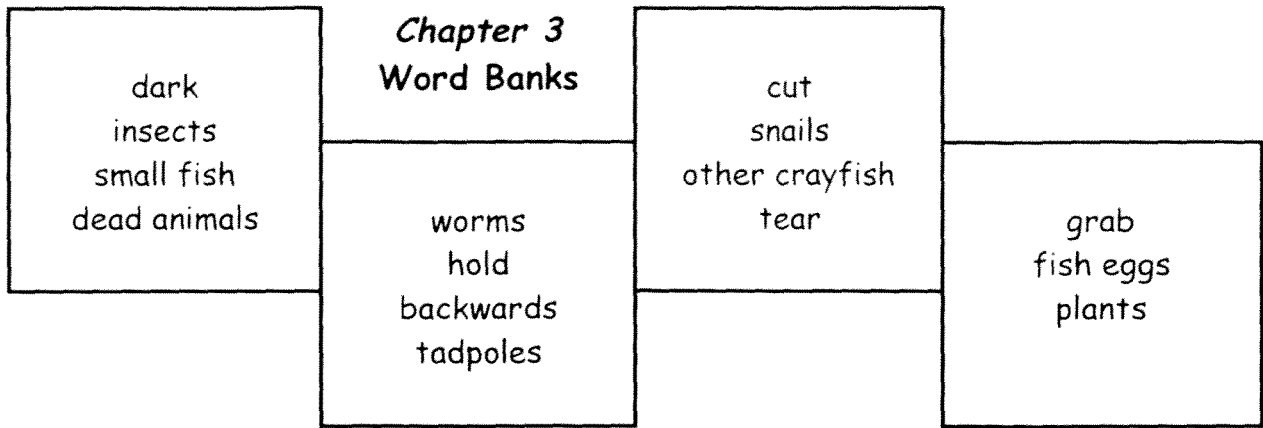
Chapter 1 NOT A FISH

1. Crayfish belong to a group of animals called _____.
2. All crustaceans have a _____.
3. Most crustaceans live in _____.
4. Three other examples of crustaceans are _____, _____, and _____.
5. There are over _____ species of crustaceans.
6. There are over _____ species of crayfish.
7. Crayfish live all over the _____.
8. Some crayfish dig holes with high walls to live in. These high walls are called _____.
9. Crayfish breathe with _____.
10. Tiny crayfish are _____ inch long, medium crayfish are _____ inches long. The largest crayfish is _____ inches long.
11. Crayfish come in many colors such as _____, _____, _____, _____, _____.
12. The average crayfish lives _____ years, but some live _____ years. Large ones live _____ years.



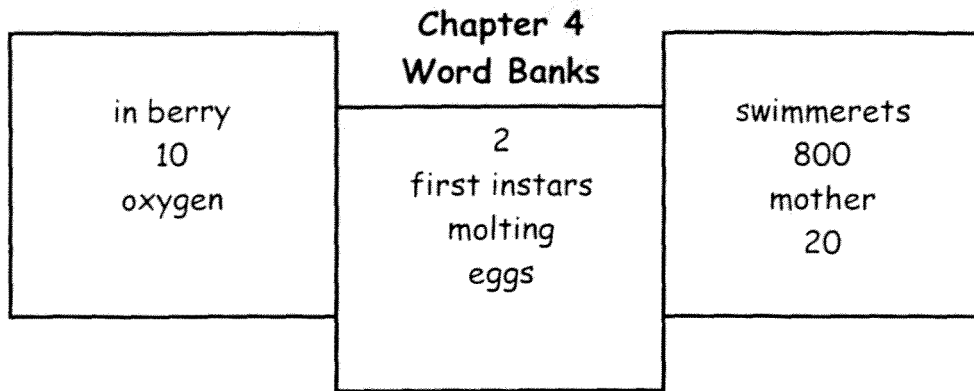
Chapter 2 LOTS OF PARTS

1. A crayfish has 2 body parts: the _____, which is the head and chest, and the _____.
2. They have 2 eyes on short _____.
3. Their eyes are _____, which means that they are made up of many small eyes. This helps them to see moving parts.
4. Crayfish have _____ antennas. (Two long and two short). The crayfish uses them to _____, _____, and _____.
5. Crayfish have _____ tiny mouth parts that help it _____ and smell.
6. A crayfish has _____ big claws to help grab and hold things as well as protect itself.
7. _____ is the number of walking legs that a crayfish has under its cephalothorax. A crayfish can move 3 ways: _____, _____, and _____.
8. You will find _____ swimmerets under the abdomen. They look like small legs, but are not used for walking.
9. When a crayfish curls its fan-like tail under itself, it shoots _____ and makes it hard to catch.
10. The crayfish's body is covered by a shell called an _____.



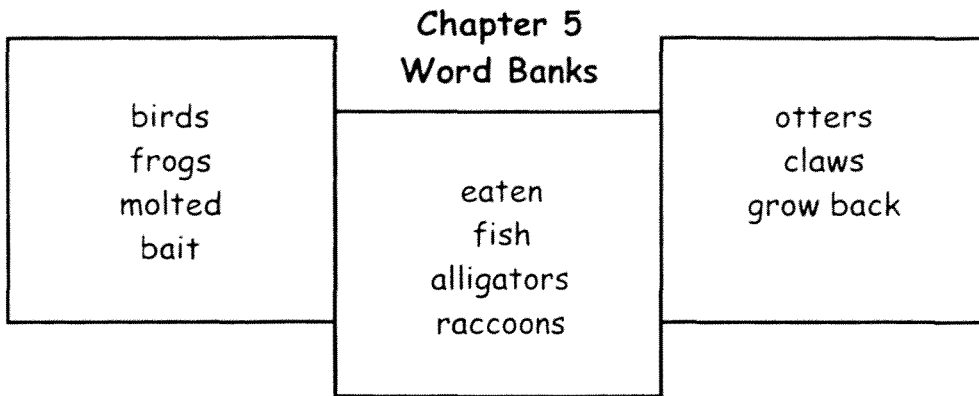
Chapter 3 DINNER TIME

1. Crayfish hunt at night because it is _____. They like to hide.
2. Crayfish always go _____ into their hiding places with their antennas and claws pointing outward.
3. A crayfish's claws have many uses - - to _____ food, and to _____ food into pieces. While its walking legs _____ food and _____ it up.
4. Crayfish have a healthy appetite. They eat _____,
_____, _____,
_____, _____, _____, and
_____. *Whew!*



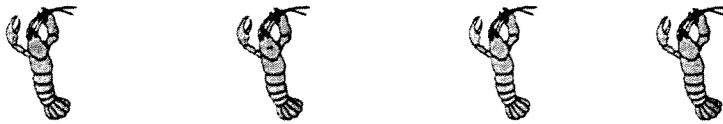
Chapter 4 GROWING UP

1. A crayfish with eggs on her abdomen is said to be _____.
2. Crayfish lay _____.
3. With a glue-like substance, the eggs grow stalks and attach to _____.
4. Swimmerets move over the eggs to bring _____ to the eggs.
5. Depending on the species, a crayfish can lay anywhere from _____ to _____ at a time.
6. It may take _____ to _____ weeks for the eggs to hatch.
7. Newly-hatched baby crayfish are called _____.
8. The shedding of the exoskeleton is called _____.
9. This shedding of the exoskeleton is repeated a number of times until the babies are ready to leave their _____.



Chapter 5 ENEMIES

1. The following animals like to nibble on crayfish: _____,
_____, _____, _____,
_____.
2. The easiest time to eat a crayfish is after they have _____.
3. Humans use crayfish as _____ for fishing, and in some parts of the world they are simply _____.
4. A crayfish's biggest defense against its enemies is its _____.
5. A crayfish is not afraid to let a body part fall off if it is in a fight because it will _____ (This is called regeneration.)



BONUS: Some place in the book they give two other names for crayfish.

They are: _____ and _____.

POOL OBSERVATION NOTES

Today you have the opportunity to observe the crayfish in the pool. Record notes about what you observe. You might want to think about the color, size, shape, body parts, movement, sound, or even the position the crayfish is in. Be a great observer!



A series of horizontal lines for writing notes, starting from the top of the page and extending down to the crayfish illustration.



A few horizontal lines for writing notes, located at the bottom of the page next to the crayfish illustration.

DRAW AND LABEL ME DAY

Today you will have the opportunity to get to know your crayfish "up close and personal." In the space below please make a good sized drawing of your crayfish and label the various body parts. The cover may be very helpful to you in labeling. You may do the back or the back and front if you have the time.



MEASURE ME DAY



Today you will need a centimeter ruler. First you are going to predict the length of the various body parts listed below. Then you will actually measure and record them using mm and cm. Have fun.

<u>Body part</u>	<u>Prediction</u>	<u>Actual</u>
cephalothorax	_____	_____
abdomen	_____	_____
right antenna	_____	_____
left antenna	_____	_____
flipper	_____	_____
right claw	_____	_____
left claw	_____	_____
walking leg	_____	_____
swimmeret	_____	_____

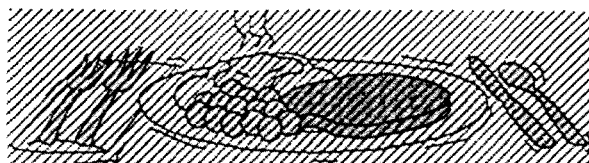
FEED ME DAY

Today you will have the opportunity to try and feed your crayfish. You have been given a "crayfish buffet" and a pair of tweezers in which to try this. Choose at least 4 foods and see if your crayfish eats any of them. Be sure that the piece is tiny (just a tidbit). Try only one food at a time. Be patient. Remember just because your crayfish doesn't eat that food, it doesn't mean that it doesn't like it, it may just not be hungry.

You may try more than 4 foods. Just record what you tried and if it ate it.

Food	Ate (X)	Didn't Eat (X)
------	---------	----------------

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



CATCH UP DAY

Perhaps you missed a day due to illness or a lesson. Perhaps you didn't finish an activity or would just like to repeat it. Perhaps you would just like to try something SAFE that you've been thinking about during the week. Today is the day that you can do it. In the space below, draw or record what you did in class today with your crayfish.

