

HELLO

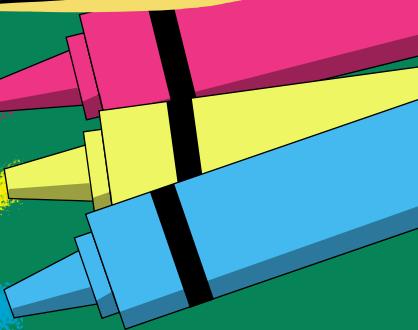
I AM A...

SCIENCE CAREERS

BOOK FOR KIDS



COLORING PAGES, DOT-TO-DOT, MAZES, TRIVIA,
PUZZLES, AND MORE....



Do you know what an ornithologist does?
What about a herpetologist?

Well, don't worry. The answers are inside.

This activity book introduces you to a bunch of cool science jobs. When you're done with the activity book, you will have learned something fun and new.

FOR MORE SCIENCE STUFF, VISIT:

<https://www.usgs.gov/educational-resources>

<https://www.usgs.gov/youth-and-education-in-science>



©2023

I Am A...

Science Careers Book for Kids

By Steven Sobieszczyk, Suzanna C. Soileau, and Annie Scott

Acknowledgments

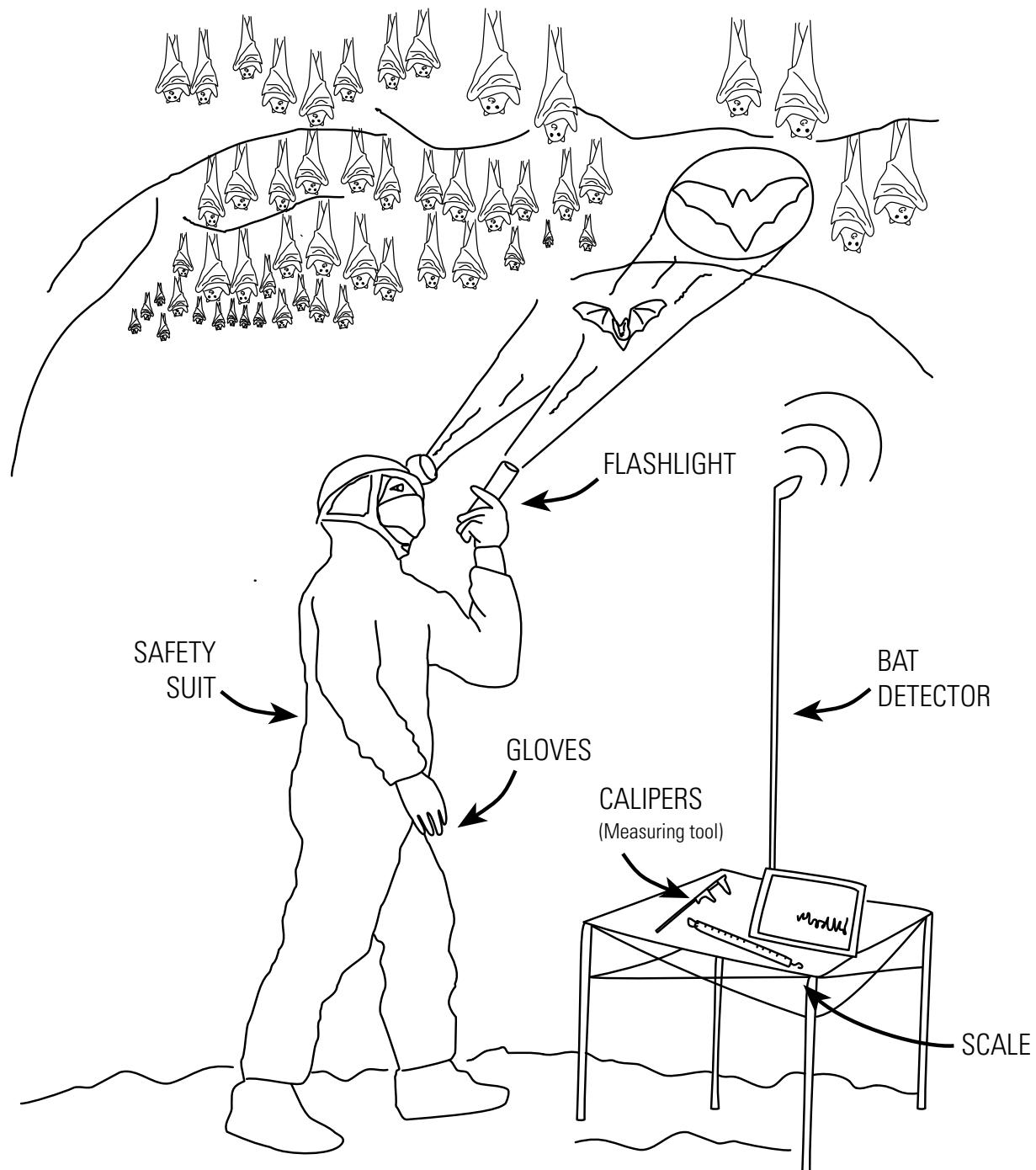
We would like to thank all the subject matter experts and staff that helped provide authenticity to our careers and their representation, including Mike Adams, Mark Wimer, Paul Steblein, Rachel Loehman, Mona Khalil, David Hu, Teresa Newton, Kaitlin Kovacs, Heather Johnson, Adam Terando, Holly Puglis, Kathy Lee, Emily Pindilli, Catherine Cullinane Thomas, Paul Cross, and Camille Hopkins.

WHAT MY PARENTS THINK...

When I say, "I work in bat caves."

WHAT AM I?





HELLO

I AM A...

CHIROPTEROLOGIST

Someone who studies bats

DID YOU KNOW?



The largest bat on Earth
has a wingspan over
5-feet wide!

CHIROPTEROLOGIST

chi·rop·ter·o·lo·gist

What it is: Someone who studies bats.

How it's said: K-EYE RAH-P TURR AH LOW JIST

What it means: The term "chiropterologist" means "someone who studies creatures with winged hands."

- chir- = hands
- -pter = wing
- -ology = study of
- -ist = person

JOKING AROUND



How do you spell bat backwards?

B-A-T-B-A-C-K-W-A-R-D-S

TEST YOUR SMARTS

1. What is the biggest bat on Earth?
 - Fruit bat
 - Mouse-eared bat
 - Golden-crowned flying fox
 - Vampire bat
2. How many bat species are there around the world?
 - 1,400
 - 900
 - 30
 - 150
3. How many years old was the oldest known bat?
 - 25 years old
 - 67 years old
 - 8 years old
 - 41 years old



WORD SEARCH



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

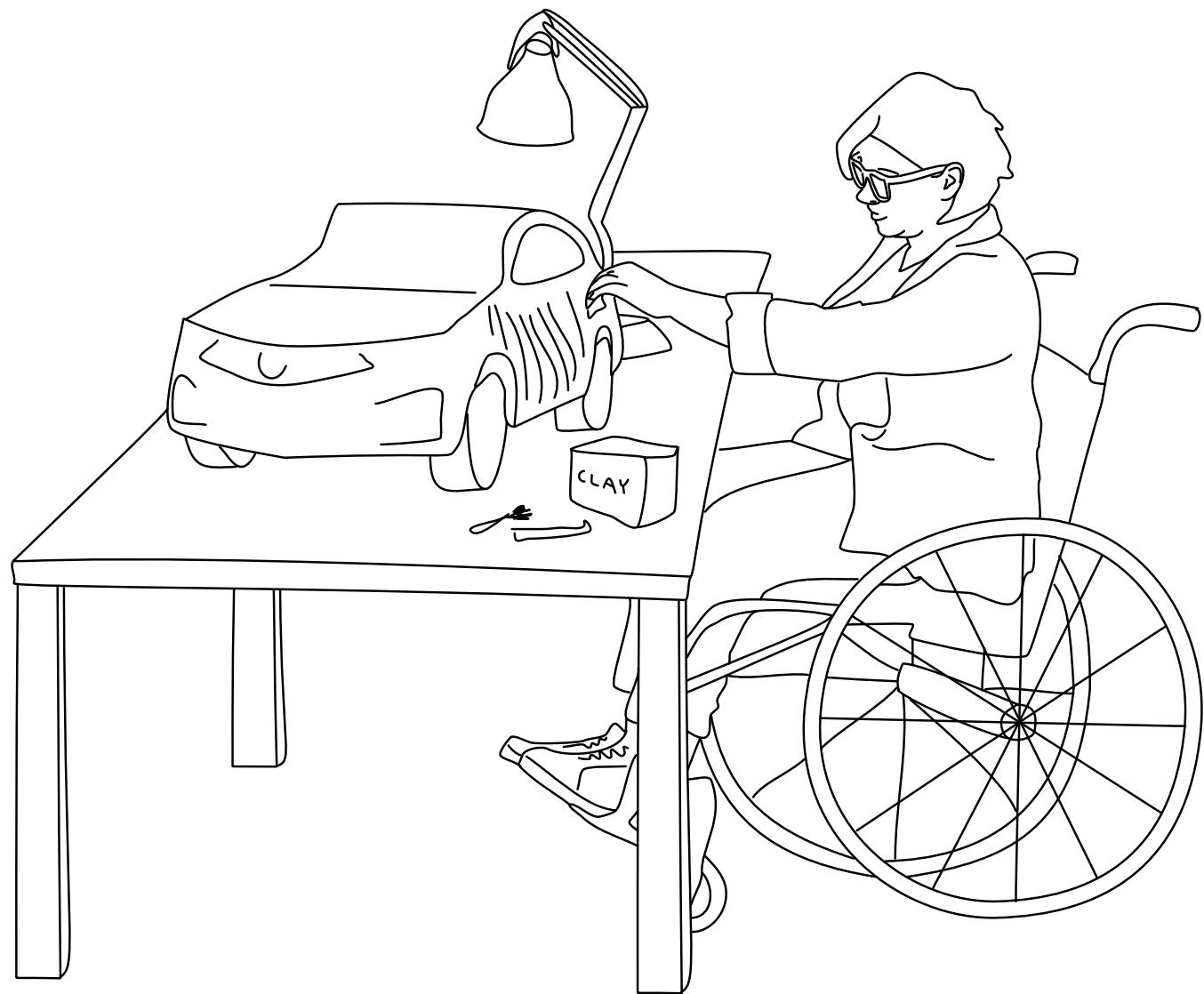
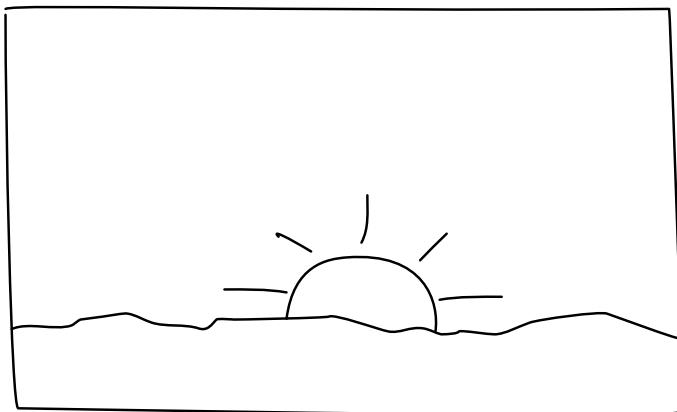
BAT DETECTOR	HELICOPTER
CALIPERS	FLASHLIGHT
CHIROPTEROLOGIST	SAFETY SUIT
GLOVES	SCALE
HANDS	WINGS

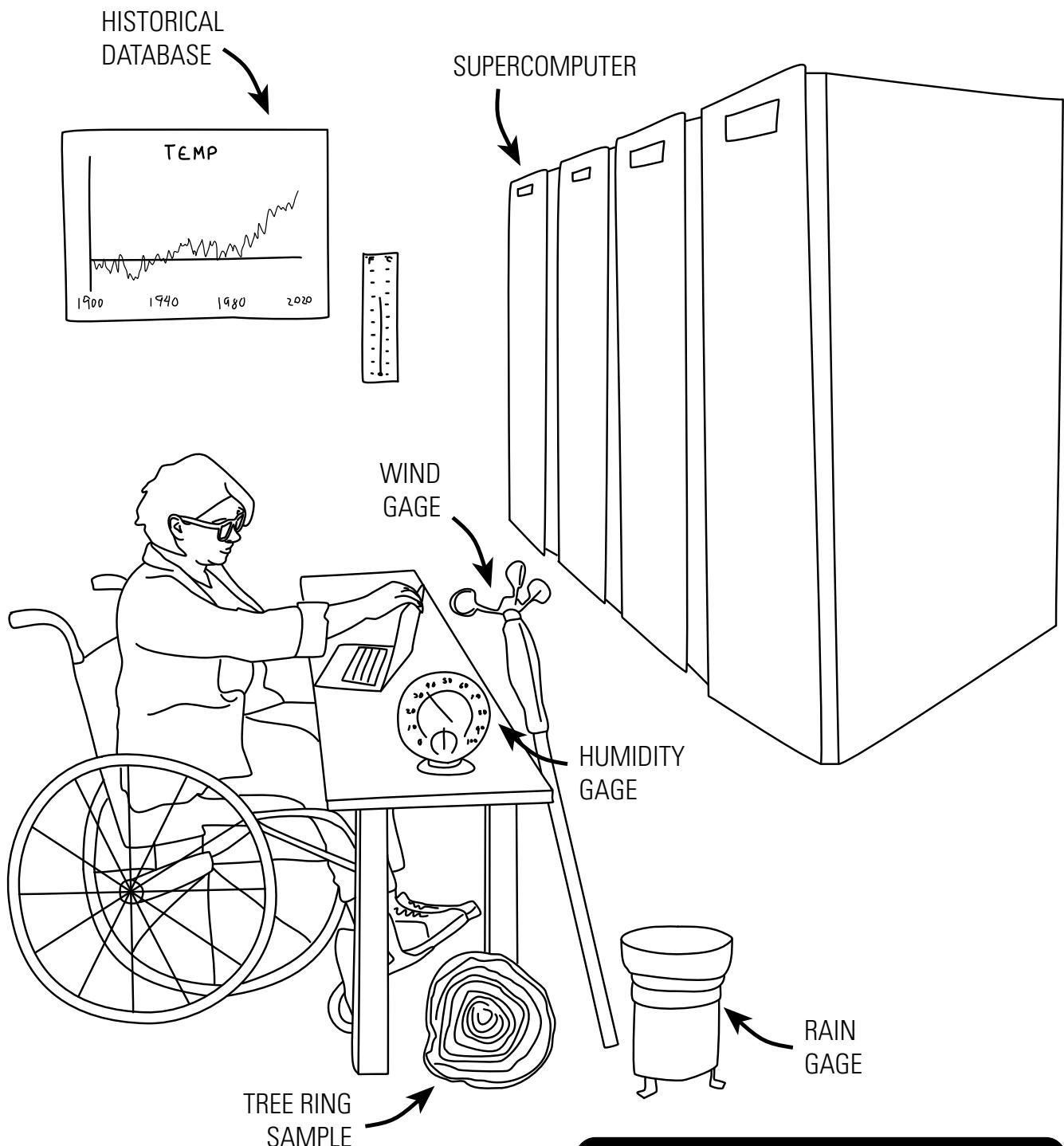
WHAT MY PARENTS THINK...

When I say, "I make models for a living."



WHAT AM I?





DID YOU KNOW?



The Earth's average temperature is 2 degrees Fahrenheit ($^{\circ}\text{F}$) warmer today than in 1880!

HELLO

I AM A...

CLIMATE MODELER

Someone who forecasts future climate scenarios

CLIMATE MODELER

cli·mate mod·el·er

What it is: Someone who forecasts future climate scenarios.

How it's said: K-LIE MET MOD EL URR

What it means: The term “climate modeler” means “someone who makes small mountains.”

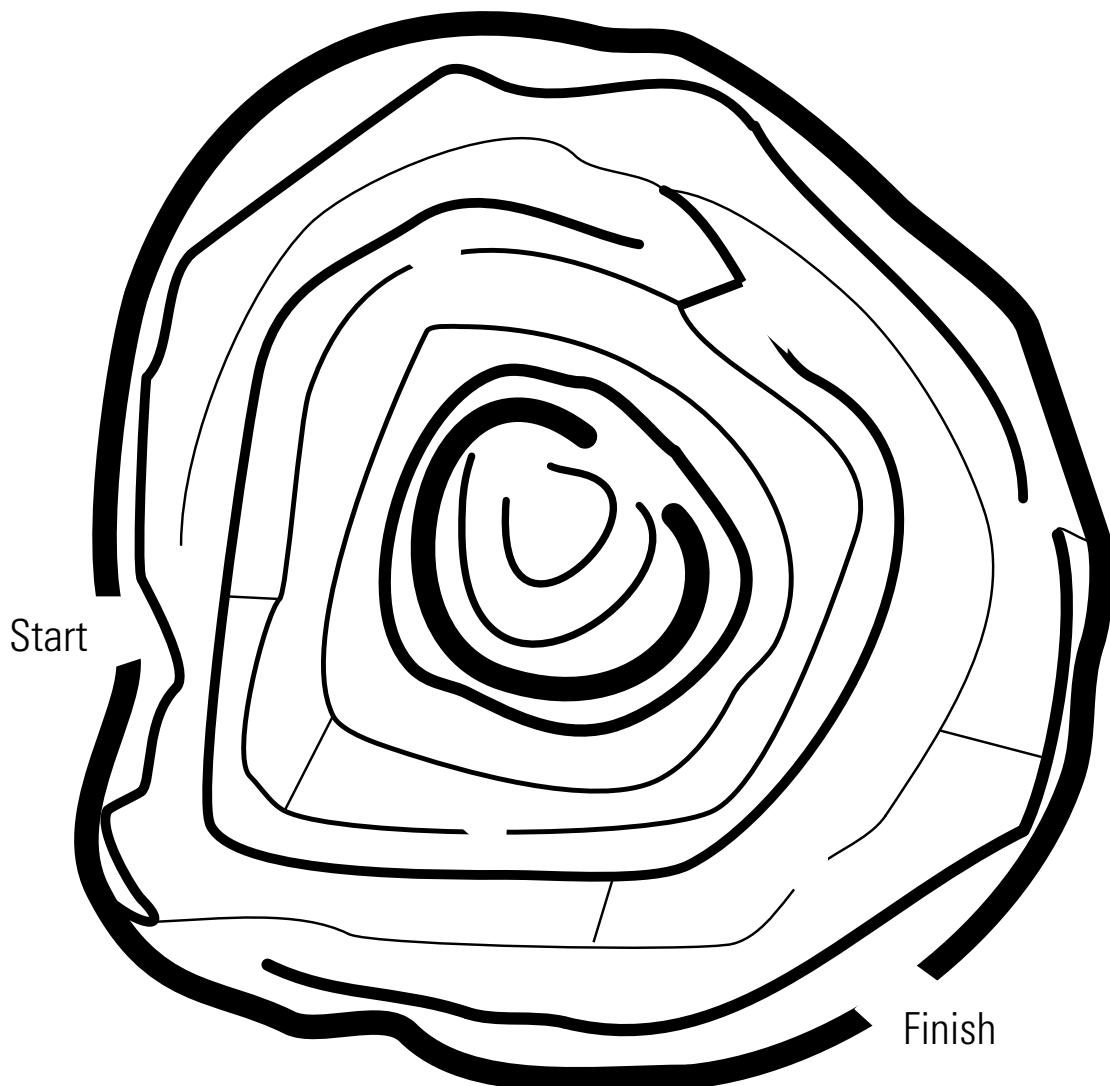
- klima- = slope, zone
- modulus- = measure, scale
- -er = person



TEST YOUR SMARTS

1. Which gas is a “greenhouse” gas?
 - Krypton
 - Carbon dioxide
 - Helium
 - Neon
2. Where is the hottest place in the United States?
 - Miami, Florida
 - Honolulu, Hawaii
 - Death Valley, California
 - New Orleans, Louisiana

TREE RING MAZE



DID YOU KNOW?

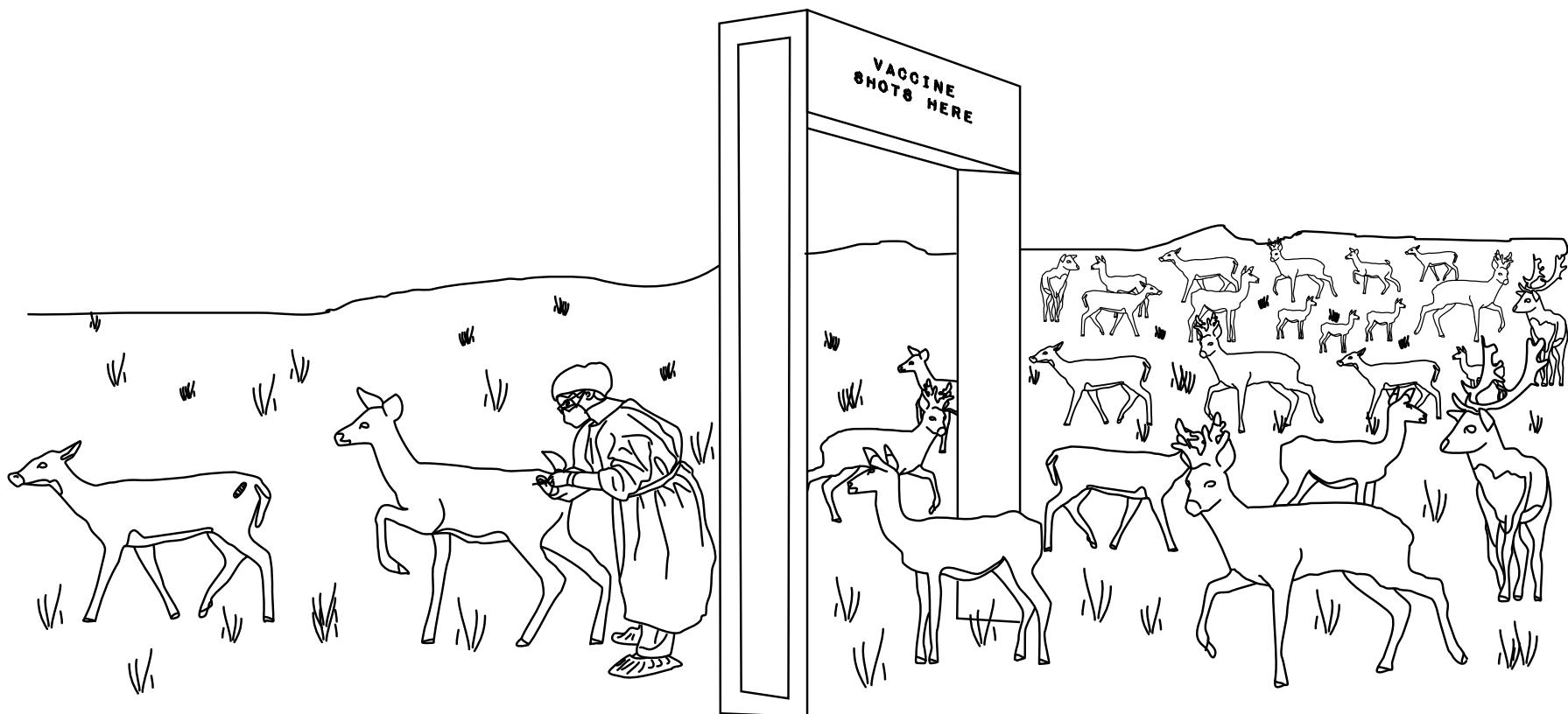


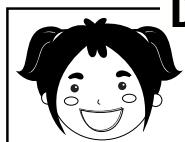
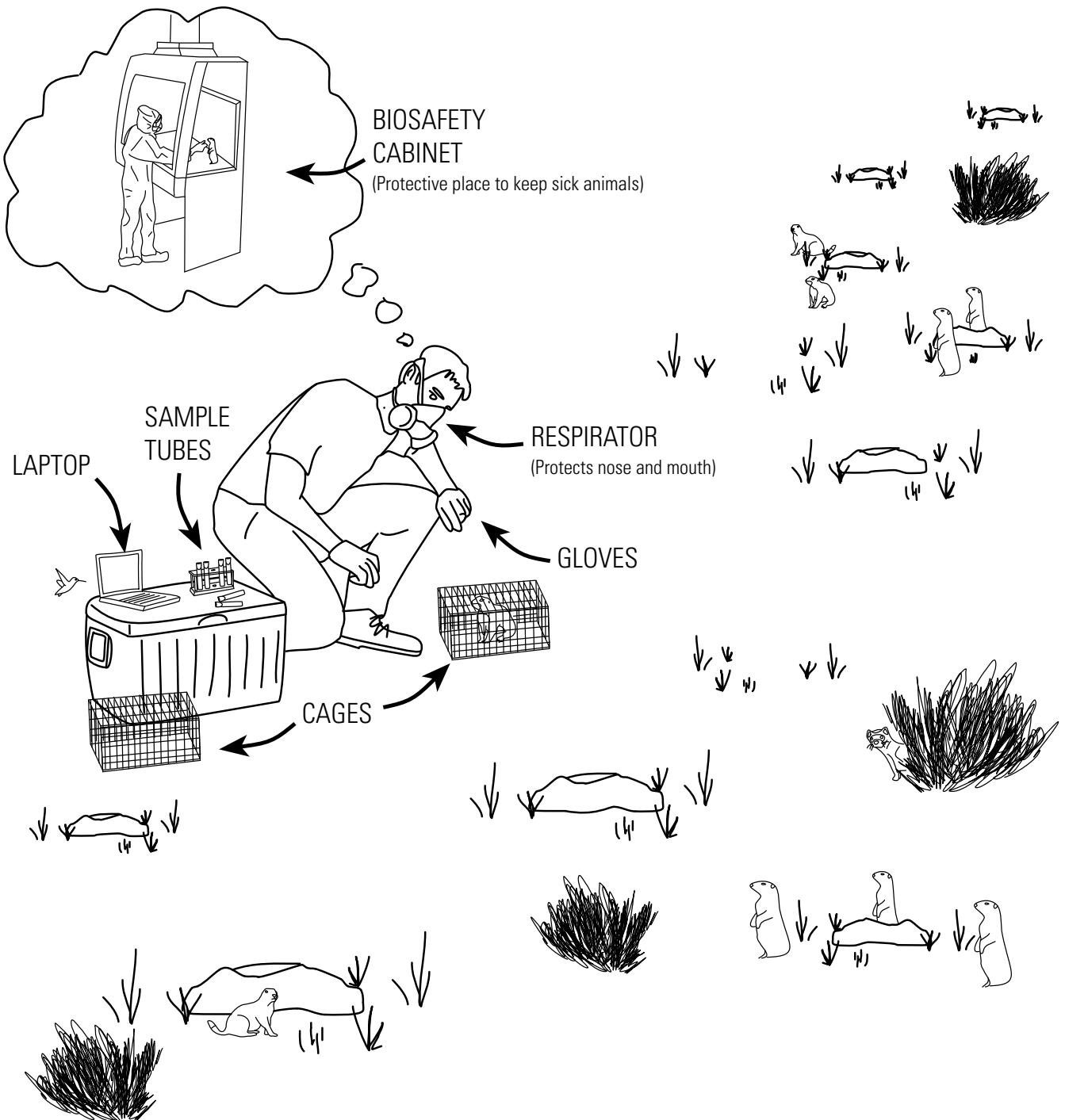
The color and thickness of tree rings can give scientists a snapshot into the past climate of an area. The light color rings form in spring and dark rings in fall. The thicker the ring, the wetter and better the growing season that year.

WHAT MY PARENTS THINK...

When I say, "I try to keep wild animals healthy."

WHAT AM I?





DID YOU KNOW?

Diseases that pass from animals to humans are called "zoonotic diseases."

HELLO

I AM A...

DISEASE ECOLOGIST

Someone who studies patterns of disease within animal populations

DISEASE ECOLOGIST

dis-ease e·col·o·gist

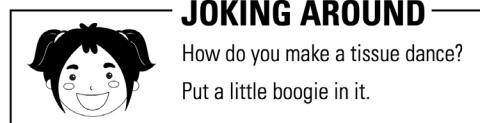
What it is: Someone who studies patterns of disease* within plant or animal populations.

How it's said: DIZ EEZ EE KAH LOW JIST

What it means: The term "disease ecologist" means "someone who studies how discomfort affects homes or habitats."

- des- = without, away
- -aise = ease
- eco- = home
- -ology = study of
- -ist = person

*A disease is a bodily disorder that produces symptoms, but not an injury.



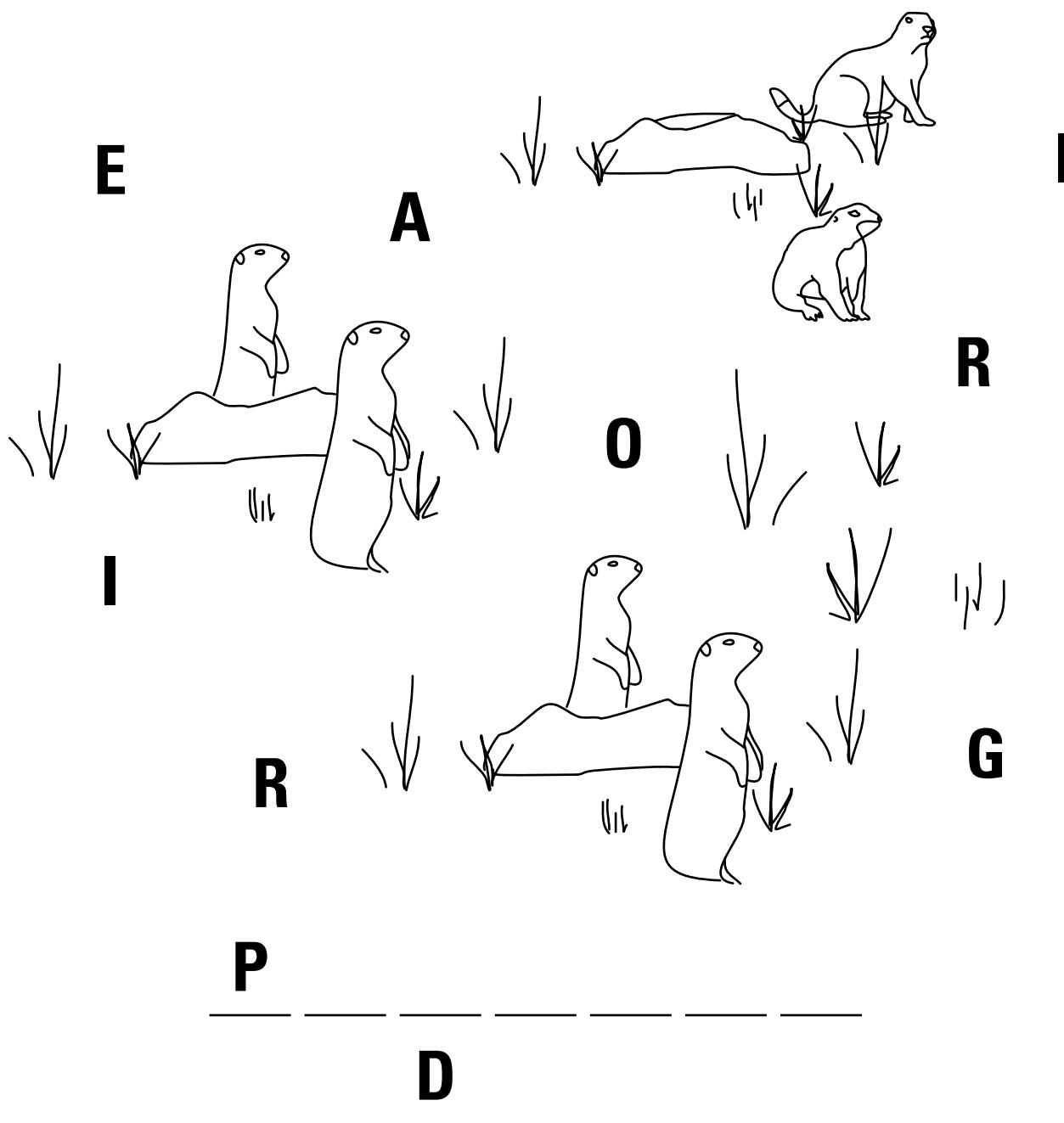
TEST YOUR SMARTS

1. Which is not a type of germ?
 - a. Viruses
 - b. Fungi
 - c. Bacteria
 - d. Atoms

2. How can an animal get Lyme Disease?
 - a. Eating limes
 - b. Eating grass
 - c. Bitten by a tick
 - d. Drinking dirty water

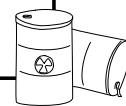
WHAT IS THIS?

Use the letters below to spell out this creature's name.



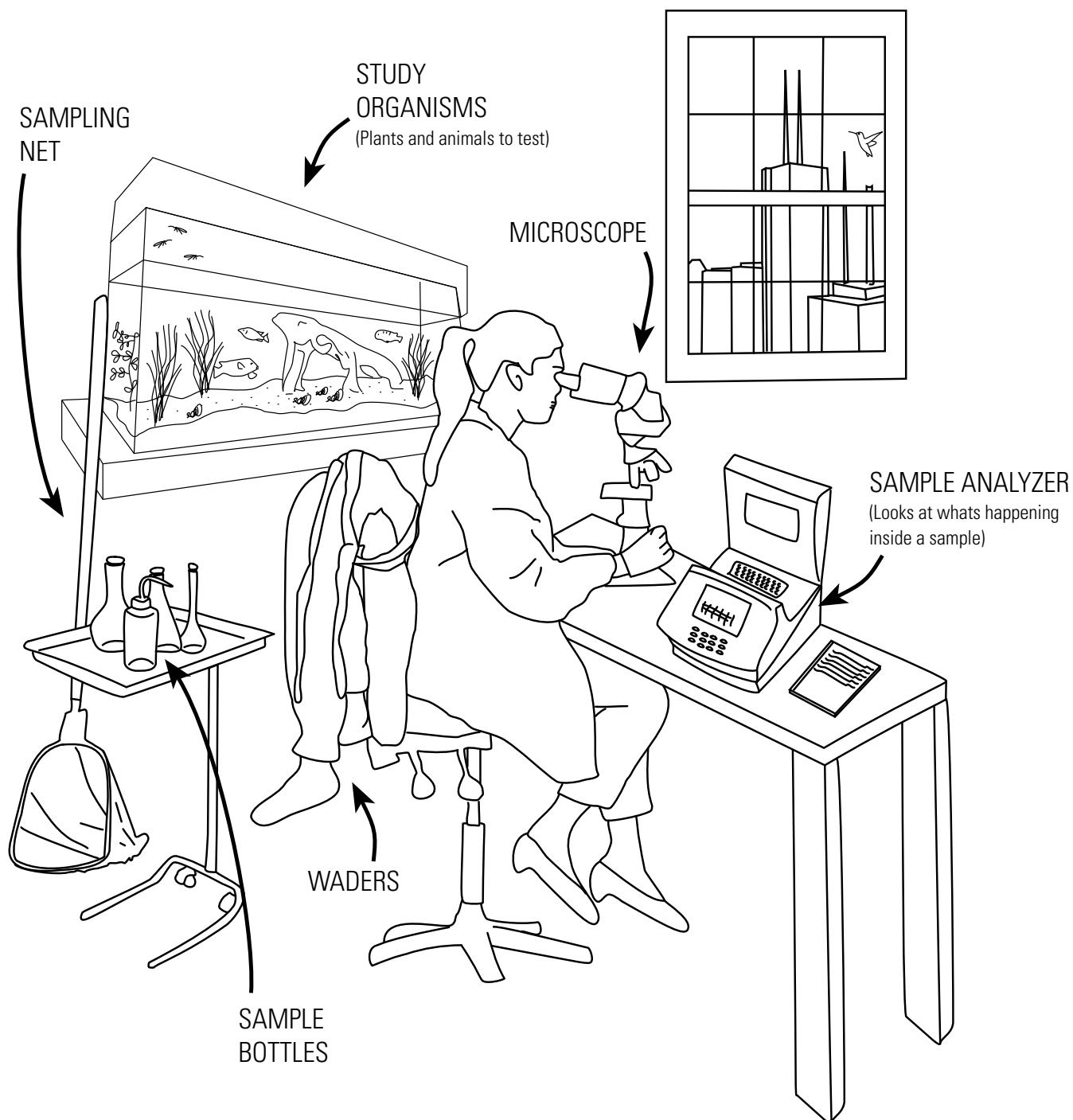
WHAT MY PARENTS THINK...

When I say, "I work with dangerous pollutants."



WHAT AM I?





HELLO

I AM A...

ECOTOXICOLOGIST

Someone who studies how pollutants affect plants and animals

DID YOU KNOW?



Nearly half of all lakes and rivers in the United States have sick fish that are unsafe for people to eat.

ECOTOXICOLOGIST

e·co·tox·i·col·o·gist

What it is: Someone who studies how pollutants affect plants and animals.

How it's said: EKO TOCKS ICK AH LOW JIST

What it means: The term "ecotoxicologist" means "someone who studies homes with poisoned arrows."

- eco- = home
- tox- = arrow, bow
- toxicum- = poison
- -ology = study of
- -ist = person

JOKING AROUND



Where does a boat go when it's sick?
The dock.

TEST YOUR SMARTS

1. Which organ works to remove toxins* from your body?
 - Heart
 - Liver
 - Stomach
 - Brain
2. Which substance is not harmful to animals?
 - Lead
 - Mercury
 - Water
 - Asbestos

*Toxins are naturally occurring poisons produced by plants or animals

WHAT'S MISSING?

Can you find the five items that are missing in this picture compared to the image on page 15?

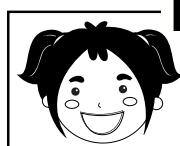
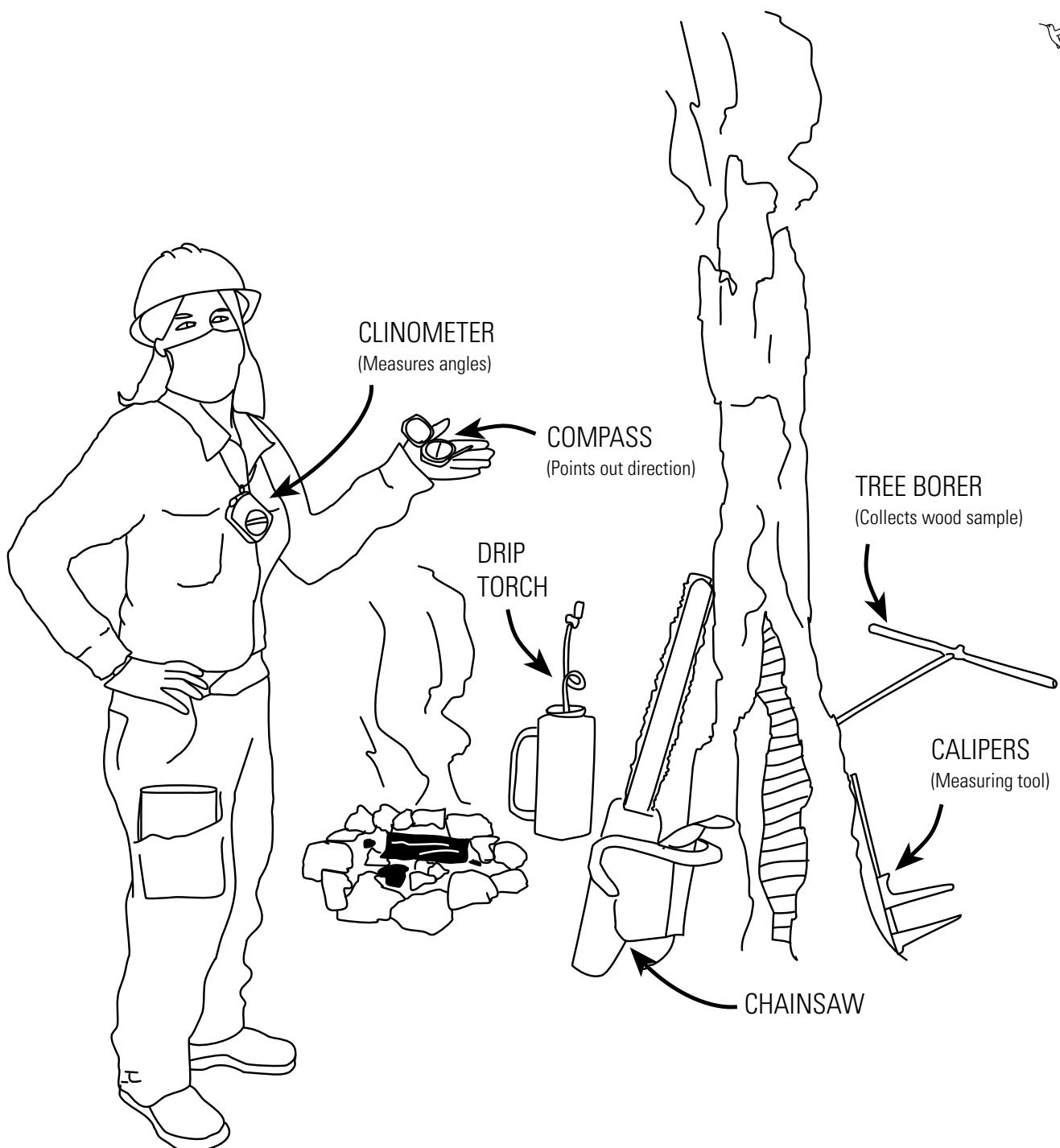


— WHAT MY PARENTS THINK... —

When I say, "I work with fire."

WHAT AM I?





DID YOU KNOW?

Lodgepole pines need heat from wildfires to open their cones for seeds to sprout.

HELLO

I AM A...

FIRE ECOLOGIST

Someone who studies fire behavior and its effects

FIRE ECOLOGIST

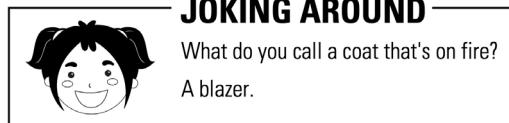
fi·re e·col·o·gist

What it is: Someone who studies fire behavior and its effects.

How it's said: F-EYE URR EEK KAH LOW JIST

What it means: The term "fire ecologist" means "someone who studies exciting homes or habitats."

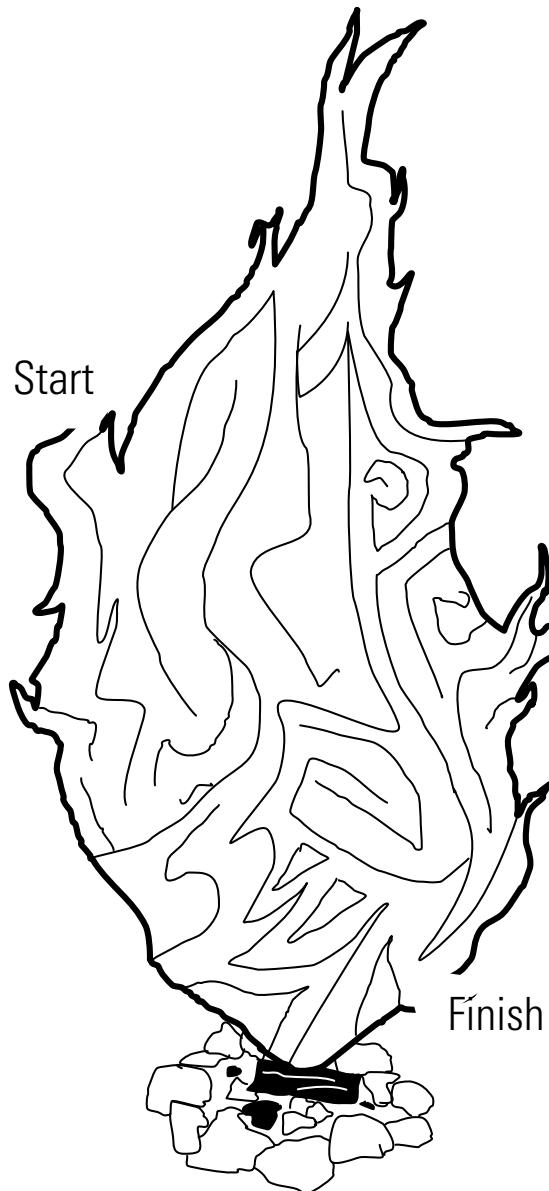
- furen = inflame, excite
- eco- = home
- -ology = study of
- -ist = person



TEST YOUR SMARTS

1. What is the most common cause of wildfires?
 - Lighting
 - Meteorites
 - People
 - Volcanic eruptions
2. If you discover an uncontrolled fire, what should you do?
 - Call 911
 - Call your friends
 - Film it and share it on social media
 - Get a closer look
3. What weather feature can wildfires create?
 - Fire drought
 - Fire rainbow
 - Fire tornado
 - Fire hurricane

BLAZE MAZE



DID YOU KNOW?



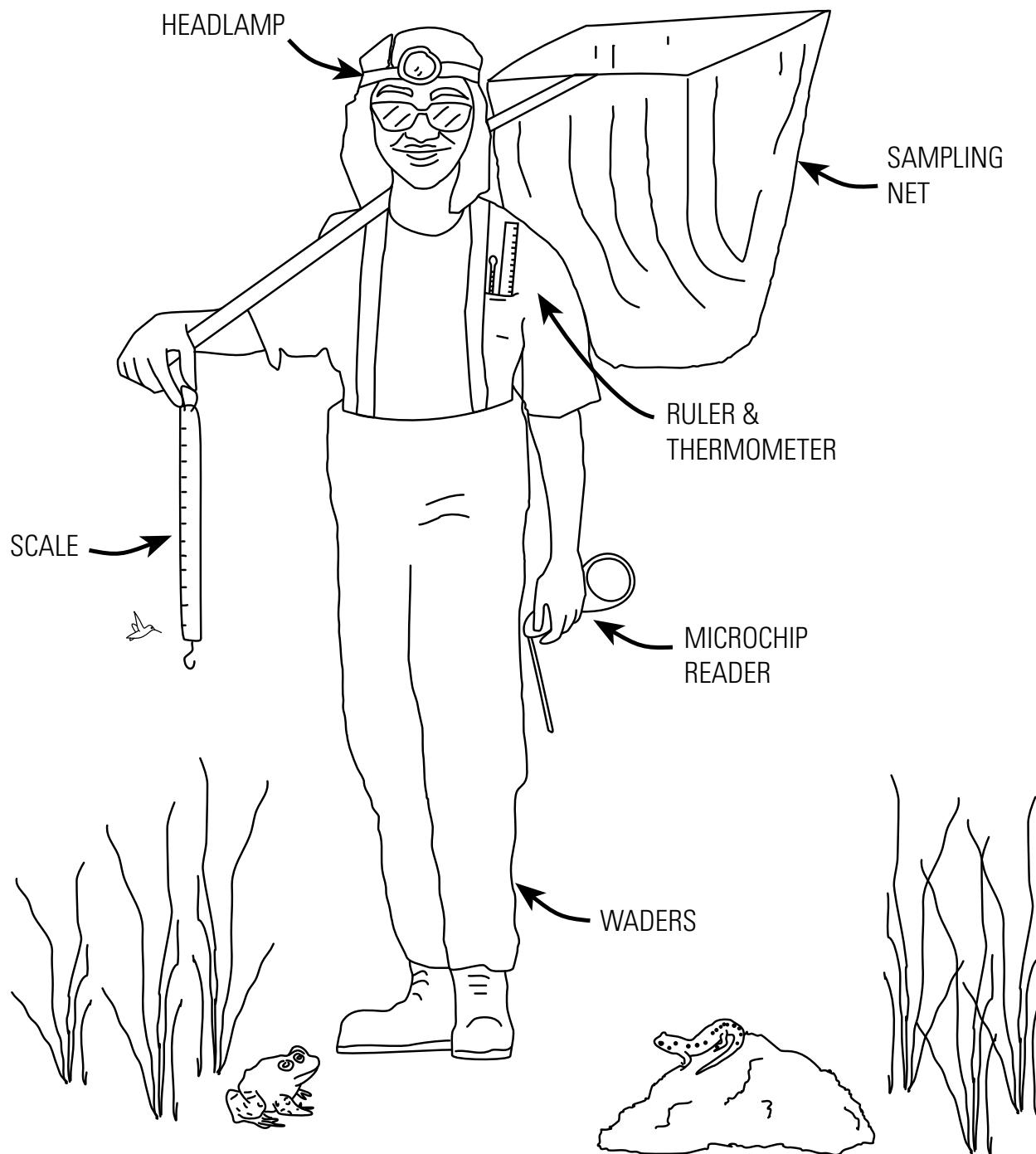
Wood does not actually burn. Heat changes the wood into gases that burn.

WHAT MY PARENTS THINK...

When I say, "I collect frogs, snakes, and turtles."

WHAT AM I?





HELLO

I AM A...

HERPETOLOGIST

Someone who studies reptiles and amphibians

DID YOU KNOW?



A group of frogs is called an "army" and a group of lizards a "lounge."

HERPETOLOGIST

her-pe-tol-o-gist

What it is: Someone who studies reptiles and amphibians.

How it's said: HER PAH TAH LOW JIST

What it means: The term "herpetologist" means "someone who studies creeping things."

- herp- = creep
- -ology = study of
- -ist = person

JOKING AROUND



Where did the lizard go after losing its tail?
The retail store.

TEST YOUR SMARTS

1. What is the most venomous snake in the world?
 - Corn snake
 - Gopher snake
 - Garter snake
 - Inland taipan snake
2. What is the biggest amphibian in the world?
 - Axolotl
 - Spiny giant frog
 - Chinese giant salamander
 - Sharp-ribbed newt
3. What is the biggest lizard in the world?
 - Komodo dragon
 - Green basilisk
 - Green iguana
 - Gargoyle gecko



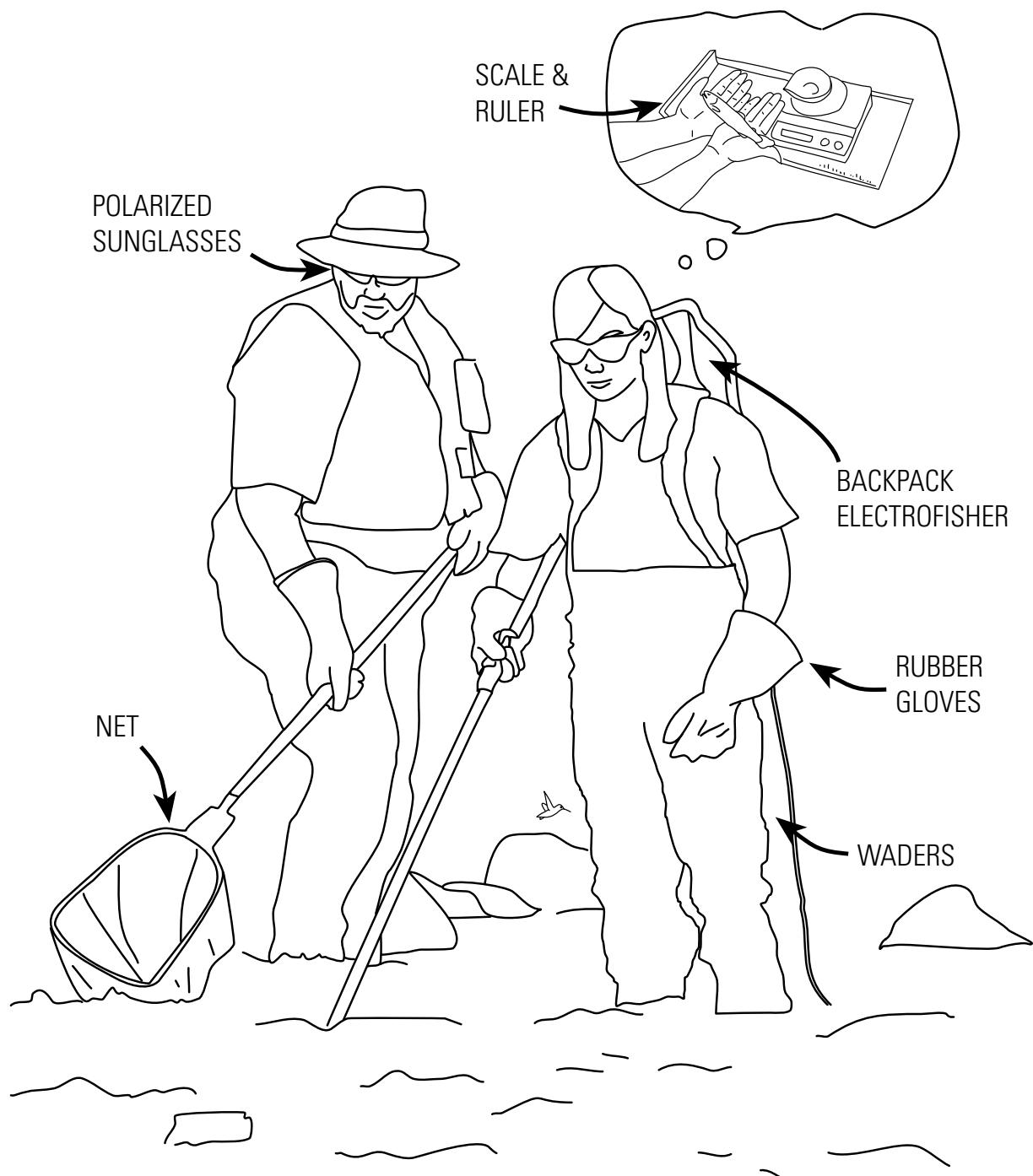
WORD SEARCH



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

AMPHIBIAN	RULER
FROG	SCALE
HEADLAMP	SNAKE
NET	TURTLE
SALAMANDER	WADERS

WHAT MY PARENTS THINK...



HELLO

I AM AN...

ICHTHYOLOGIST

Someone who studies fish

DID YOU KNOW?



Catfish have three times as many tastebuds as humans.

ICHTHYOLOGIST

ich-thy-ol-o-gist

What it is: Someone who studies fish.

How it's said: ICK THEE AH LOW JIST

What it means: The term "ichthyologist" means "someone who studies fish."

- ichthy- = fish
- -ology = study of
- -ist = person

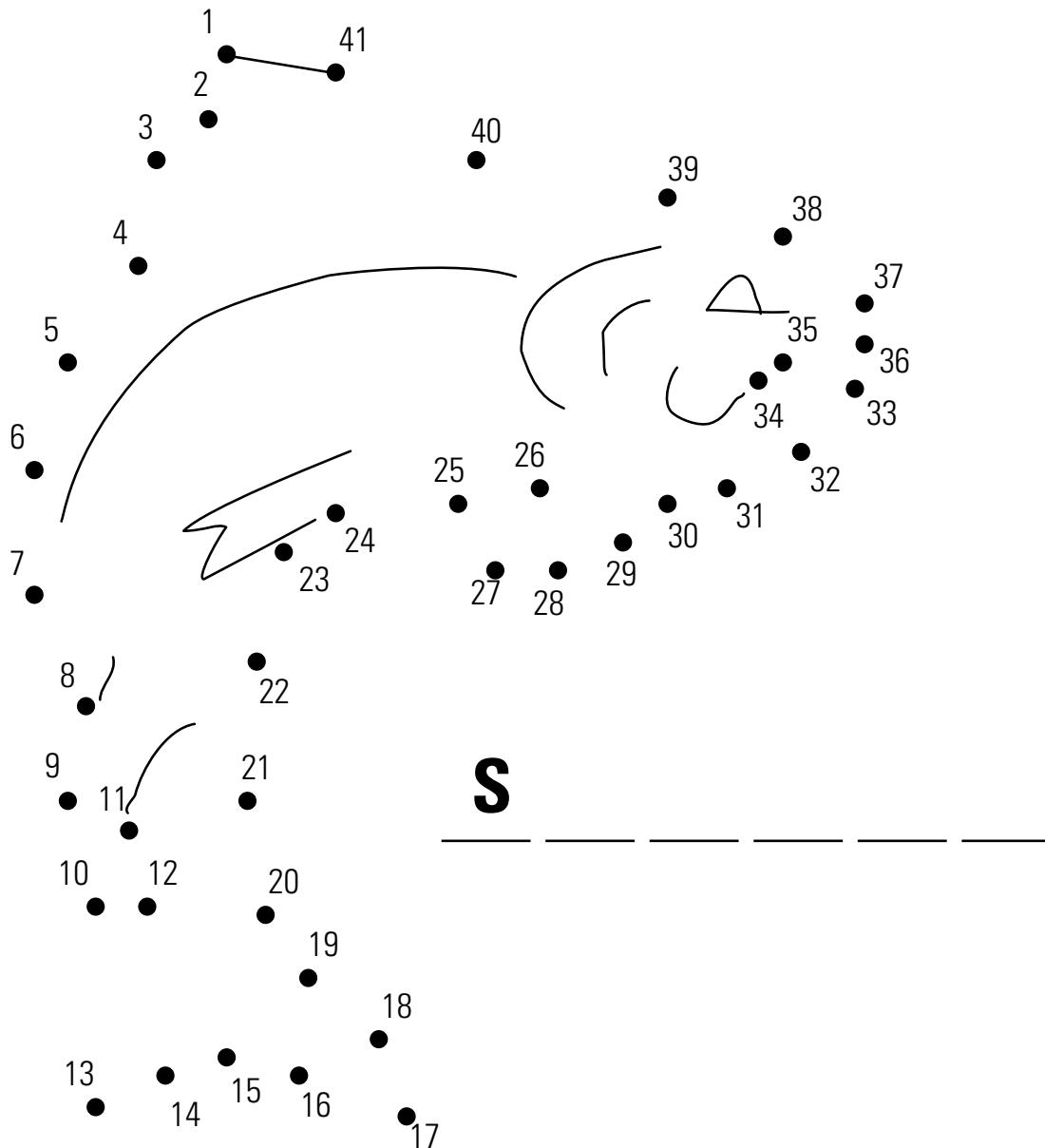


TEST YOUR SMARTS

1. How many types of fish are there in the world?
 - 800
 - 6,500
 - 27,000
 - 212,000
2. What is the most poisonous fish in the world?
 - Swordfish
 - Pufferfish
 - Clownfish
 - Zebrafish
3. Which of these animals is a fish?
 - Dolphin
 - Jellyfish
 - Cuttlefish
 - Sea horse

CONNECT THE DOTS

What do you see?



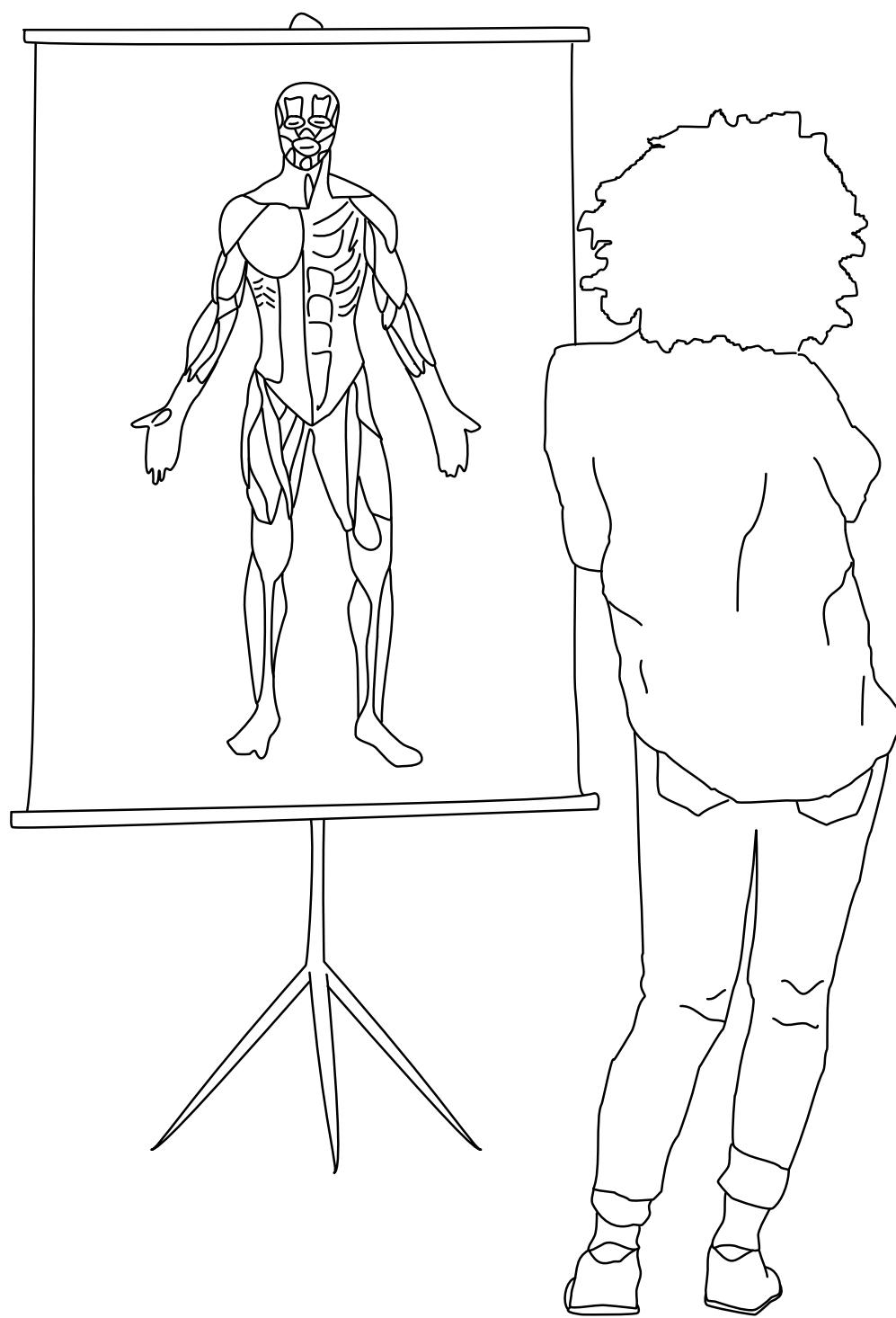
DID YOU KNOW?

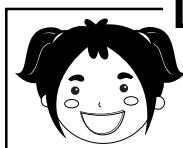
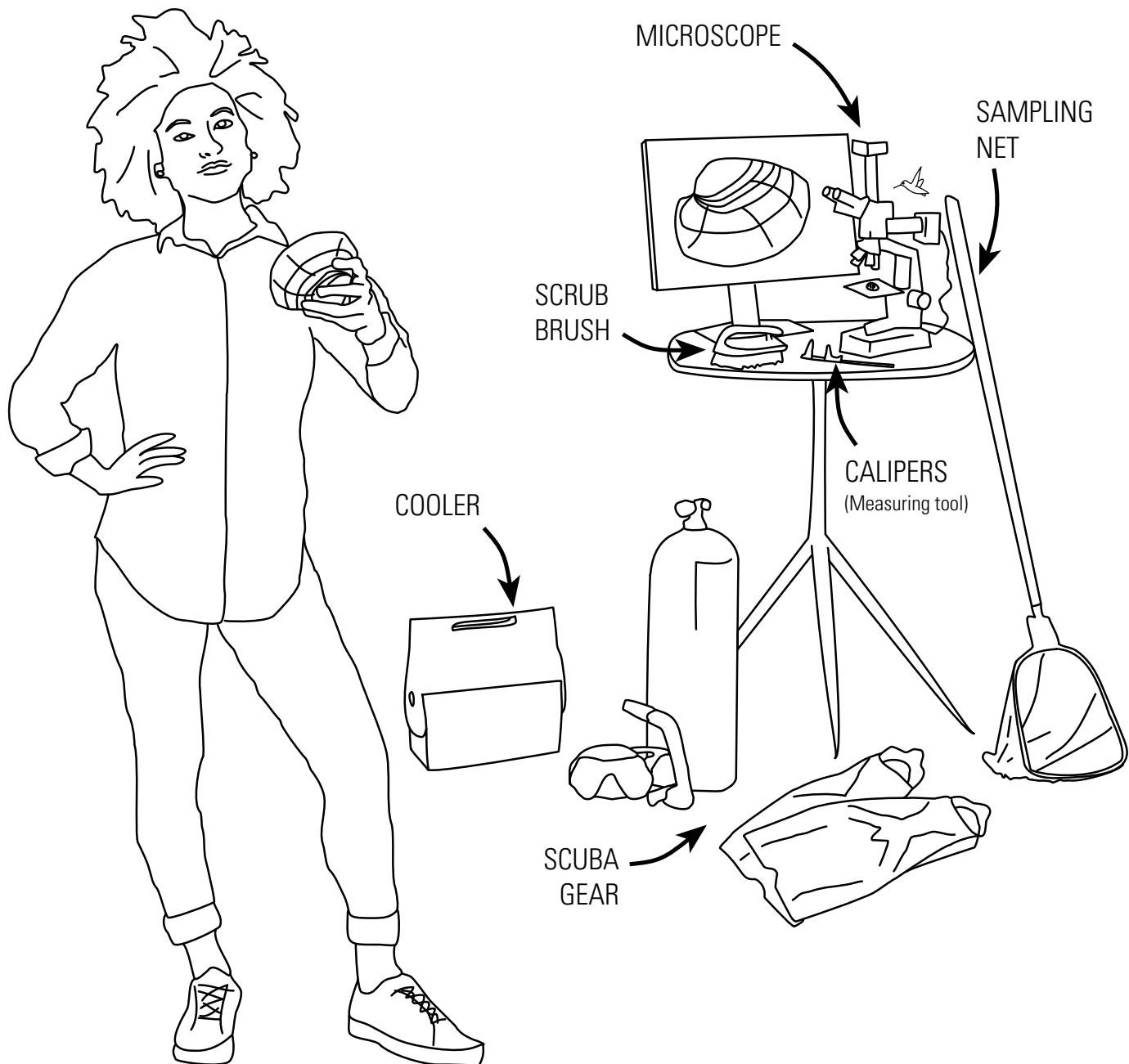
There are seven species of this fish: Chinook, Coho, Chum, Sockeye, Pink, Masu, and Amago.

WHAT MY PARENTS THINK...

When I say, "I study mussels."

WHAT AM I?





DID YOU KNOW?

The Giant Clam can grow more than 4-feet wide and weigh more than 500 pounds.

HELLO

I AM A...

MALACOLOGIST

Someone who studies mollusks
(for example, clams and mussels)

MALACOLOGIST

mal-a-col-o-gist

What it is: Someone who studies mollusks.

How it's said: MAL AH KAH LOW JIST

What it means: The term "malacologist" means "someone who studies soft-bodied creatures."

- malakos- = soft body
- -ology = study of
- -ist = person



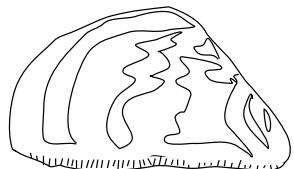
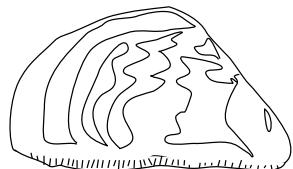
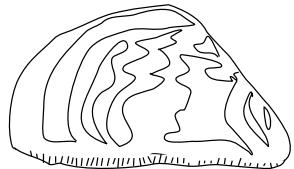
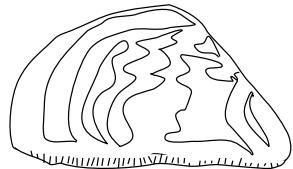
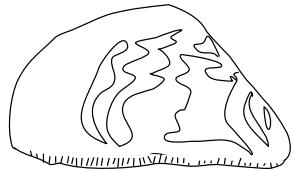
TEST YOUR SMARTS

1. How much water can a small clam filter each day?
 - 1 gallon
 - 4.5 gallons
 - 14 gallons
 - 32 gallons
2. What is a snail's shell made of?
 - Calcium
 - Iron
 - Protein
 - Silica
3. Which is not a two-shelled marine animal?
 - Oyster
 - Mussel
 - Starfish
 - Clam

SHELL MATCHING

DRAW A LINE TO CONNECT THE SAME SHELLS

Can you match all 5 pairs?



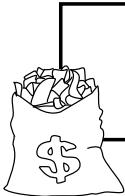
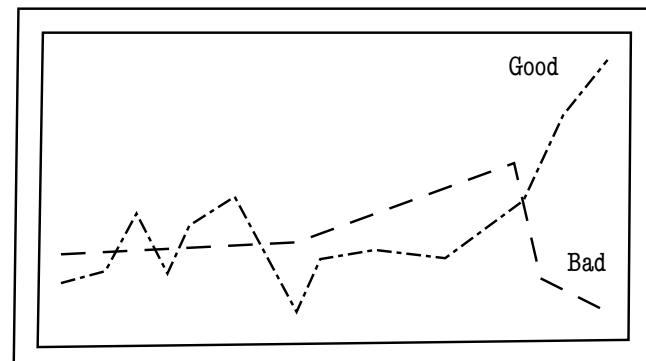
DID YOU KNOW?

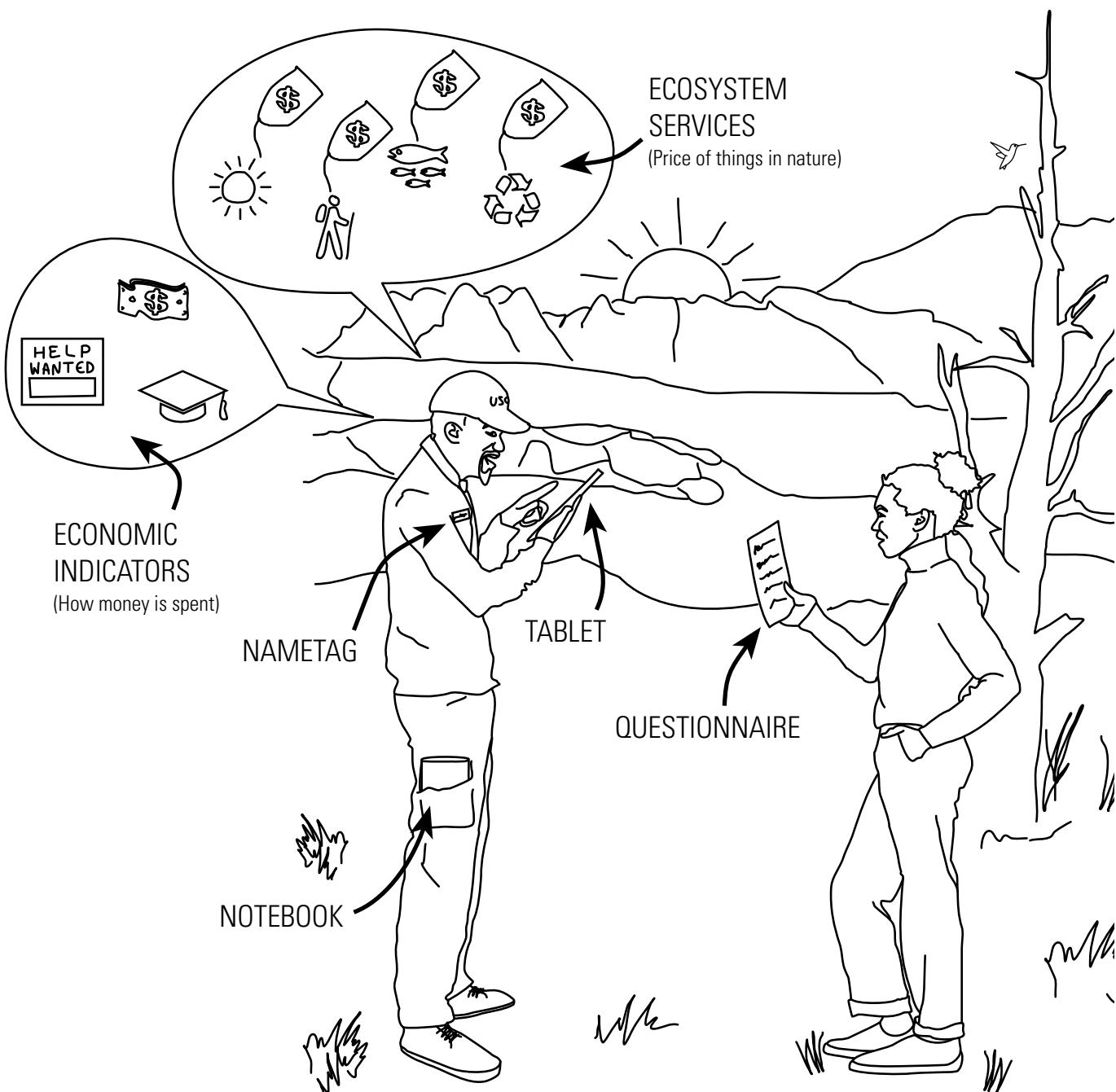


Mussels can be found in both freshwater
and in saltwater.

WHAT MY PARENTS THINK...

When I say, "I figure out the value of things."

**WHAT AM I?**



HELLO

I AM A...

NATURAL RESOURCE ECONOMIST

Someone who studies the value of features
in the natural world

DID YOU KNOW?



Every \$1 invested in clean
drinking water saves \$3 off
later medical expenses.

NATURAL RESOURCE ECONOMIST

Nat·u·ral re·source e·con·o·mist

What it is: Someone who studies the value of features in the natural world.

How it's said: NAT TROLL REE SORES EEK ON OH MIST

What it means: The term “natural resource economist” means “manager of the birth or return of homes or habitats.”

- Naturalis = by birth, according to nature
- Resurgere = to rally, rise again
- eco- = house
- -nomos = account
- -ist = person

JOKING AROUND



Why did the two 4s skip lunch?
They already 8.

TEST YOUR SMARTS

1. Which of these is not a type of “ecosystem service?”
 - Hiking
 - Fishing
 - Farming
 - Polluting
2. Which is not a way to average numbers?
 - Median
 - Mean
 - Mode
 - Make

SUDOKU

7	8	9		6		3		5
6	4		9	3	5	7		2
	3	2	7		8	6	1	
4	6		3		9	5	2	
	1	5	4	2	7		6	3
2	3		8	6		1	7	4
9		6	8		4		3	1
1	2		6	9		8	5	
	5	8	1		2	4		6



DID YOU KNOW?

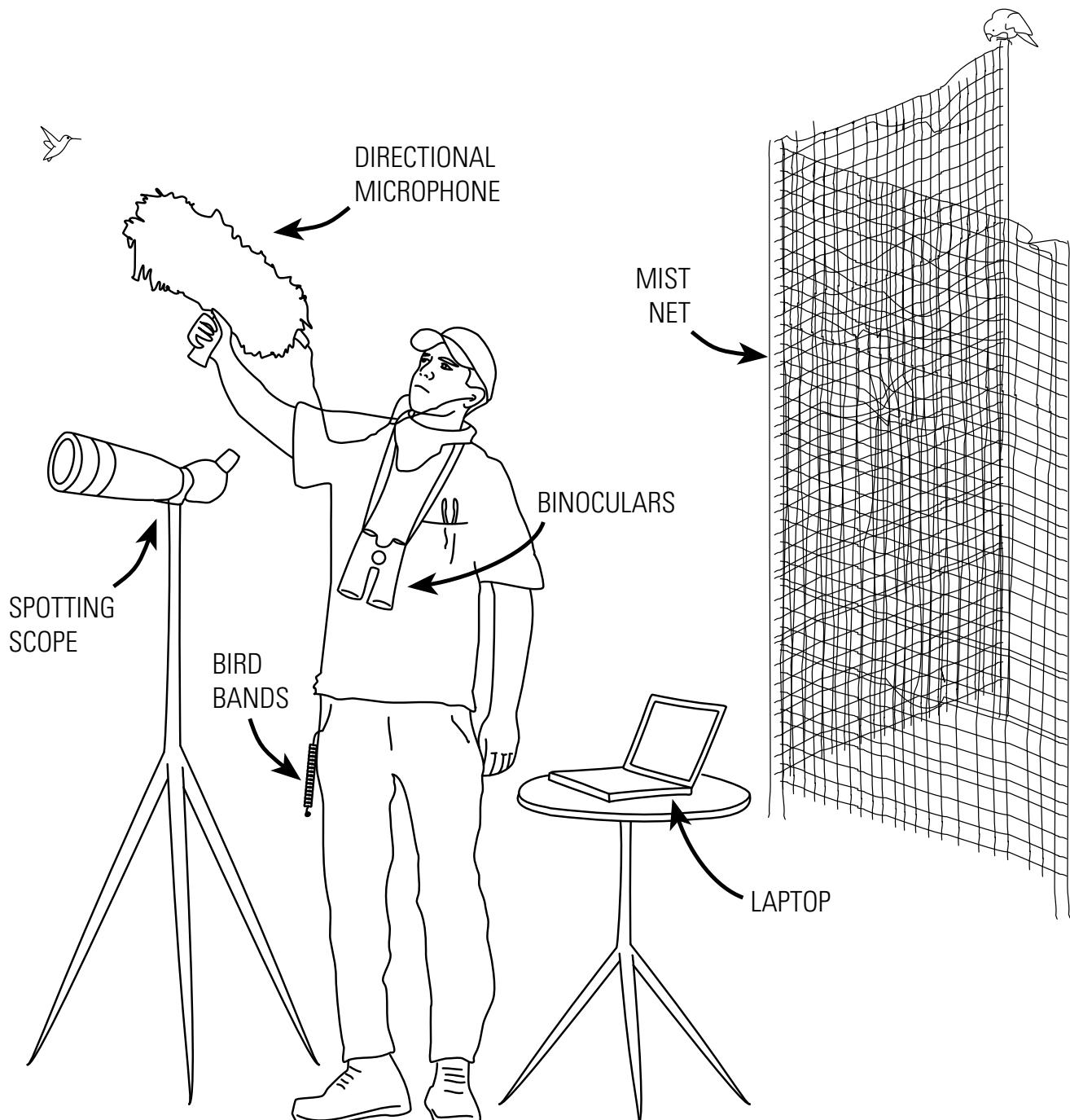
Natural resource economists help put a price on the value that natural features provide.

WHAT MY PARENTS THINK...

When I say, "I spend my time learning about birds."

WHAT AM I?





DID YOU KNOW?

Birds have hollow bones that help them to fly.

HELLO

I AM AN...

ORNITHOLOGIST

Someone who studies birds

ORNITHOLOGIST

or-ni-thol-o-gist

What it is: Someone who studies birds.

How it's said: OR NI THAH LOW JIST

What it means: The term "ornithologist" means "someone who studies birds."

- ornith- = bird
- -ology = study of
- -ist = person

JOKING AROUND



Why do seagulls fly over the sea?

If they flew over the bay, they'd be bagels.

TEST YOUR SMARTS

1. How many bird species are in the world?
 - 150
 - 1,000
 - 5,000
 - 10,000
2. Which bird lays blue eggs?
 - Robin
 - Blue jay
 - Magpie
 - Oriole
3. What is a baby penguin called?
 - Puffin
 - Pup
 - Chick
 - Dewy



WORD SEARCH

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

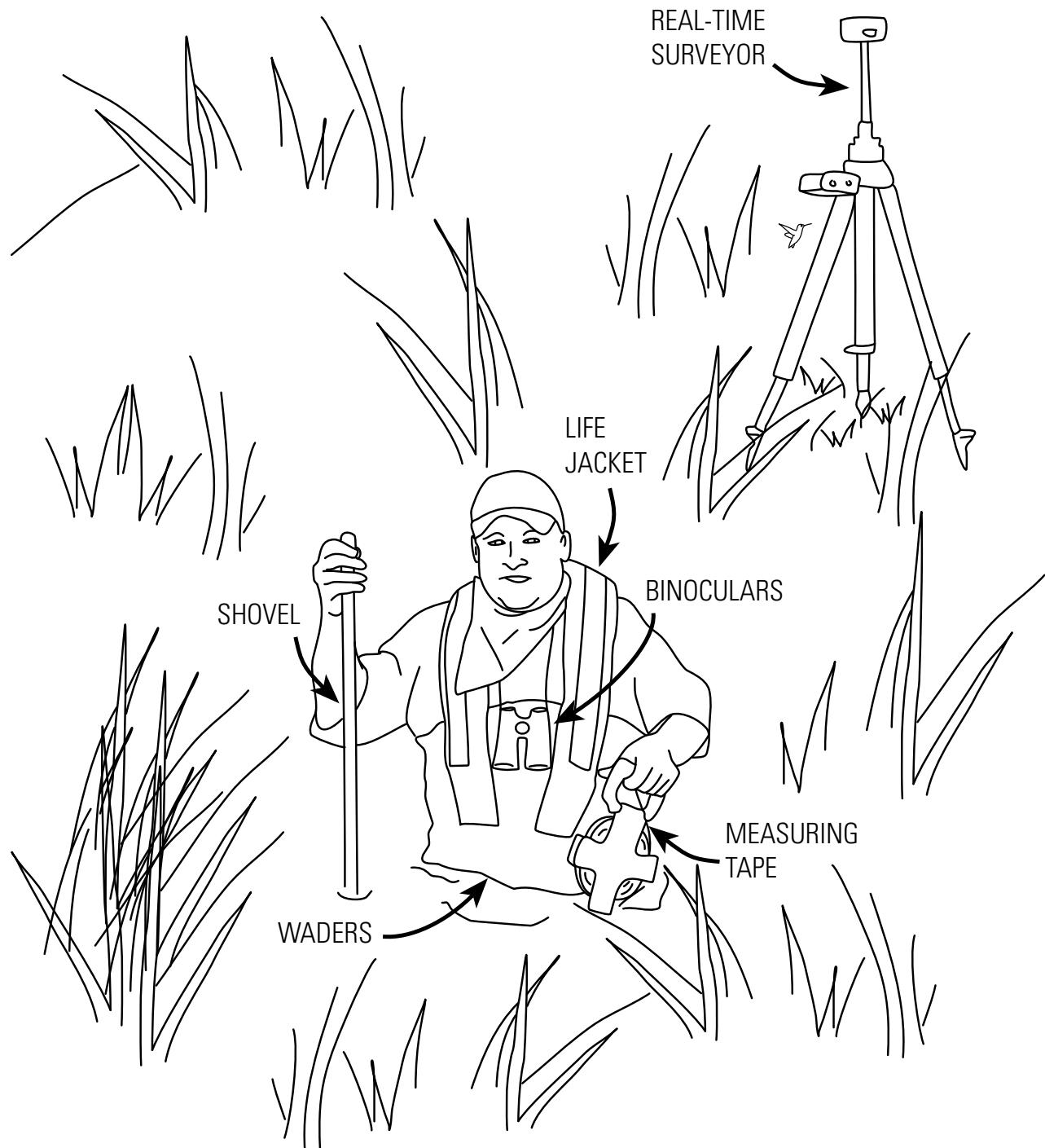
BINOCULARS	MICROPHONE
BIRD BANDS	MIST NET
EAGLE	ORNITHOLOGIST
HAWK	RAPTOR
LAPTOP	SCOPE

WHAT MY PARENTS THINK...

When I say, "I trudge around swamps all day."

WHAT AM I?



**DID YOU KNOW?**

The term "wetland"
wasn't formally defined
until 1974.

HELLO

I AM A...

WETLAND ECOLOGIST

Someone who studies wetland plants and animals

WETLAND ECOLOGIST

wet·land e·col·o·gist

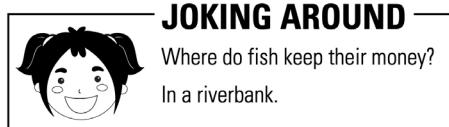
What it is: Someone who studies wetland* plants and animals.

How it's said: WET LAND EEK KAH LOW JIST

What it means: The term “wetland ecologist” means “someone who studies wet ground homes or habitats.”

- wætan – to wet, moisten
- lond – ground, soil
- eco- = home
- -ology = study of
- -ist = person

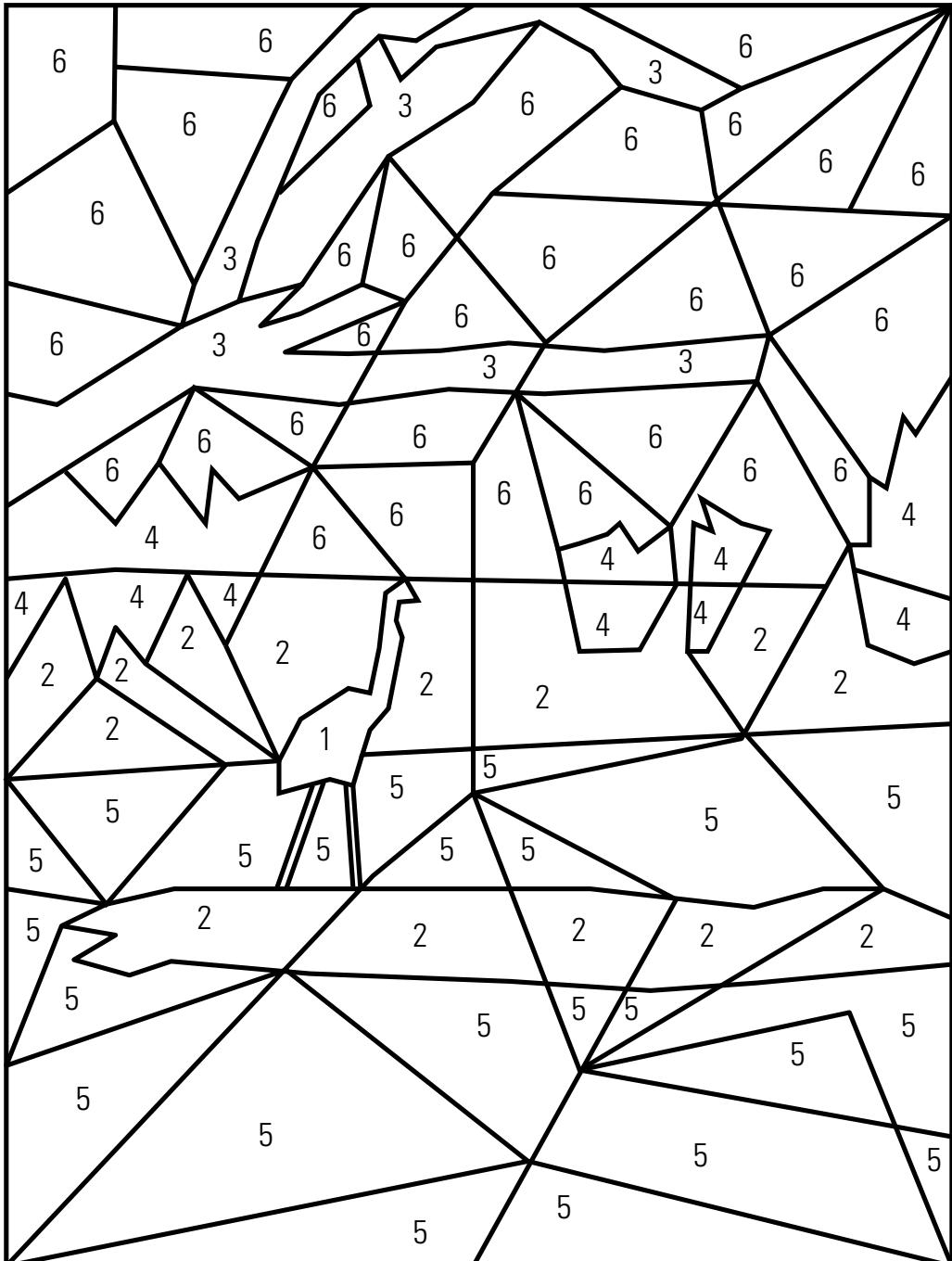
*Wetland refers to land with water at the surface for all or part of the year.



TEST YOUR SMARTS

1. Which word is not another name for a wetland?
 - Bog
 - Swamp
 - Marsh
 - Tundra
2. How much more carbon can wetlands store compared to rainforests?
 - 5 times more
 - 10 times more
 - 20 times more
 - 50 times more

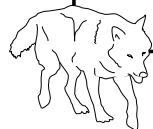
COLOR BY NUMBERS



1 White	2 Yellow	3 Brown	4 Light green	5 Blue	6 Dark green
------------	-------------	------------	------------------	-----------	-----------------

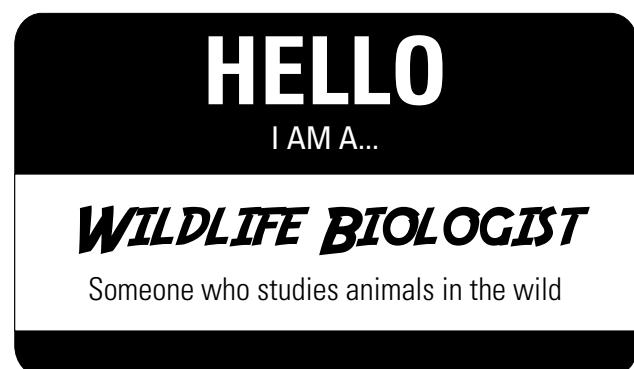
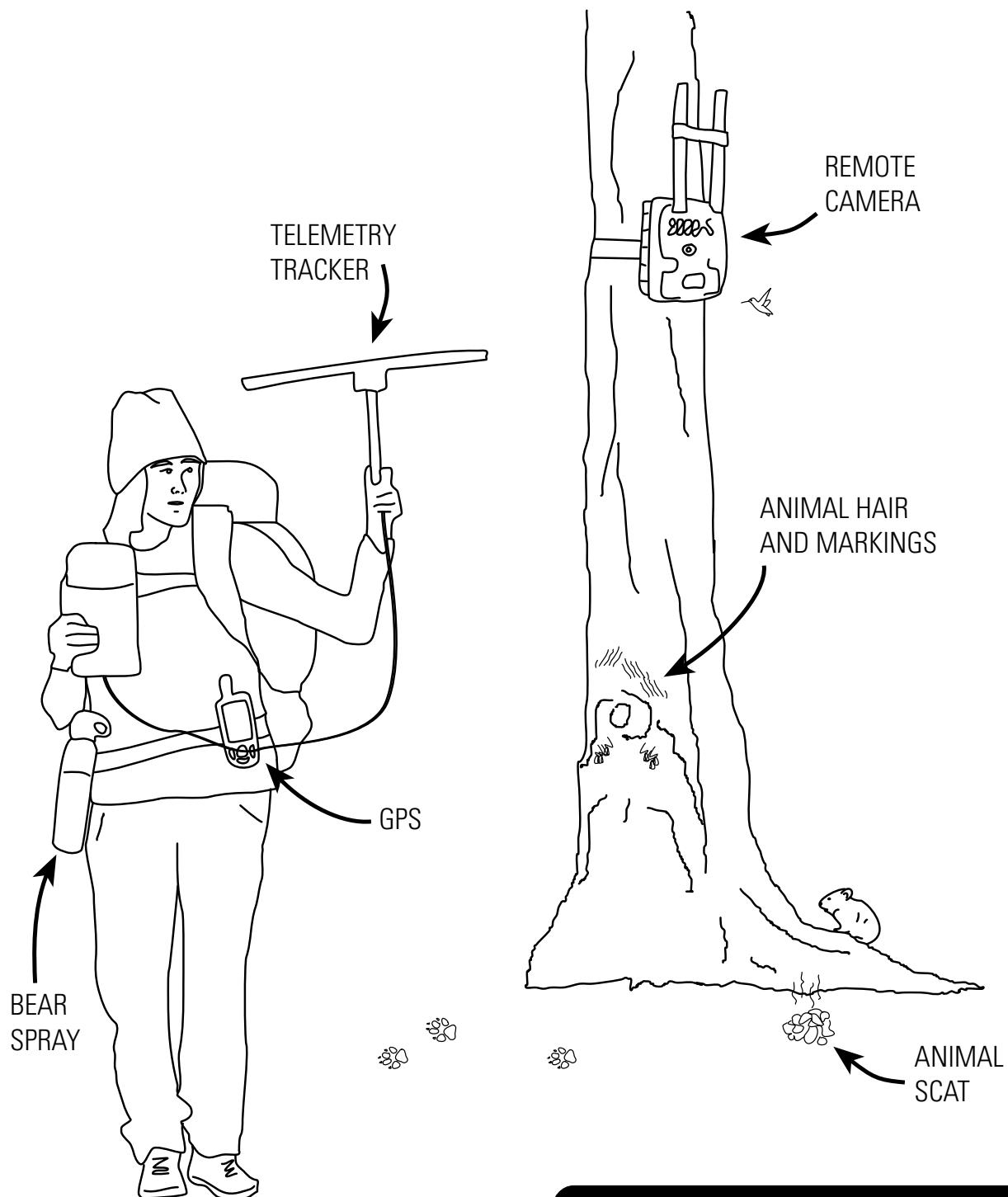
WHAT MY PARENTS THINK...

When I say, "I track wild animals."



WHAT AM I?





WILDLIFE BIOLOGIST

wi·ld·life bi·ol·o·gist

What it is: Someone who studies animals or wildlife* in nature.

How it's said: WHY AULD LIFE BUY AH LOW JIST

What it means: The term "wildlife biologist" means "someone who studies woodland creatures."

- *welt-* = woodlands
- *lif* = body
- *bio-* = life
- *-ology* = study of
- *-ist* = person

*Wildlife refers to the native animals from a place.

JOKING AROUND



What did the buffalo say when his son left?
Bison.

TEST YOUR SMARTS

1. What is the fastest land animal?
 - Cheetah
 - Zebra
 - Deer
 - Leopard
2. What color is a giraffe's tongue?
 - Blue
 - Pink
 - Purple
 - Red

WHAT'S MISSING?

Can you find the 5 items that are missing in this picture compared to the image on page 47?



DID YOU KNOW?



Animal poop, called scat, can be used to identify what species left it and what it has been eating.

Puzzle Answers

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

Pg. 6

7	8	9	2	6	1	3	4	5
6	4	1	9	3	5	7	8	2
5	3	2	7	4	8	6	1	9
4	6	7	3	1	9	5	2	8
8	1	5	4	2	7	9	6	3
2	9	3	5	8	6	1	7	4
9	7	6	8	5	4	2	3	1
1	2	4	6	9	3	8	5	7
3	5	8	1	7	2	4	9	6

Pg. 18

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

Pg. 30

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

Pg. 42

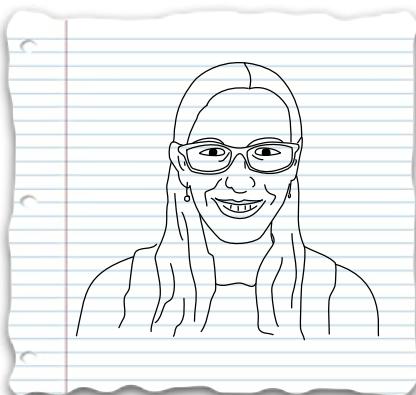
ABOUT THE AUTHORS



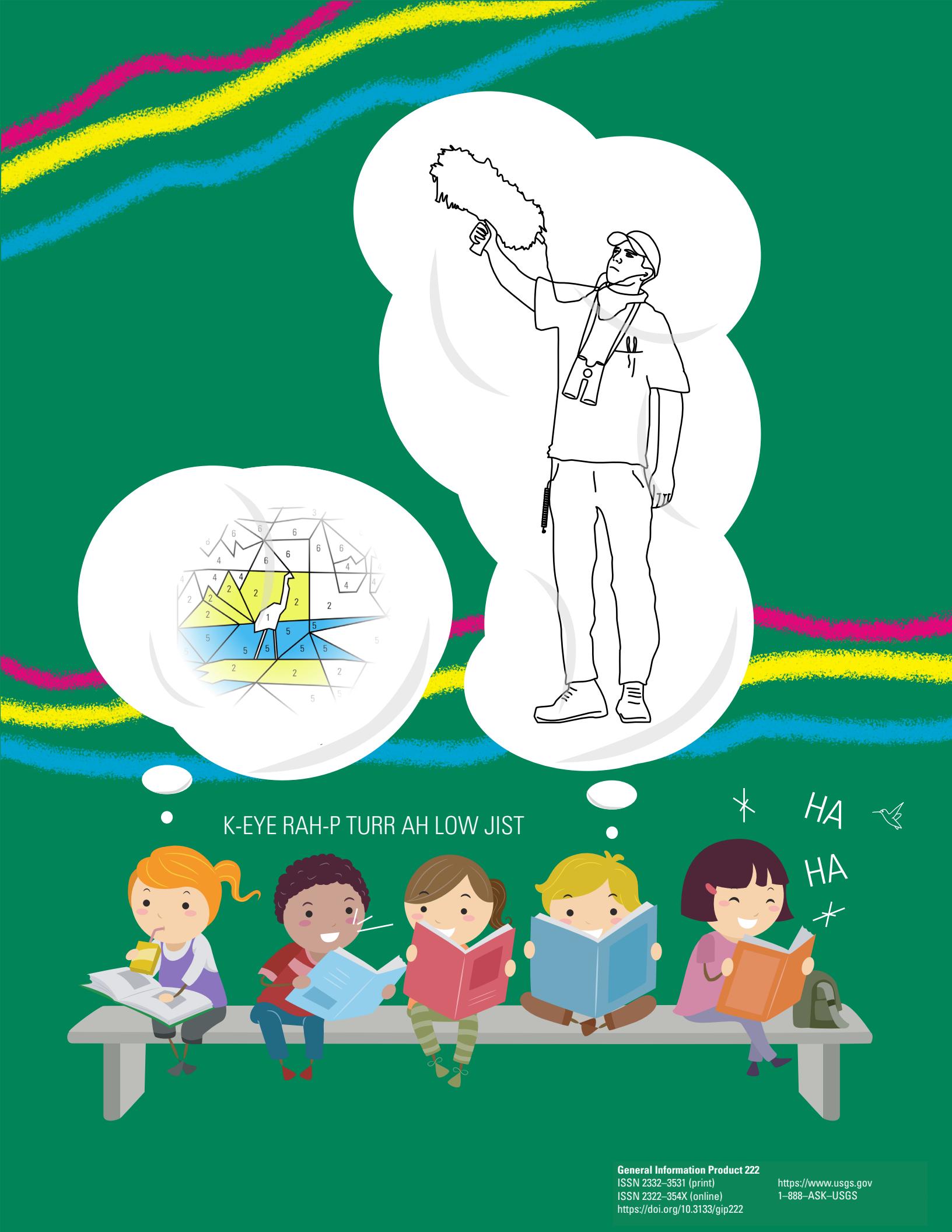
Steven Sobieszczyk is a scientist and artist. While "Sobie" spent most of his career studying landslides and flooding, he now focuses on using creative ways to share science.



Suzanna Soileau is a scientist and educator. Not only does she love spending time in nature, she is passionate about sharing her knowledge about wildlife and the environment.



Annie Scott is a scientist and educator. She loves learning new things every day about this amazing planet and believes that anyone can be a scientist. Stay curious, kids!



K-EYE RAH-P TURR AH LOW JIST