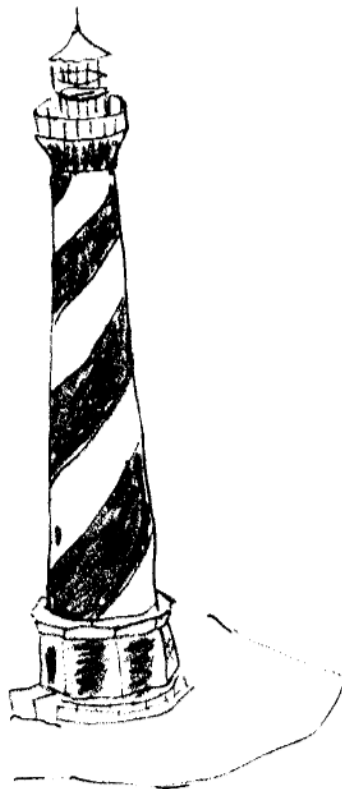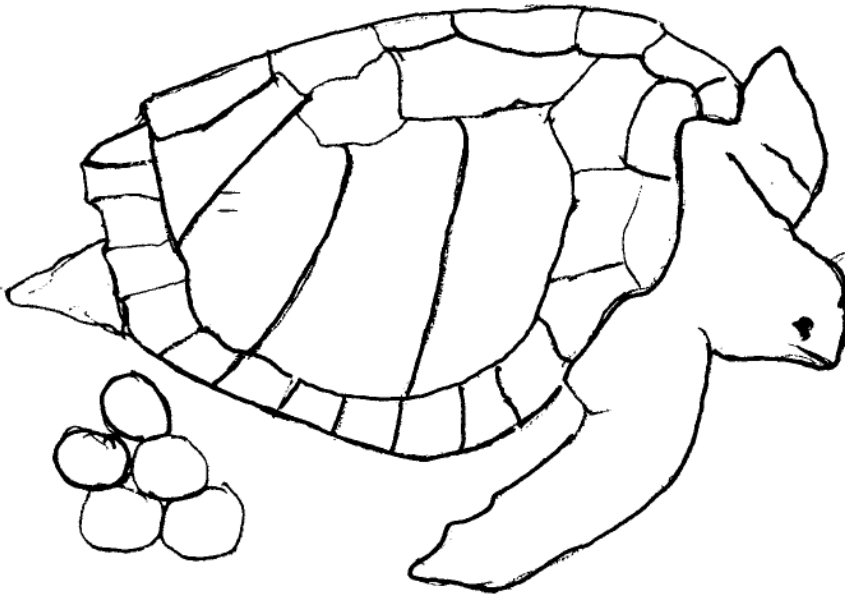# Coastal
North Carolina
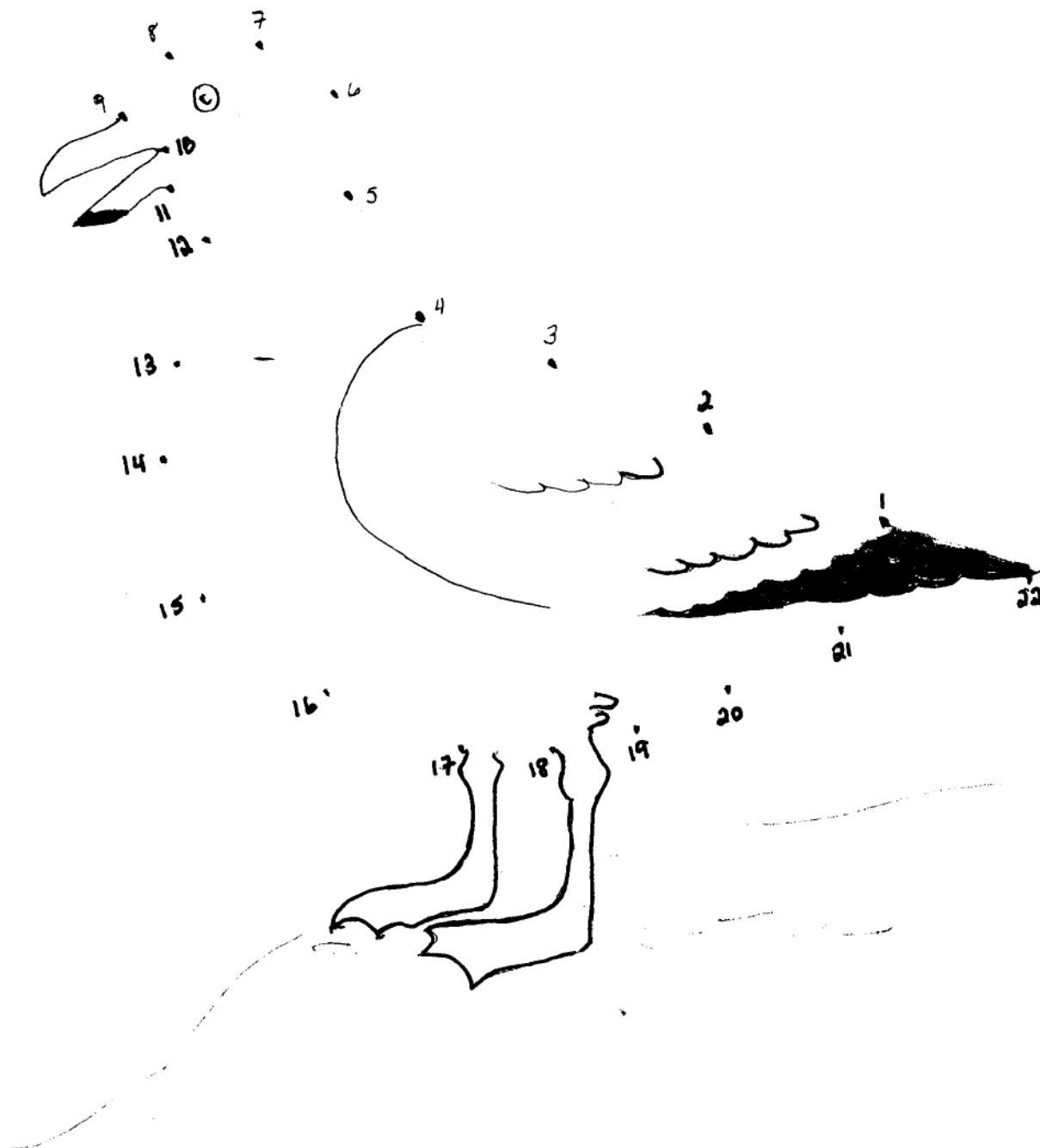
Activity Book

Coastal North Carolina: Did you know???

- The coast of North Carolina is fringed by a string of barrier islands (Outer Banks) separated from the mainland by shallow sounds. North Carolina has 23 barrier islands.

- The Outer Banks are low sand islands that form a barrier between the ocean and the mainland. The geography of the Outer Banks is constantly changing. Beaches erode and accrete as sand is removed or added; sand bars form and disappear; navigation channels shift; islands change shape; dunes form, disappear, and migrate to new places. It is estimated that 500,000 to 1 million cubic yards of sand are transported along the Outer Banks each year. This equals 66,000 dump truck loads!

- North Carolina has 301 miles of coastline, and 3,375 miles of tidal shoreline.

- Coastal North Carolina contains many different ecosystems including ocean beaches, sand dunes, maritime forests, salt marshes, and tidal flats that extend for hundreds of miles along the coast.

- The cool Virginia current and the warmer Gulf Stream meet at Cape Hatteras. As a result of these different water temperatures, somewhat different plants and animals may be found north and south of the Cape.

- At least 393 ships are known to have wrecked along the Outer Banks between 1526 and 1940. Wrecked ships form artificial reefs and provide homes for many animals.

Color Me!

In the summer female loggerhead turtles come to shore and dig holes in the warm sand beaches to lay their eggs.

Connect the dots to find a common shore bird.

Can you find these Coastal North Carolina words?

The words are found down, across, and diagonally.

C	X	L	I	G	H	T	H	O	U	S	E	Y	U	S
C	A	S	G	Q	W	H	E	L	K	V	K	P	K	L
S	E	P	E	O	T	F	J	M	Y	N	E	N	S	C
X	F	H	E	S	T	U	A	R	Y	I	A	K	S	A
B	M	E	N	H	A	D	E	N	R	B	G	U	H	P
E	W	S	F	D	A	C	B	Y	R	H	O	S	E	E
A	N	E	H	G	F	T	V	E	Z	S	J	O	L	L
C	L	A	M	S	R	G	T	W	R	V	H	U	L	O
H	J	G	O	K	E	U	G	E	X	E	M	N	S	O
Z	F	U	C	Y	O	K	T	C	R	U	A	D	L	K
K	E	L	E	V	N	S	Q	S	Y	A	R	B	R	O
U	B	L	A	W	Y	K	C	R	A	B	S	L	M	U
F	G	X	N	O	N	P	U	Q	A	I	H	F	O	T
C	B	A	R	R	I	E	R	I	S	L	A	N	D	P
N	O	R	T	H	C	A	R	O	L	I	N	A	N	C

Sound

Barrier Island

Outer Banks

Cape Lookout

Cape Hatteras

Estuary

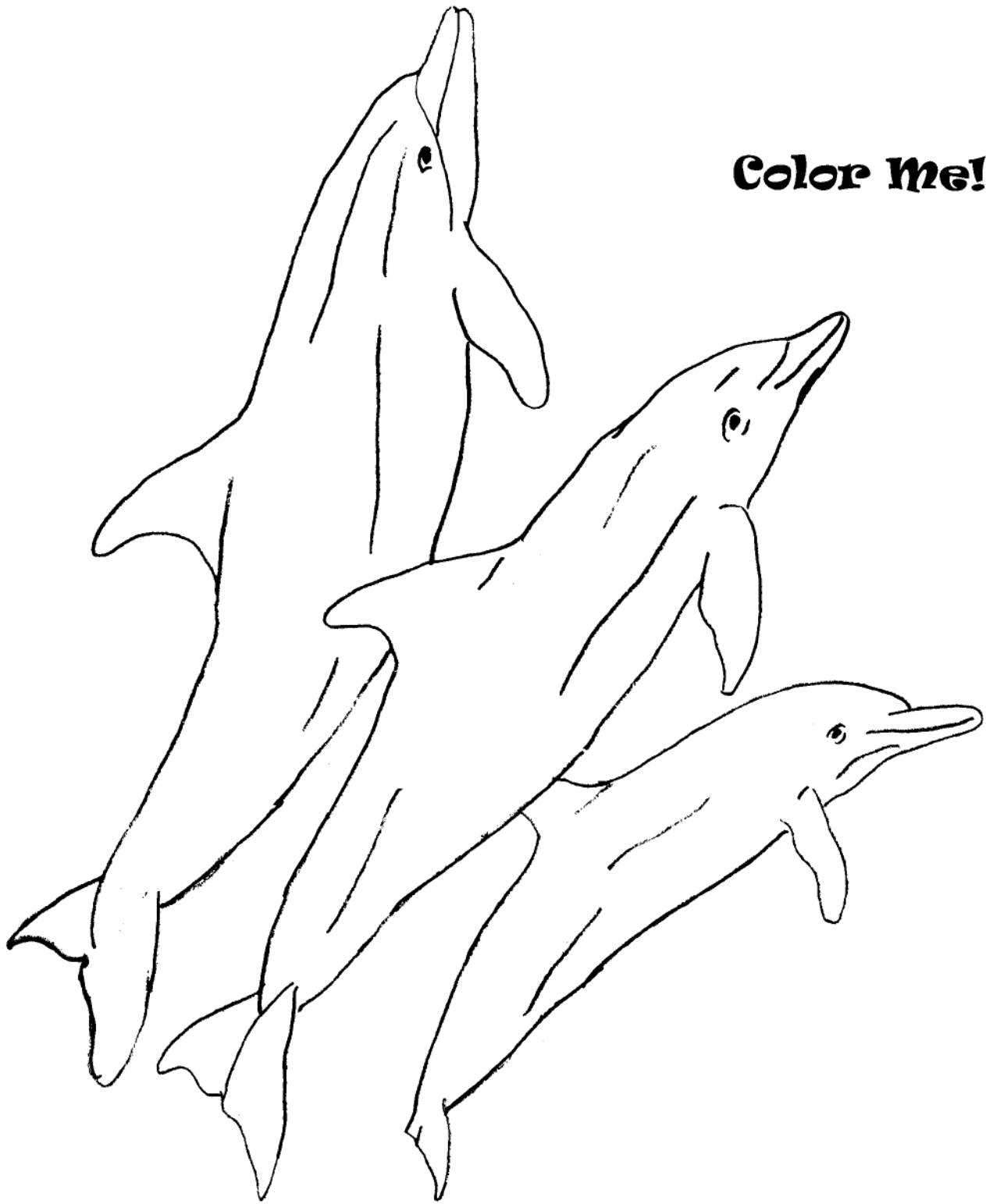Marsh

Oysters

Crabs

Menhaden

Whelk

Seagull

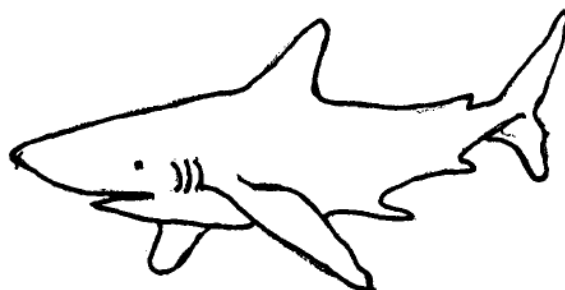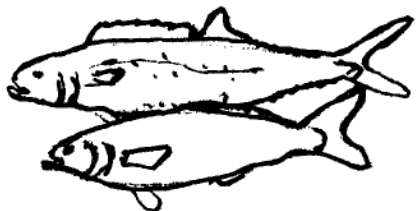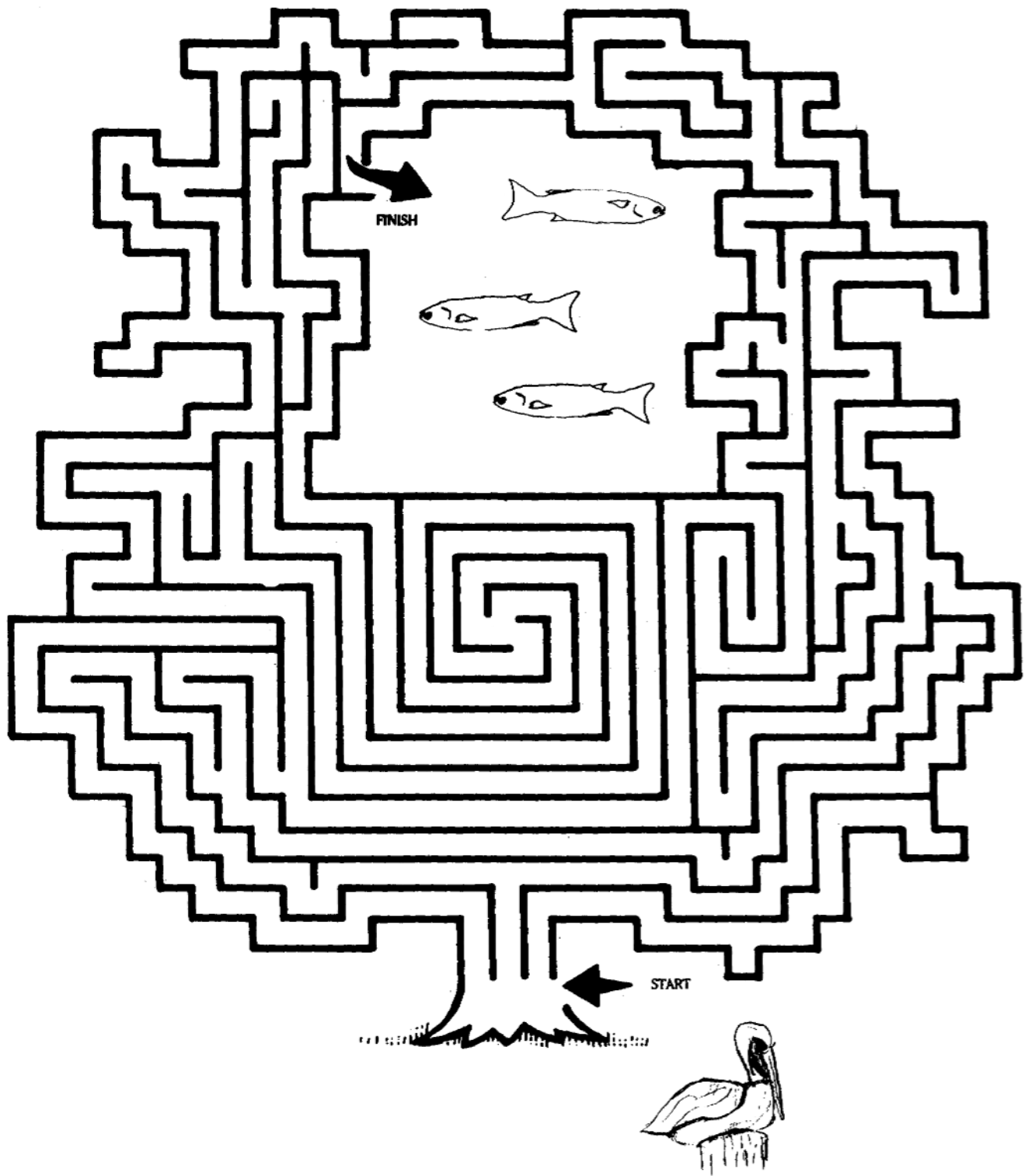Beach

Shells

Ocean

Lighthouse

North Carolina

Clams

Color Me!

Bottlenose dolphins can be seen year-round off the coast, in the sounds, estuaries, and up the rivers south of Cape Hatteras.

Who Eats Whom?

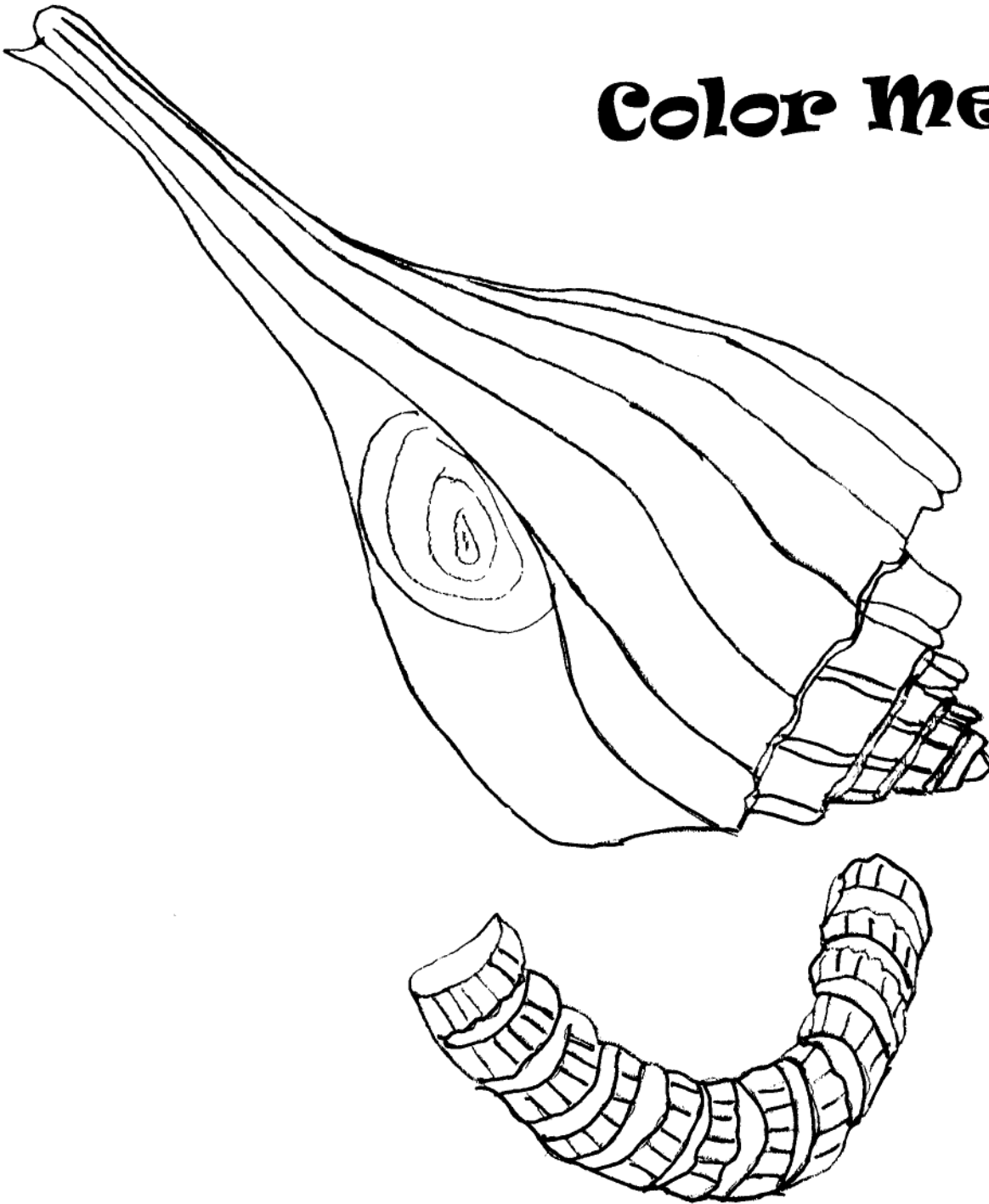Can you draw a line between the predator (eater) and the prey (eaten)?

FINISH

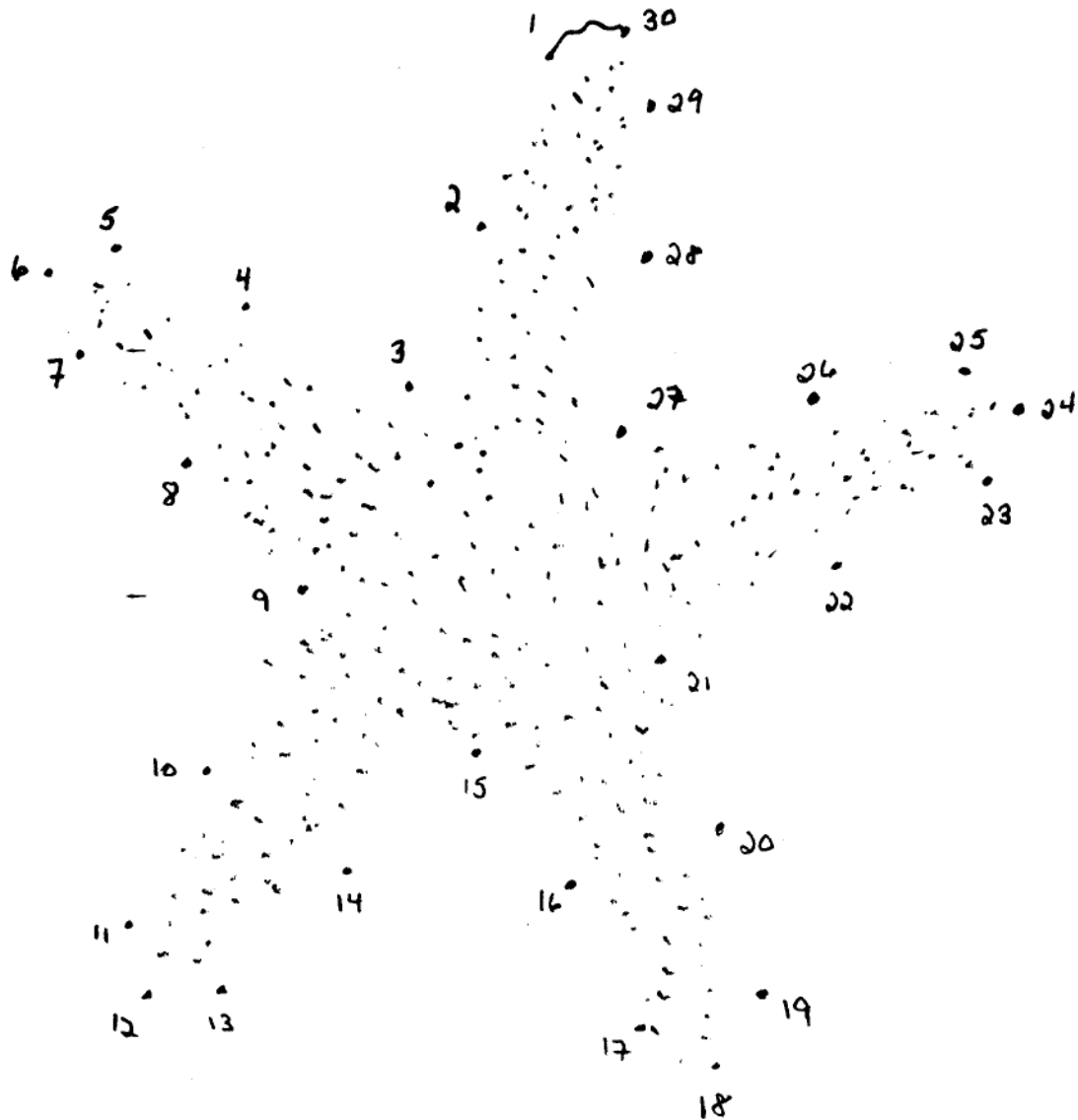START

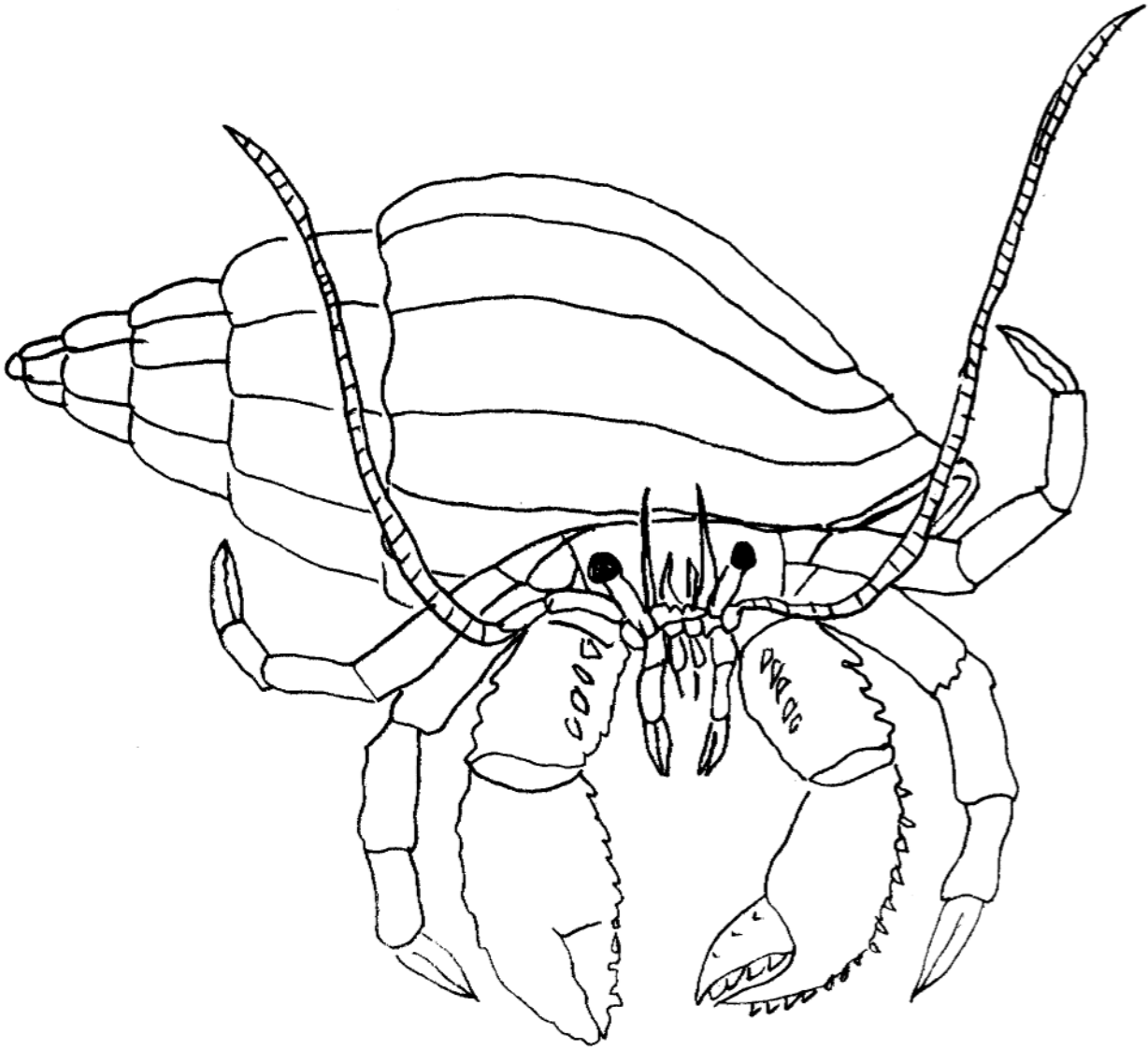**Can you help the pelican find its dinner of fish?**

Color Me!

Whelks are big, ocean-going snails. They can be up to a foot long. Whelk egg cases are often found on the beach. Each disc can contain a hundred eggs.

Connect the Dots

Sea Stars, sometimes called starfish, can grow a new arm if one breaks off.
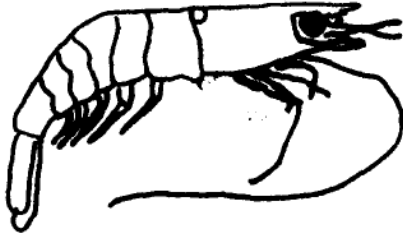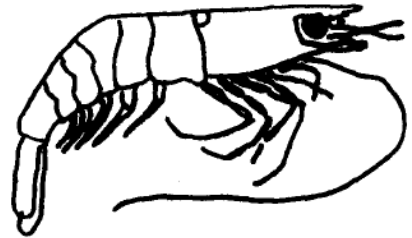
Color Me!

Hermit crabs have no shells of their own, so they use the empty shells of other animals as their home. As they grow they have to seek larger shells to move into.

Which two are the same?
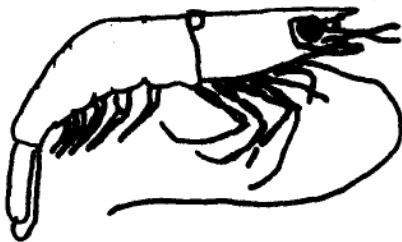

1

4

2
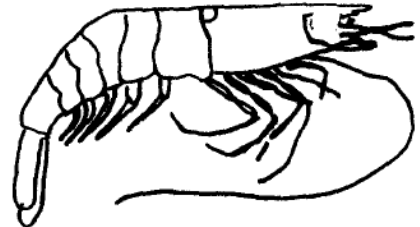
5

3
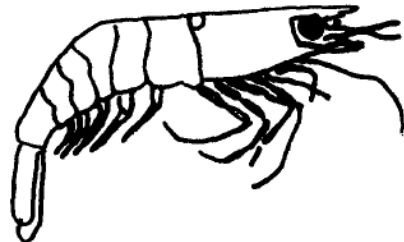
6

Color Me!

Posts from docks and piers provide homes for a variety of different organisms – plants such as sea lettuce, invertebrates such as sponges and oysters, and many different kinds of fish.

North America

Europe

Sargasso Sea

Africa

South America

START
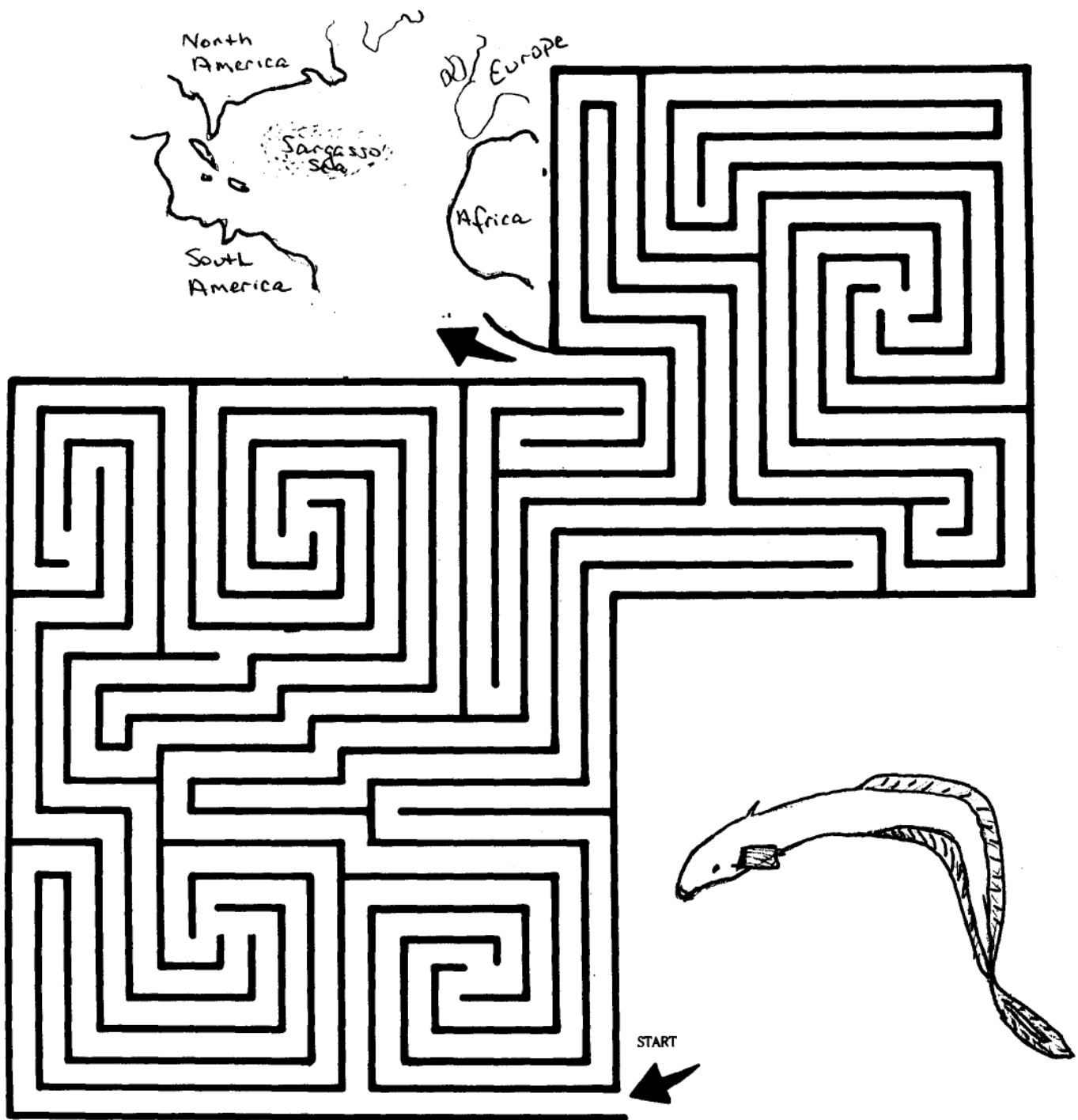
American Eels are freshwater fish that travel to the ocean to reproduce. Can you help this eel finds its way to the Sargasso Sea?
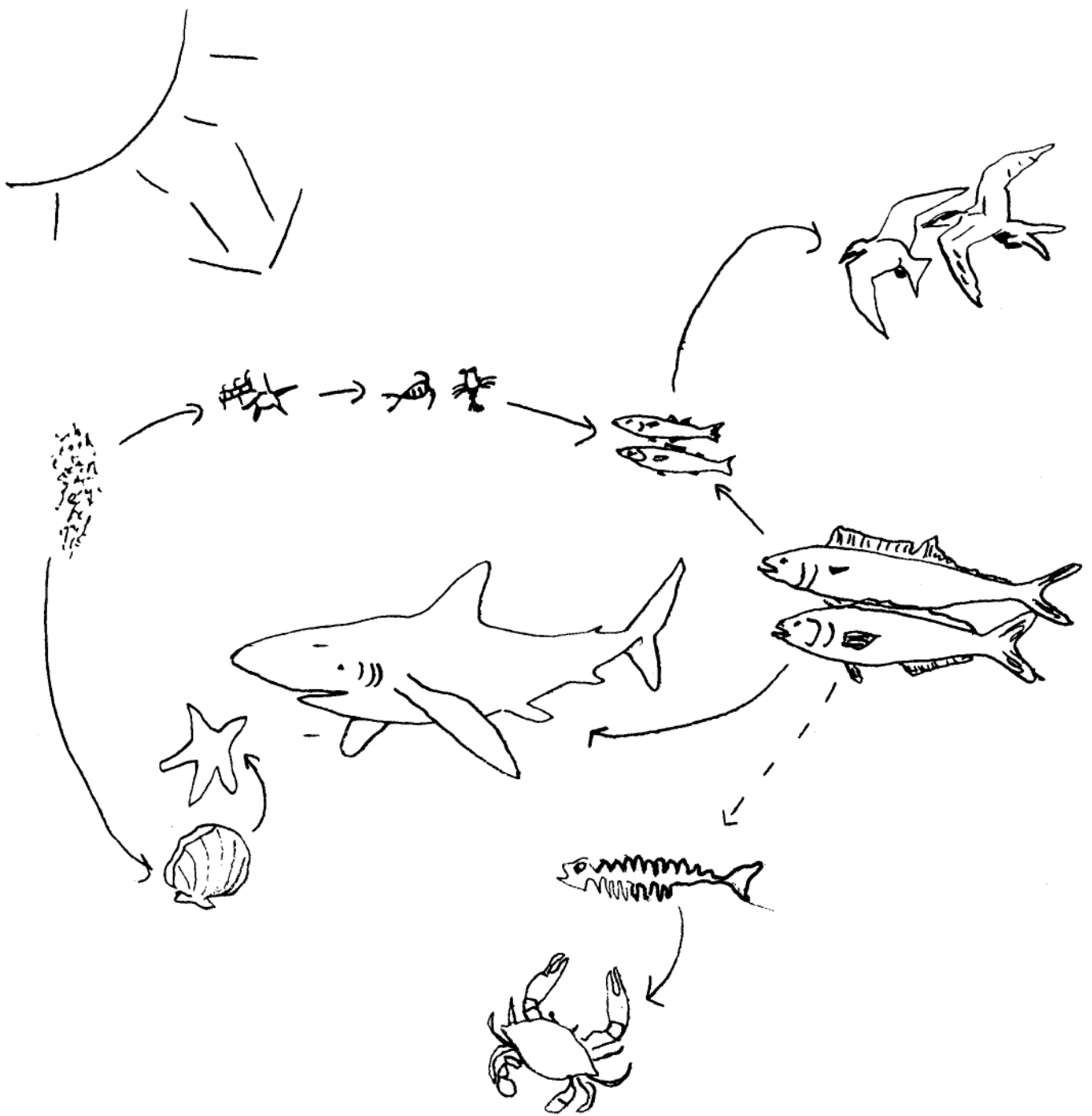
Sunlight provides the original source of energy for the entire community. Producers (such as plankton) absorb the Sun's energy and use inorganic nu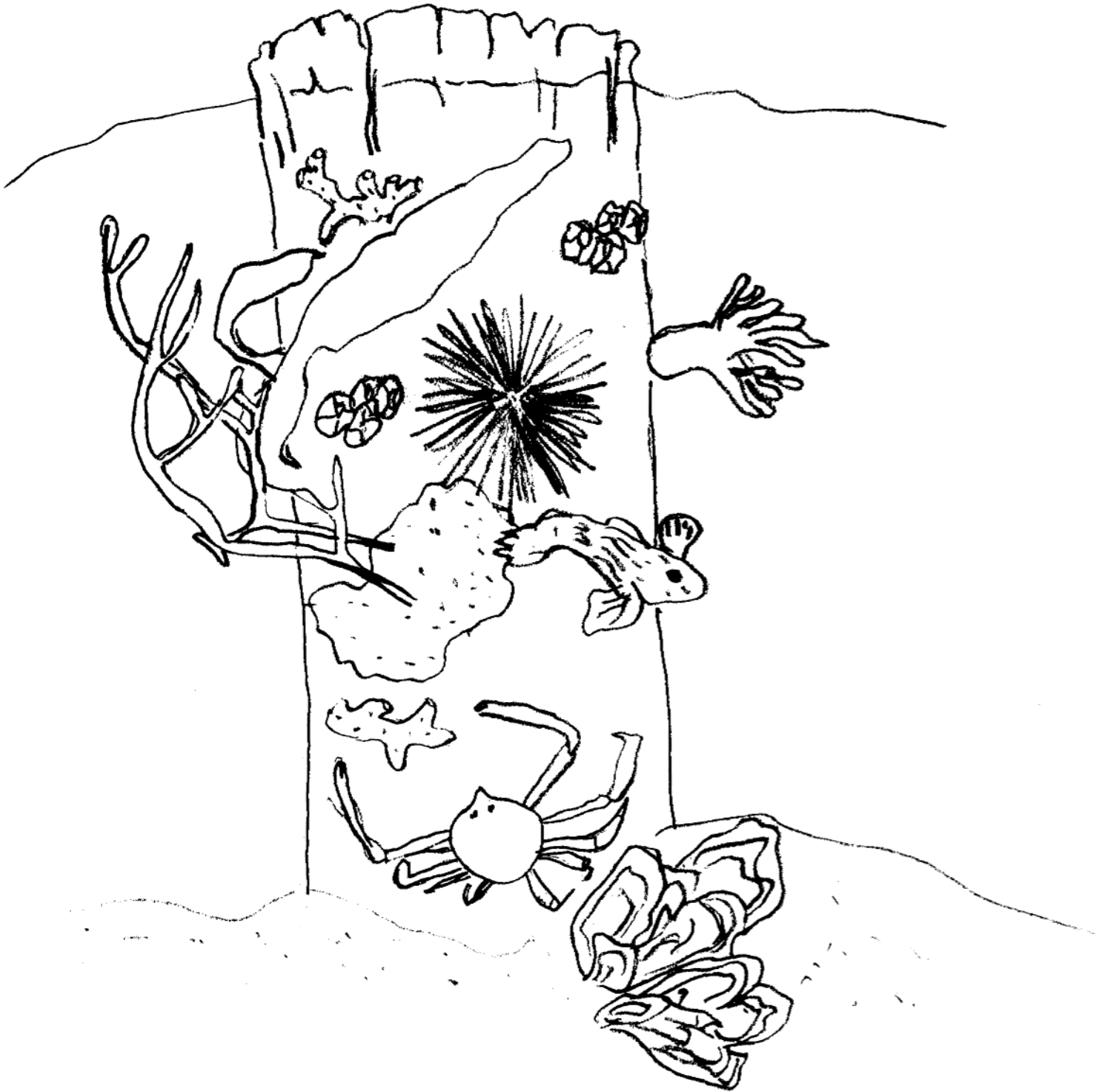trients from the environment. Consumers (such as sharks, fish, birds) eat plants or other animals. Decomposers (such as crabs) convert dead material to inorganic nutrients.
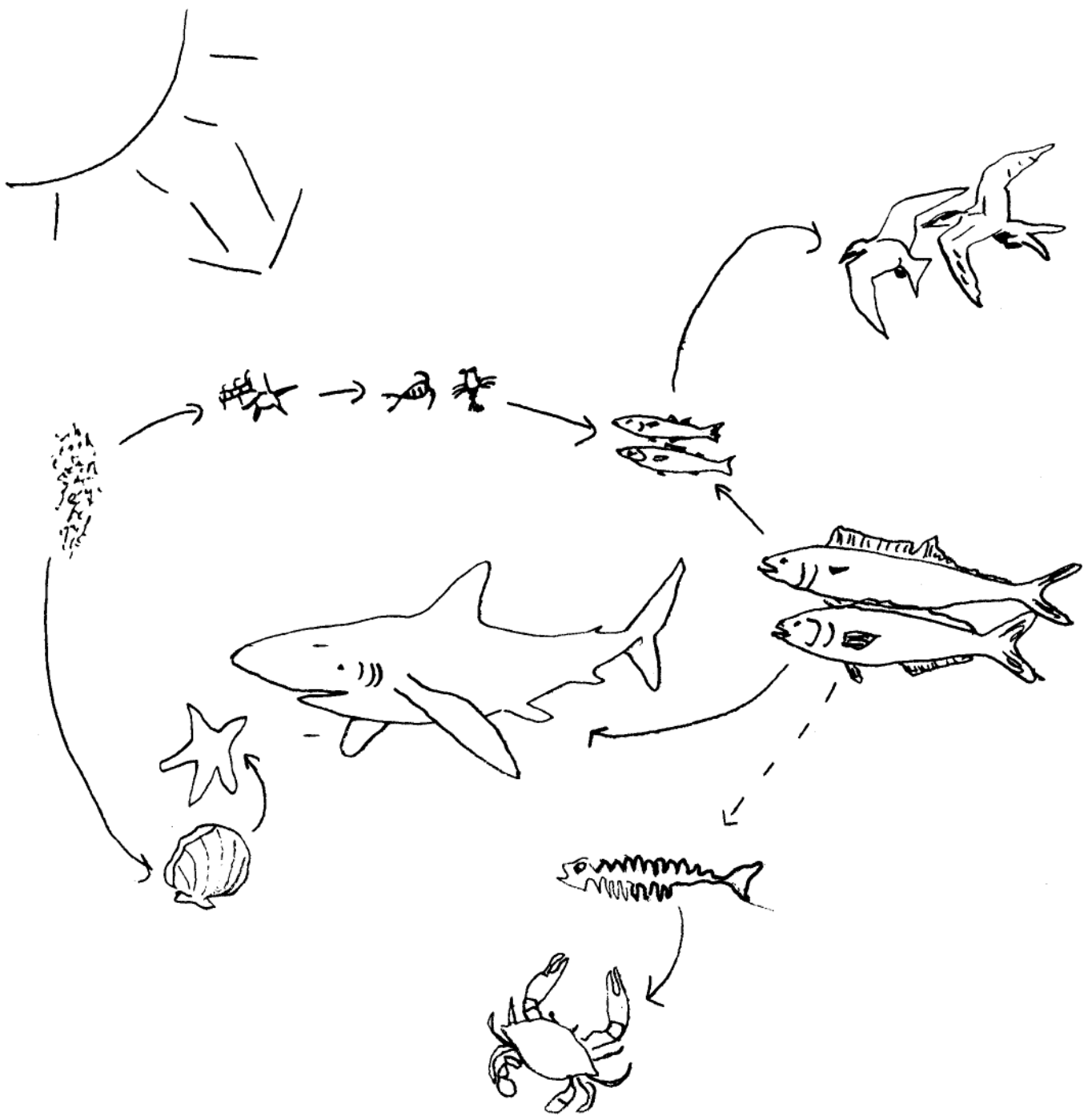
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Can you find a fish, a sea star, and a sea horse hidden in the seaweed?
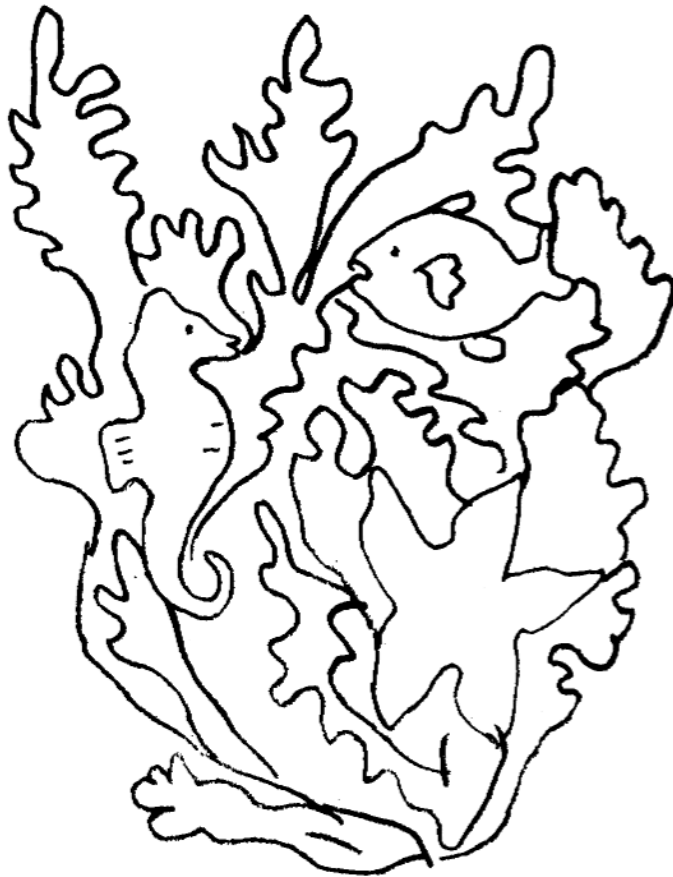
Color Me!
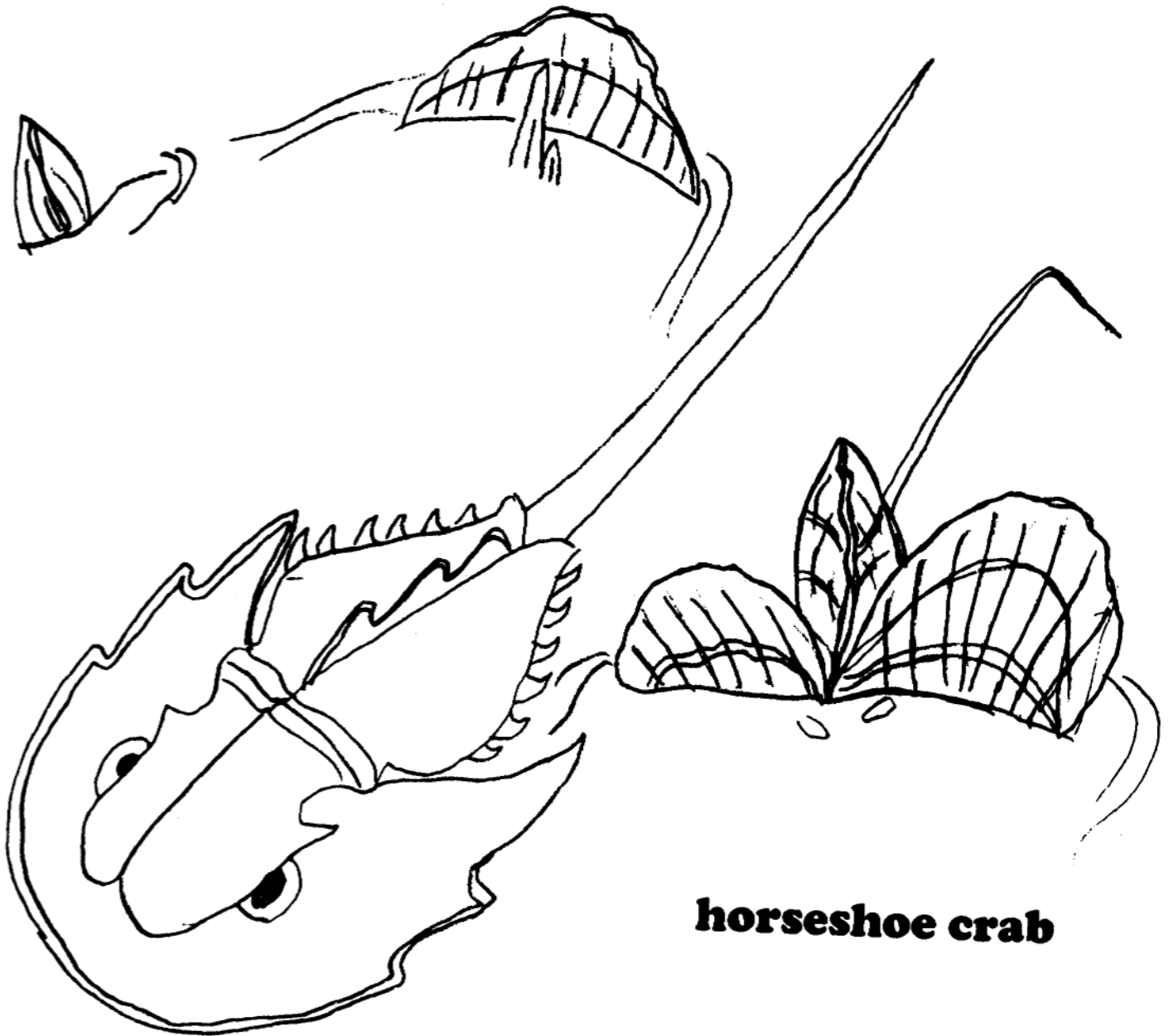
horseshoe crab

Did you know that horseshoe crabs are one of the oldest living animals on the earth? They are called living fossils because their appearance has not changed in 360 million years.

**On barrier islands currents move sand along the coast.
The arrow shows the direction the water is moving.
Which drawing best shows what happens when the
sand and water meet with a rock jetty?**

beach

water

Jetty

A.

beach

water

Jetty

B.

beach

water

Jetty

C.

Adult

Zoea

Megalopa

Juvenile
Crab
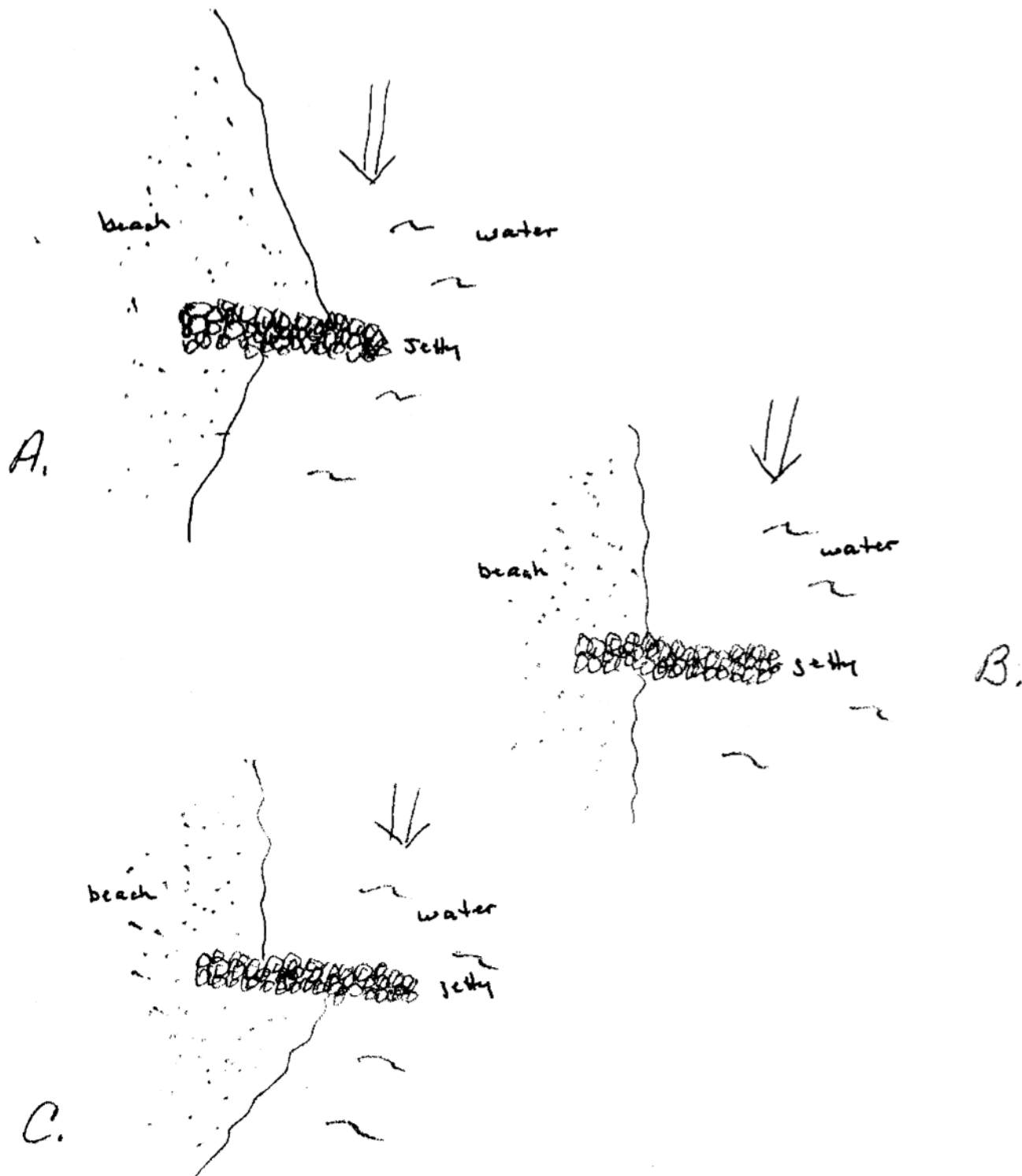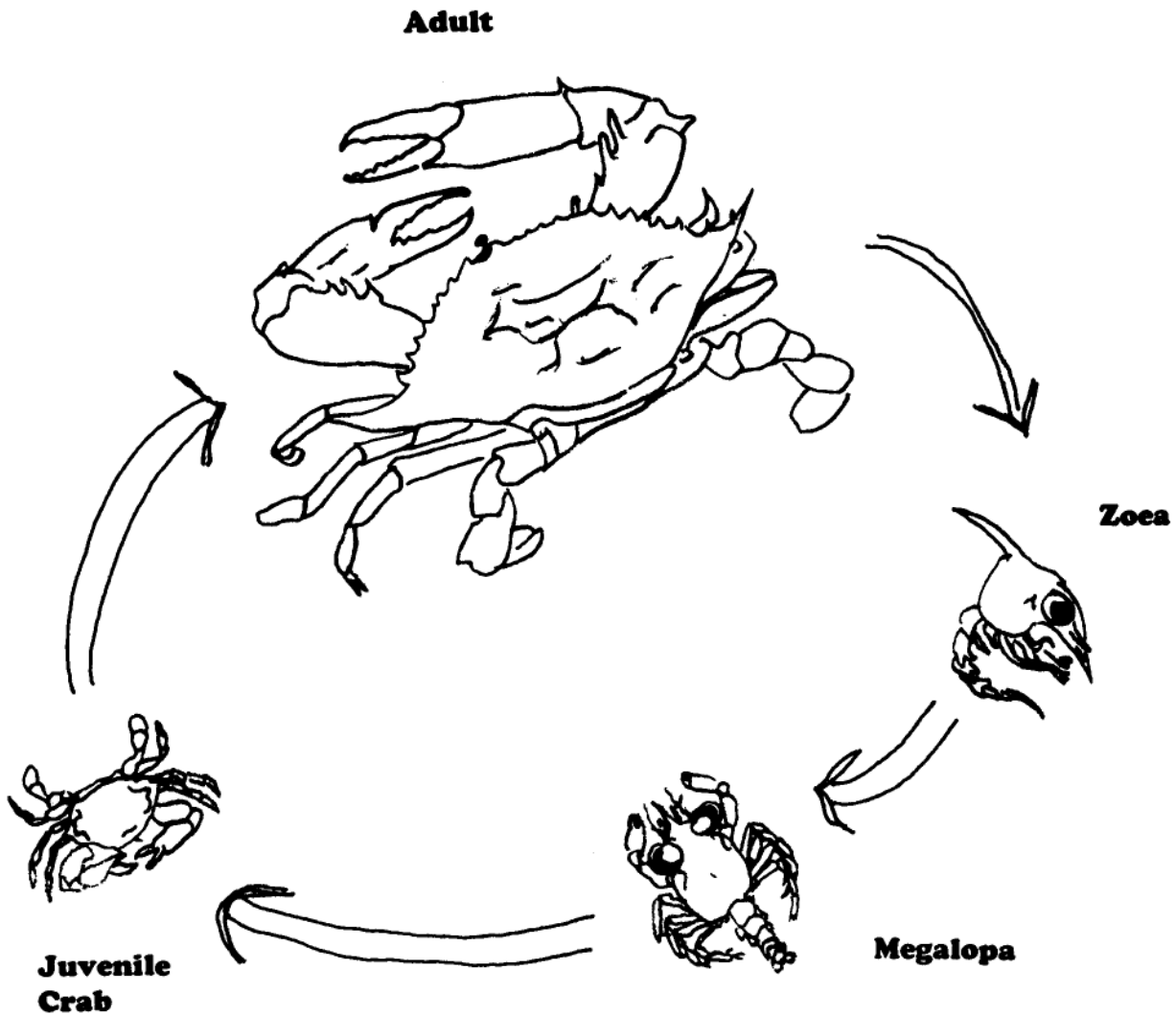
Blue Crab Life Cycle

Did you know that a single female blue crab can produce up to eight million eggs in one mating season? Of the many eggs that hatch, as few as two may live to reproduce, therefore it is very important to minimize capture of the female blue crab.

Color Me!
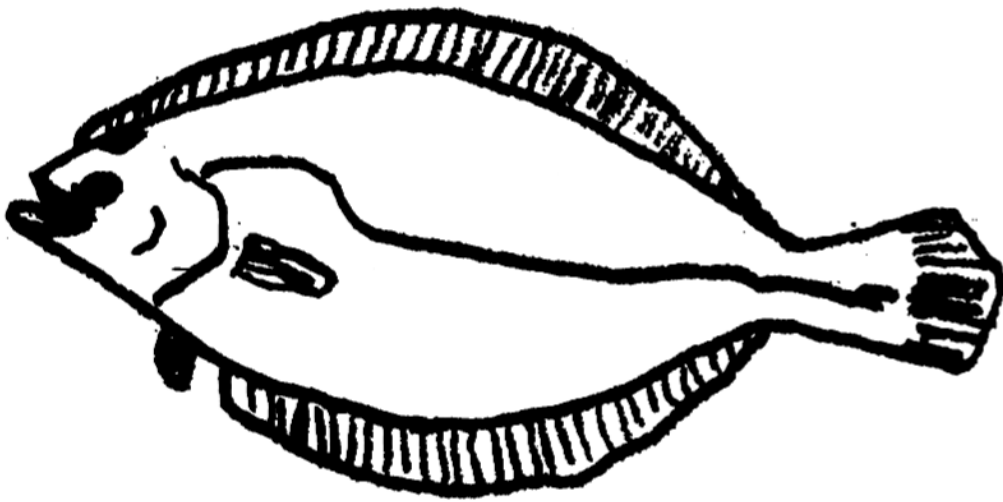
Flounder begin life like other fish – upright, with eyes on opposite sides of the head. Gradually, they begin listing to one side, and one eye migrates to the "top" side. They spend the rest of their life sideways, swimming and lying flat on the bottom.

Can you find these Barrier Island words?

The words are found down, across, and diagonally.

O	C	E	A	N	O	Y	S	N	D
T	U	I	N	L	E	T	O	A	R
R	K	T	E	C	X	D	U	N	E
A	B	W	E	U	J	C	N	P	A
N	F	D	W	R	H	Y	D	S	N
S	B	G	I	R	B	E	A	C	H
P	Q	Z	N	E	W	A	V	E	H
O	E	H	D	N	A	L	N	O	I
R	M	I	P	T	Z	R	C	K	J
T	T	E	D	W	R	E	C	C	K	S

Tide
Current
Wave
Wind
Transport
Wrecks

Beach
Ocean
Inlet
Outer Banks
Sound
Dune

Color Me!
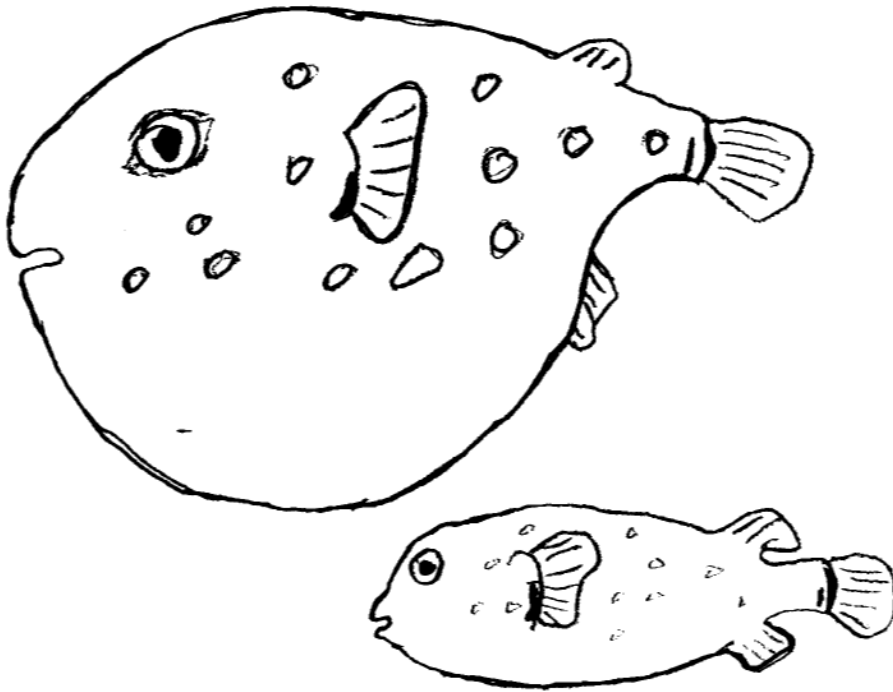
Puffer fish are named for their habit of swallowing water and ballooning to twice their size when threatened. When inflated, puffers are too big for predators to swallow and the confused predators give up in search of easier prey. Puffers also produce a powerful poison – tetrodotoxin – that is toxic to people and other animals.

Answers:

Can you find these Coastal North Carolina words?

The words are found down, across, and diagonally.

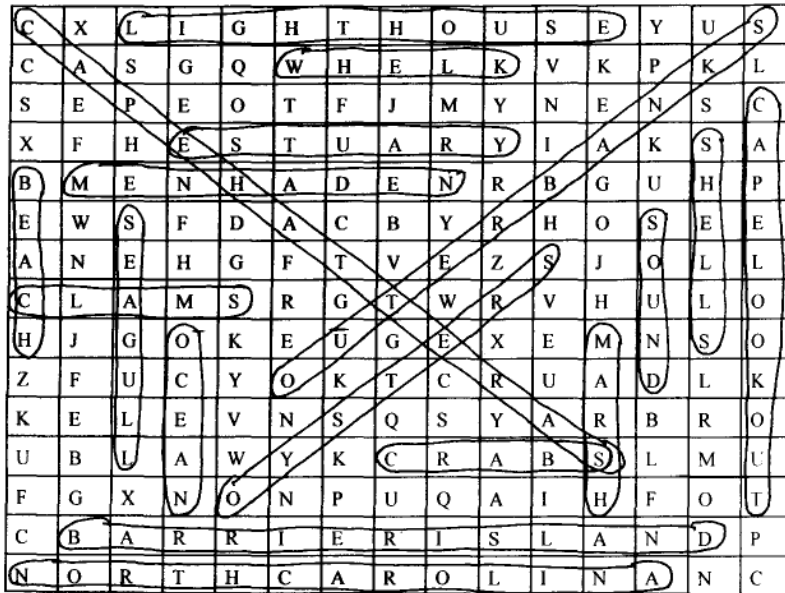|															
C	X	L	I	G	H	T	H	O	U	S	E	Y	U	S
C	A	S	G	Q	W	H	E	L	K	V	K	P	K	L
S	E	P	E	O	T	F	J	M	Y	N	E	N	S	C
X	F	H	E	S	T	U	A	R	Y	I	A	K	S	A
B	M	E	N	H	A	D	E	N	R	B	G	U	H	P
E	W	S	F	D	A	C	B	Y	R	H	O	S	E	E
A	N	E	H	G	F	T	V	E	Z	S	J	O	L	L
C	L	A	M	S	R	G	T	W	R	V	H	U	L	O
H	J	G	O	K	E	U	G	E	X	E	M	N	S	O
Z	F	U	C	Y	O	K	T	C	R	U	A	D	L	K
K	E	L	E	V	N	S	Q	S	Y	A	R	B	R	O
U	B	U	A	W	Y	K	C	R	A	B	S	L	M	U
F	G	X	N	O	N	P	U	Q	A	I	H	F	O	T
C	B	A	R	R	I	E	R	I	S	L	A	N	D	P
N	O	R	T	H	C	A	R	O	L	I	N	A	N	C

Who Eats Whom?

Can you draw a line between the predator (eater) and the prey (eaten)?