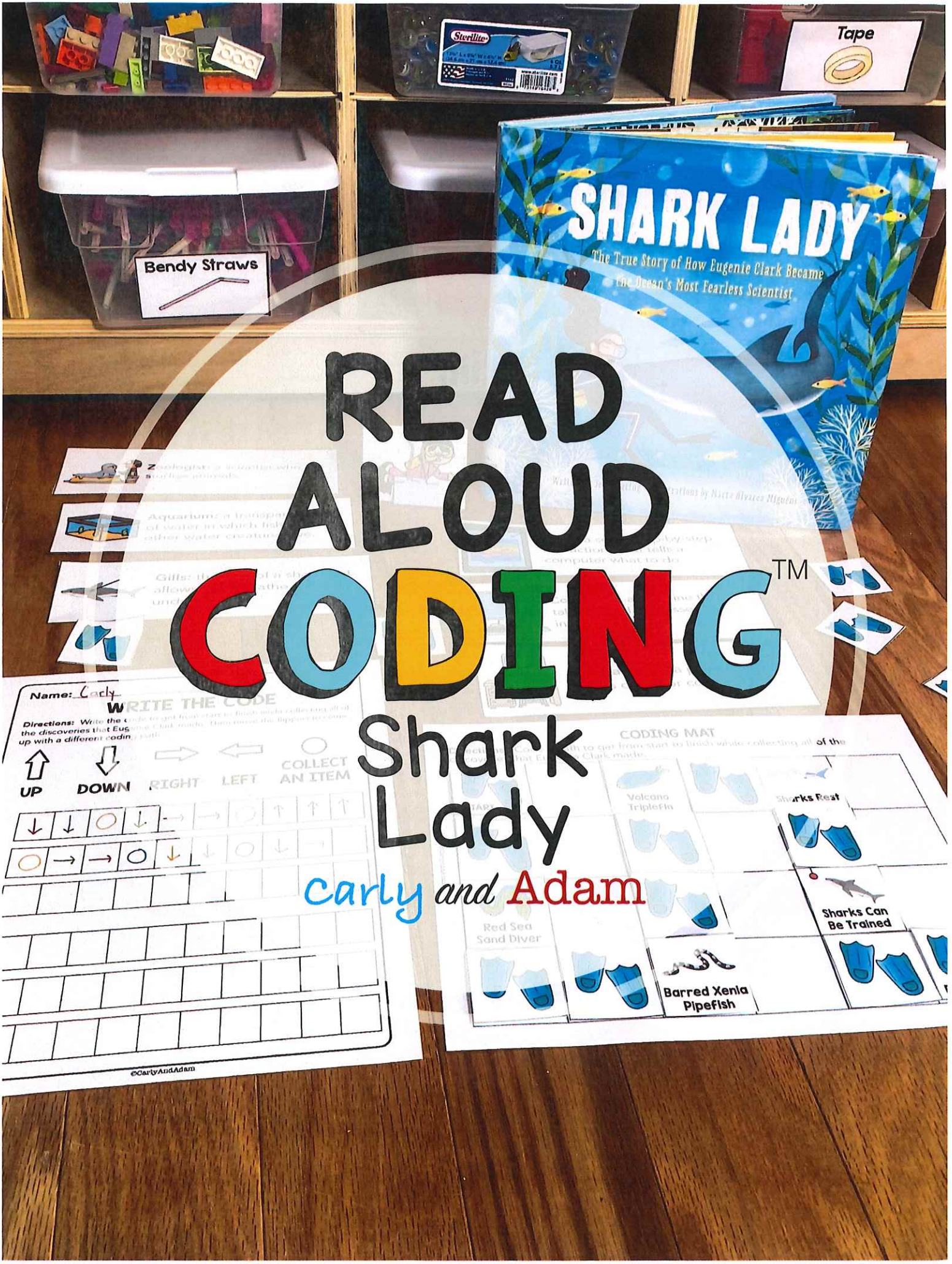




Bendy Straws

Tape

SHARK LADY

The True Story of How Eugenie Clark Became the Ocean's Most Fearless Scientist

READ ALOUD CODING™

Shark Lady

carly and Adam

Name: Carly

WRITE THE CODE

Directions: Write the code to get from start to finish while collecting all of the discoveries that Eugenie Clark made. Then trace the path to come up with a different coding path.

UP DOWN RIGHT LEFT COLLECT AN ITEM

↓	↓	○	↓	→	→	○	↑	↑	↑
○	→	→	○	↓	↓	○	↓	→	

©CarlyAndAdam

CODING MAT

START	Volcano Triplefin	Sharks Rest
Red Sea Sand Diver	Barred Xenia Pipefish	Sharks Can Be Trained
FINISH		

EUGENIE CLARK CODING

Teacher Instructions: EXAMPLE

CODING MAT

Directions: Code a path to get from start to finish while collecting all of the discoveries that Eugenie Clark made.

START		Volcano Triplefin		Sharks Rest	
Red Sea Sand Diver				Sharks Can Be Trained	
		Barred Xenia Pipefish			FINISH

WRITE THE CODE

Name: Carly

Directions: Write the code to get from start to finish while collecting all of the discoveries that Eugenie Clark made. Then move the flippers to come up with a different coding path.

UP
 DOWN
 RIGHT
 LEFT
 COLLECT AN ITEM

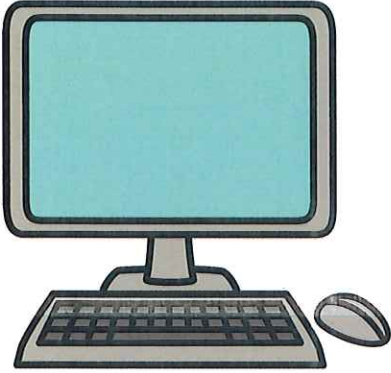
1.

2.

©Carly and Adam

Vocabulary

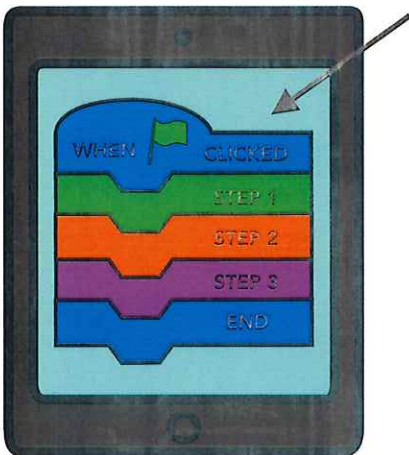
Directions: Use the cards to pre-teach the vocabulary words before completing the activities.



Computer: a machine that takes in and processes information.



Programmer: a person who writes code for computers.



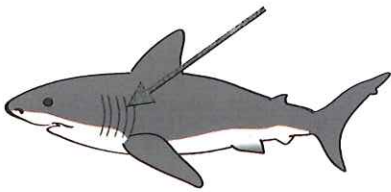
Code: a set of step-by-step instructions that tells a computer what to do.

Vocabulary

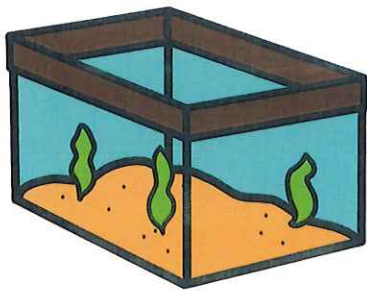
Directions: Use the cards to pre-teach the vocabulary words before completing the activities.



Zoologist: a scientist who studies animals.



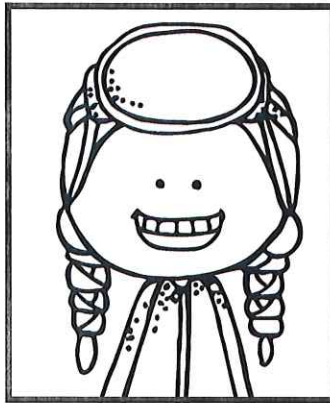
Gills: the part of a shark that allows it to breathe underwater.



Aquarium: a transparent tank of water in which fish and other water creatures live.

Name: _____

Eugenie Clark



Eugenie Clark was popularly known as The Shark Lady. She dedicated much of her work to change how people saw sharks. Many people viewed them as scary, dangerous, and unintelligent, but Eugenie thought they were beautiful. She learned all that she could about sharks and other fish, and she went on dives in the ocean to study them.

On her dives, Eugenie made many discoveries. She discovered new species of fish including the Red Sea Sand Diver, the Barred Xenia Pipefish, and the Volcano Triplefin.

Eugenie Clark was also the first to discover that sharks rest, and she was the first scientist in the world to train sharks.

Can you and your partner code a path
to get from start to finish while
collecting all of the discoveries that
Eugenie Clark made?

Name: _____

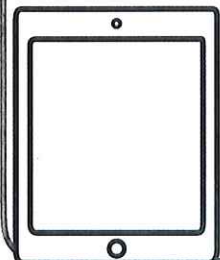
PROGRAM PLAN

Directions: Answer the questions to plan your program.

What is the goal of your program?

What possible problems could come up as you create your program?

How will you check for bugs in your program?



INSTRUCTIONS

Can your team code a path to get from start to finish while collecting all of the discoveries that Eugenie Clark made? Work in groups of 2 to complete the challenge.

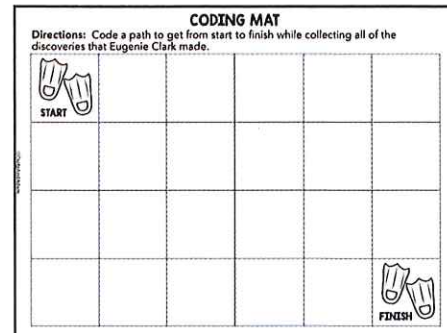
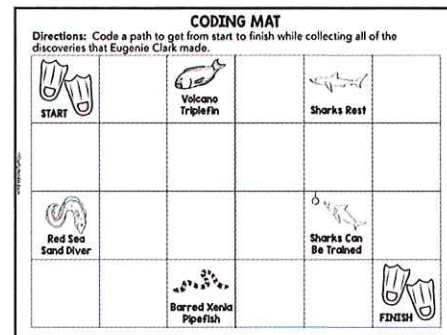
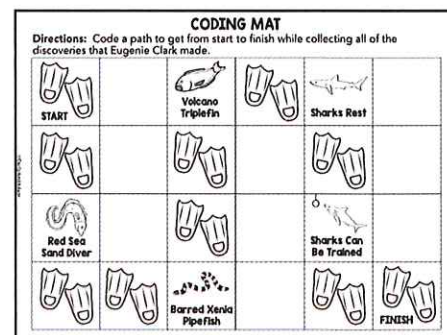
Step 1: Partner 1 will place the start in one corner of the Coding Mat and the finish in the opposite corner.

Step 2: Partner 1 will place the discoveries that Eugenie Clark made on the mat.

Step 3: Partner 1 will make a path from the start to the finish using the flippers. The flippers must make a path connecting all of the discoveries.

Step 4: Partner 2 will write the code, then partner 1 will check the code.

Step 5: Partner 2 will move the flippers to create a different path. Partner 1 will write the code, and partner 2 will check it.



Name: _____

WRITE THE CODE
Directions: Write the code to get from start to finish while collecting all of the discoveries that Eugenie Clark made. Then move the flippers to come up with a different coding path.

UP
 DOWN
 RIGHT
 LEFT
 COLLECT AN ITEM

1.

↓	↓	○	↓	→	→	○	↑	↑	↑
○	→	→	○	↓	↓	○	↓	→	

2.

CODING MAT

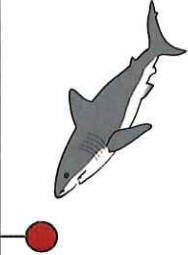
Directions: Code a path to get from start to finish while collecting all of the discoveries that Eugenie Clark made.

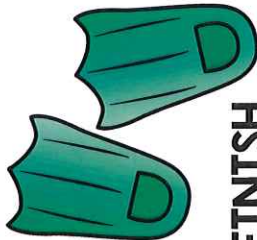
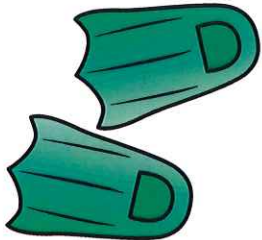
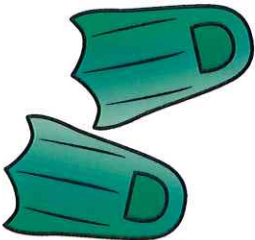
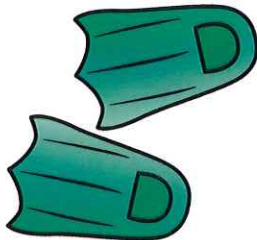
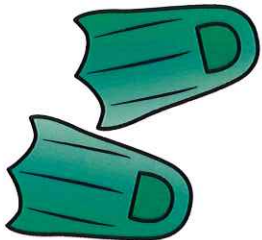
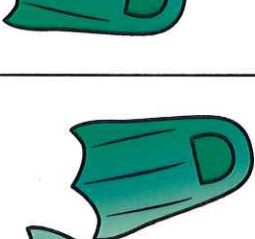
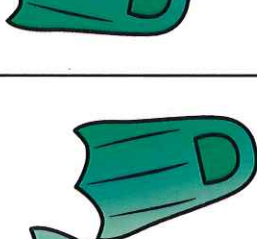
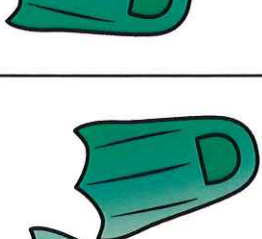
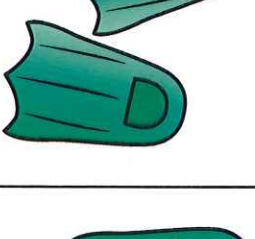
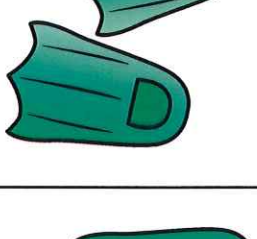
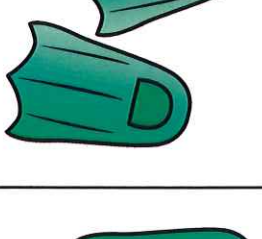
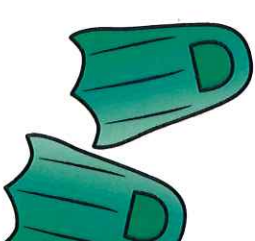
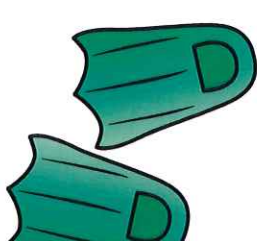
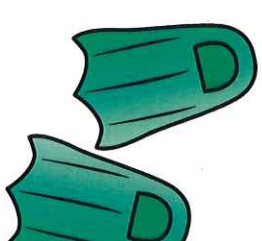
Diver Cutouts

Directions: Print and cut out the diver cutouts. Attach a binder clip to the bottom of the cutout so that it stands up. Students can move the cutout on the grid beginning at start and following the code they wrote to check their work.



Coding Pieces

				
Red Sea Sand Diver	Barred Xenia Pipefish	Volcano Triplefin	Sharks Rest	Sharks Can Be Trained

 START	 FINISH	
		
		
		
		

Name: _____

WRITE THE CODE

Directions: Write the code to get from start to finish while collecting all of the discoveries that Eugenie Clark made. Then move the flippers to come up with a different coding path.



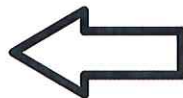
UP



DOWN



RIGHT



LEFT



COLLECT
AN ITEM

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1.

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2.

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WRITE THE CODE

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3.

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4.

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5.

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Name: _____

CODING REFLECTION

Directions: Answer the questions to reflect on what you learned.

What are some of the discoveries that Eugenie Clark made?

Describe a challenge you had while completing this activity. If someone else had a similar challenge what advice would you give them?

What about your work today are you most proud of?

Name: _____

CODING REFLECTION

Directions: Answer the questions to reflect on your coding.

What was hard about this activity?

What about your work today are you most proud of?

Name: _____

CODING REFLECTION

Directions: Answer the questions to reflect on your coding.

What was hard about this activity?

What about your work today are you most proud of?
