

LOVE A LOBSTER

OVERVIEW	This lesson introduces younger students to the anatomy of a well-known (and delicious!) member of the crustacean family, the lobster. Students make a model lobster and gain knowledge about lobsters including their importance to humans from colonial times to now.
OBJECTIVES	Following completion of this lesson, the students will be able to: <ol style="list-style-type: none">1. Identify a lobster's basic parts;2. Relate each part to its function;3. Appreciate the relationship between lobsters and humans
GRADE LEVELS	K-5 th grades
NJCC STANDARDS	Science Indicators: 5.1, 5.5, 5.10
MATERIALS	<ul style="list-style-type: none">• Lobster part templates (included in this lesson plan),• Brass fasteners, hole punchers, glue or glue sticks,• Tape, "wiggly" eyes, scissors,• Copier paper (colored card stock is best),• Lobster anatomy chart (included in this lesson plan),• Live or plastic lobster (optional).
PROCEDURES	Using the chart and the fact cards included in this lesson plan, the teacher initiates a discussion about lobsters. A live lobster or plastic model may be used to show how a lobster looks and moves. Students then construct a paper lobster using templates from this lesson copied onto cardstock or copier paper. To save class time, parts can be pre-cut or have students cut out then assemble their lobster using tape as a hinge to attach the telson/abdomen , antenna and walking legs to the carapace and rostrum . Hole punchers and brass fasteners are used to attach the pincher/ripper and crusher claws. Students may also attach "wiggly" eyes and decorate their lobster however they choose. Remind students that lobsters can come in many colors including red, orange, blue and green.

BACKGROUND

We are most familiar with the American lobster (*Homarus americanus*), also known as the Maine lobster. The American lobster's range is from Labrador to Virginia and they have been highly valued by New England commercial fishers for over 150 years.

Lobsters live an average of 15 years. They grow by a process called molting, in which they shed their old shell and grow a new one.

Lobsters are not scavengers as they were once thought to be. Lobsters catch and eat mostly live food using their claws. One claw is sharp and pointed (**ripper or pincher claw**) to tear food and the other is larger and rounded lined with crusher "knobs" (**crusher claw**). The lobster's diet may include crabs, clams, mussels, starfish, sea urchins and even other lobsters. They will also eat bait while they are small and can go in and out of traps intended to catch fish.

VOCABULARY

Abdomen: Often referred to as the tail, it is the second segmented section of a lobster.

Antenna: Sense organ of a lobster that helps it locate food.

Anatomy: The separation of the parts of an organism in order to ascertain their position, relations, structure and function.

Carapace: The top of the hard exoskeleton, or shell of the lobster

Crusher Claw: The heavier of a lobster's claw, used to crush food.

Ripper or Pincher Claw: The smaller of the lobster's claw, used in tearing flesh to help feed

Rostrum: Spine like projection on the front portion of a lobster.

Telson: A lobster's tail

Walking legs: Appendages that allow a lobster to be mobile on the bottom of the ocean floor.

REFERENCES

- Bayer, R and J. 1999. Lobsters Inside-Out. Kendall Hunt Publishing. Dubuque, Iowa.
- Green, T.F. 1998. Marine Science. Amsco School Publications Inc. New York.
- Gosner, K.L 1978. Peterson Field Guide - Atlantic Seashore. Houghton Mifflin Company. Boston, MA.
- Reseck, J. 1988. Marine Biology. Prentice-Hall, Englewood Cliffs, NJ.

Internet Resources:

The Lobster Conservancy: www.lobster.org

Lobsters: www.cyhaus.com/marine/lobsters.htm

Lobster Institute: www.lobster.um.maine.edu/lobster/index.html

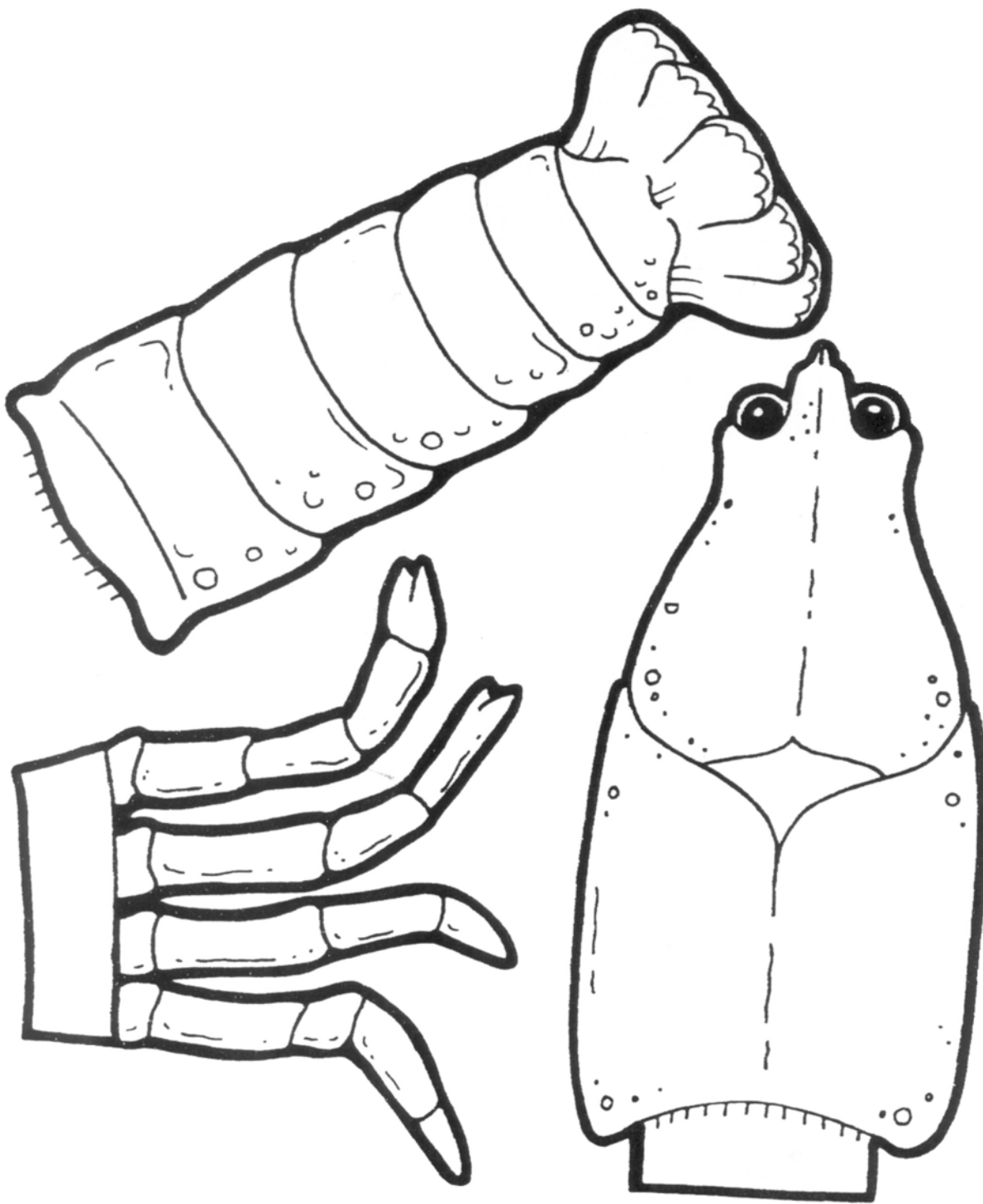
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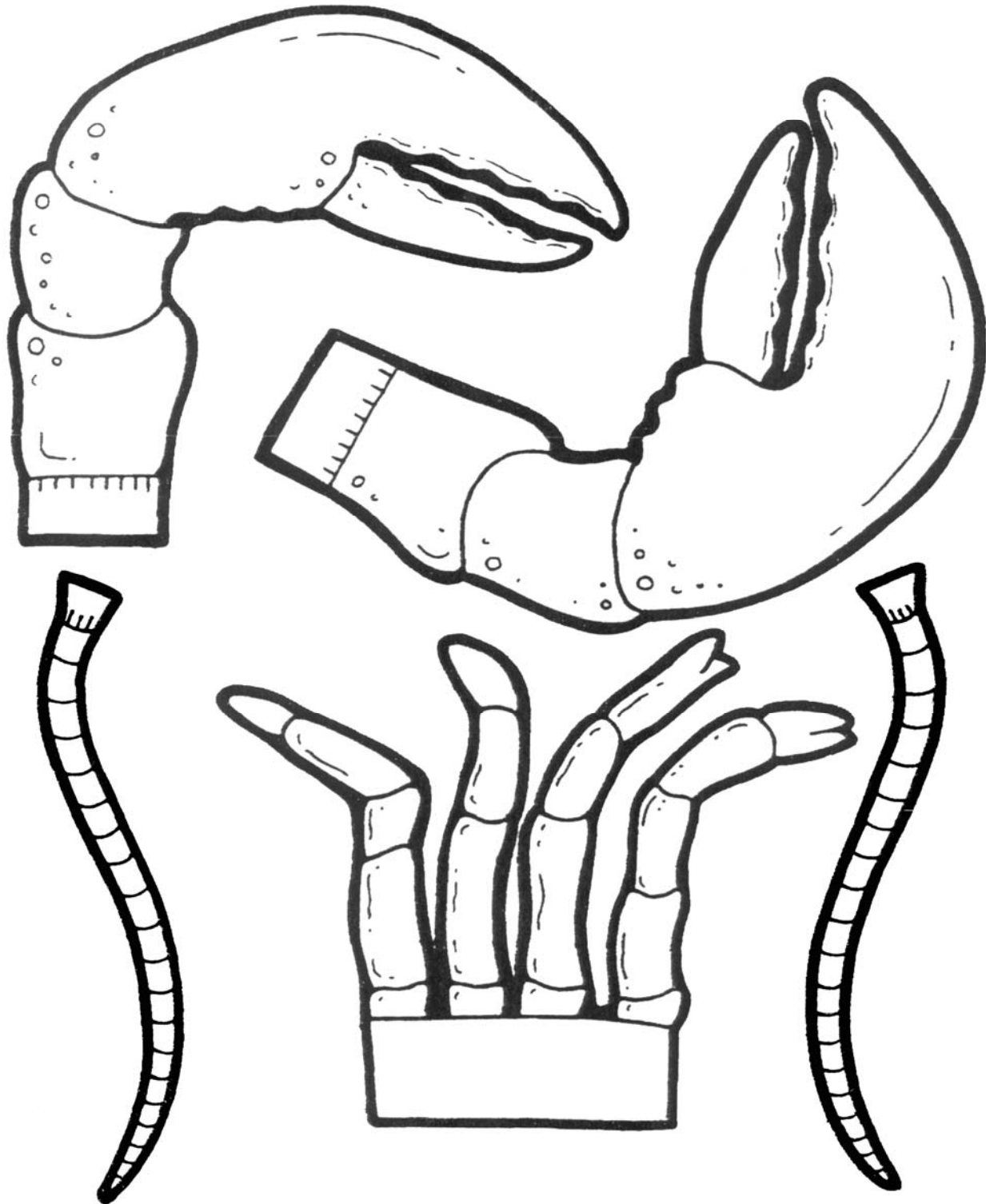
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Lobster Fact Cards

Love A Lobster!

The minimum legal size (3 ¼" carapace) allows lobsters time to reproduce

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Love A Lobster!

In colonial times, lobsters were considered to "poverty food," fed to servants, children, and prisoners

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Love A Lobster!

Long ago lobsters were so plentiful that Native Americans used them as bait and fertilizer

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Love A Lobster!

Lobsters molt (shed their shell) to grow larger. They are soft-shelled for 24-36 hours

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Love A Lobster!

Before 1988, 90% of all Lobsters were caught before they could reproduce

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Love A Lobster!

An extra large, older female lobster can produce 100,00 eggs

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Love A Lobster!

There is no way to tell the age of a lobster

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Love A Lobster!

Maine has imposed a maximum size (5" Carapace) to protect the biggest lobster breeders

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Love A Lobster!

The average Female lobster produces 10,000 eggs.

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Love A Lobster!

Lobster Blood is a clear fluid, when boiled it turns into a whitish gel that has no flavor.

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Love A Lobster!

Female lobsters may carry her eggs on her swimmerets for one year. Only 1% of the eggs will make it after being dropped.

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Love A Lobster!

Lobsters may come in a variety of colors, besides the usual red, they may be blue, green, yellow or white.

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Maine Lobster

Dorsal View

