



COLORING PAGES, CROSSWORDS, MAZES, TRIVIA,
WORD SEARCHES, AND MORE....



Do you know what a geomorphologist does?
What does a seismologist do...study sighs?

Well, don't worry! Once again, the answers are inside.

This activity book introduces you to a bunch of cool natural hazard science jobs. When you're done with this activity book, check out our previous science career activity book for more fun!

<https://doi.org/10.3133/gip222>



FOR MORE SCIENCE STUFF, VISIT:

<https://www.usgs.gov/>

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

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



USGS Natural Hazards Mission Area

I Am A...

Science Careers Book for Kids

PART 2

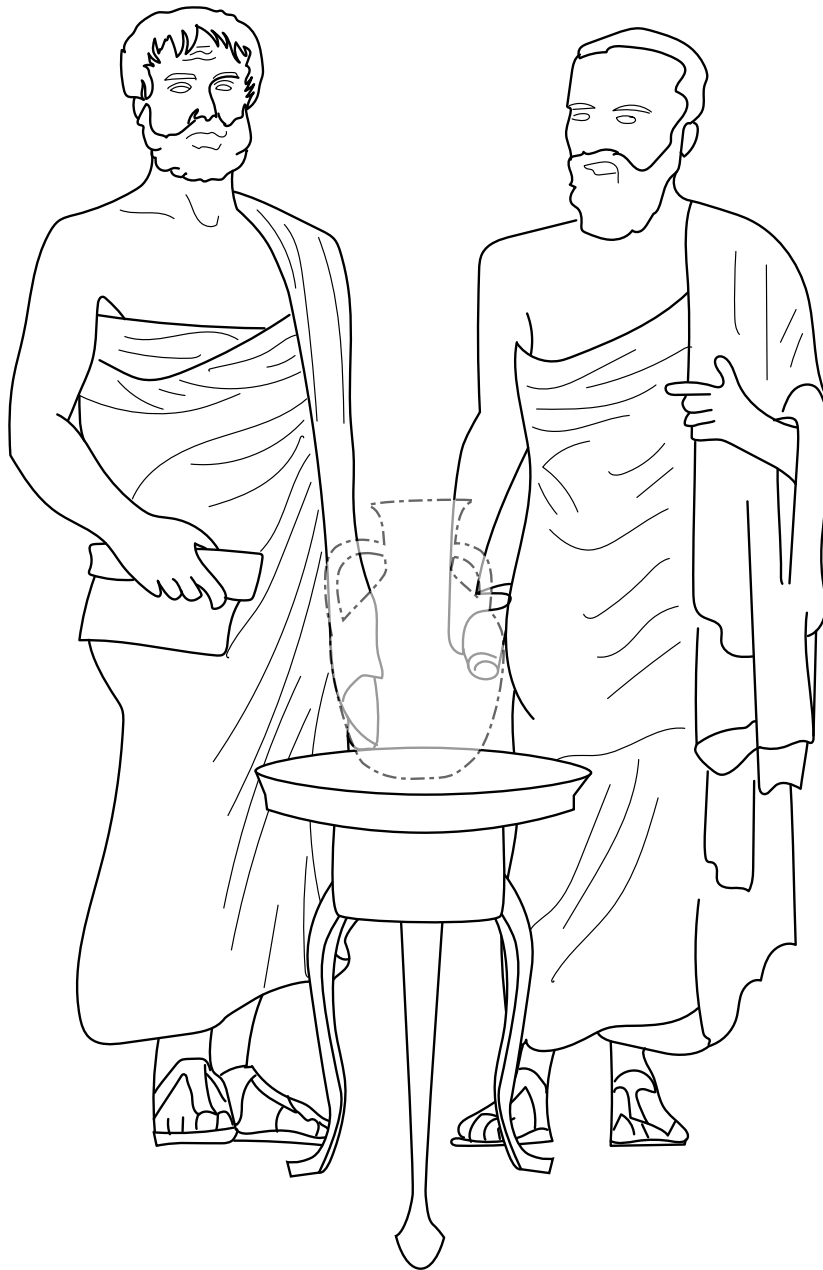
By Steven Sobieszczyk

Acknowledgments

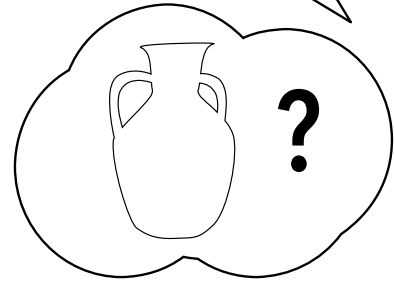
I would like to thank all the subject matter experts and staff who helped provide authenticity to our careers and their representation, including Suzanna Soileau, Annie Scott, Holly Weiss-Racine, Rachel Pawlitz, Gary Latzke, Eleanour Snow, Wendy Stovall, Austin Elliott, Alexandra Hatem, Sara Ernst, Sara McBride, Jack Friedman, James Mosley, and Paul Earle.

WHAT MY PARENTS THINK...

When I say, "I try to understand how ancient humans lived."

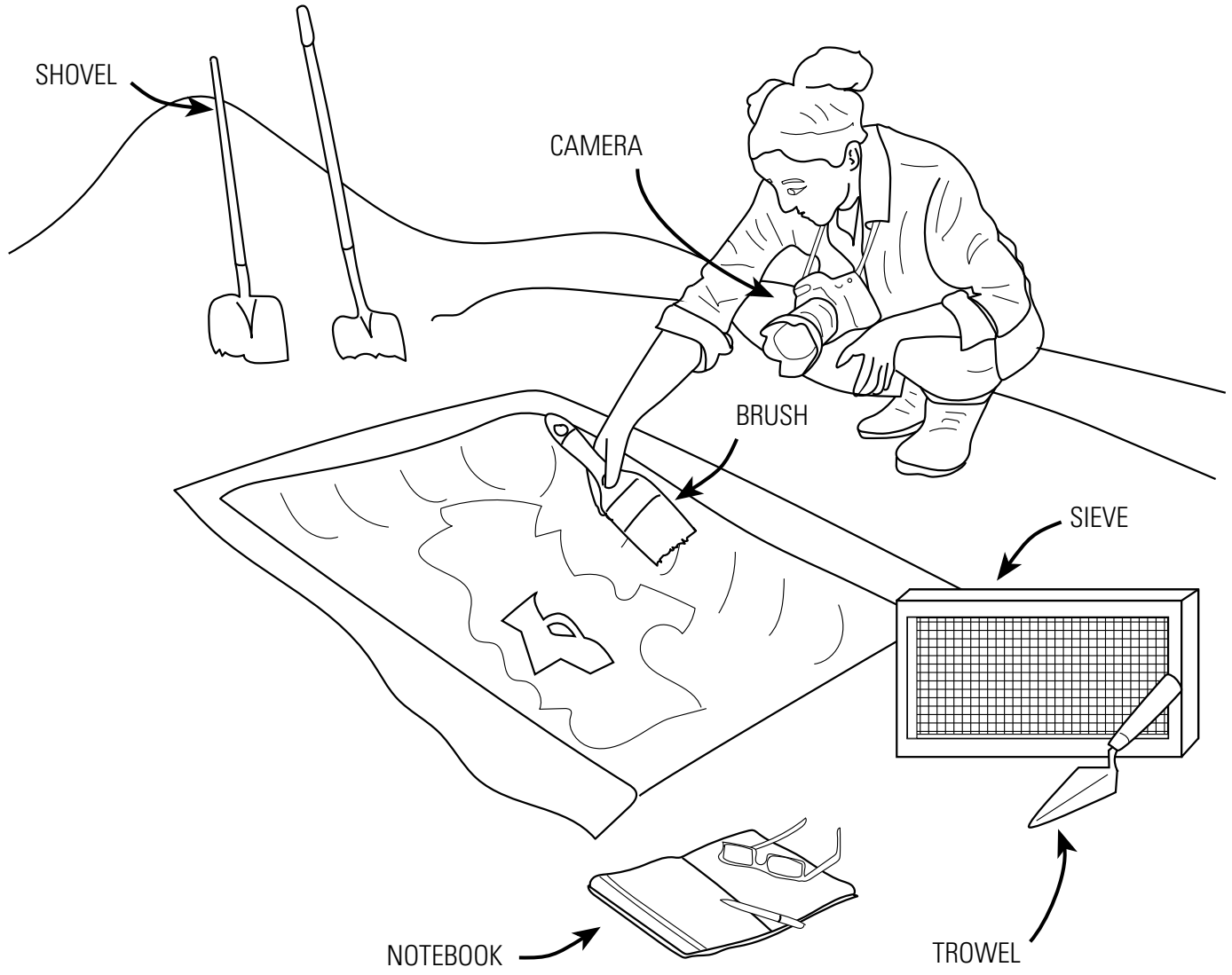


WHAT AM I?




Hmmm.





HELLO
I AM AN...
ARCHAEOLOGIST
Someone who studies ancient history

DID YOU KNOW?
 The early human fossil "Lucy" was named after the Beatles' song "Lucy in the Sky with Diamonds."

ARCHAEOLOGIST

ar-cha-e-ol-o-gist

What it is: Someone who studies ancient history by collecting and analyzing physical remains.

How it's said: AR KEY OL O JIST

What it means: The term "archaeologist" means "someone who studies ancient things."

- arkhairo- = ancient
- -ology = study of
- -ist = person

JOKING AROUND



Why did the archaeologist get promoted?
They dug deep and found success.

TEST YOUR SMARTS

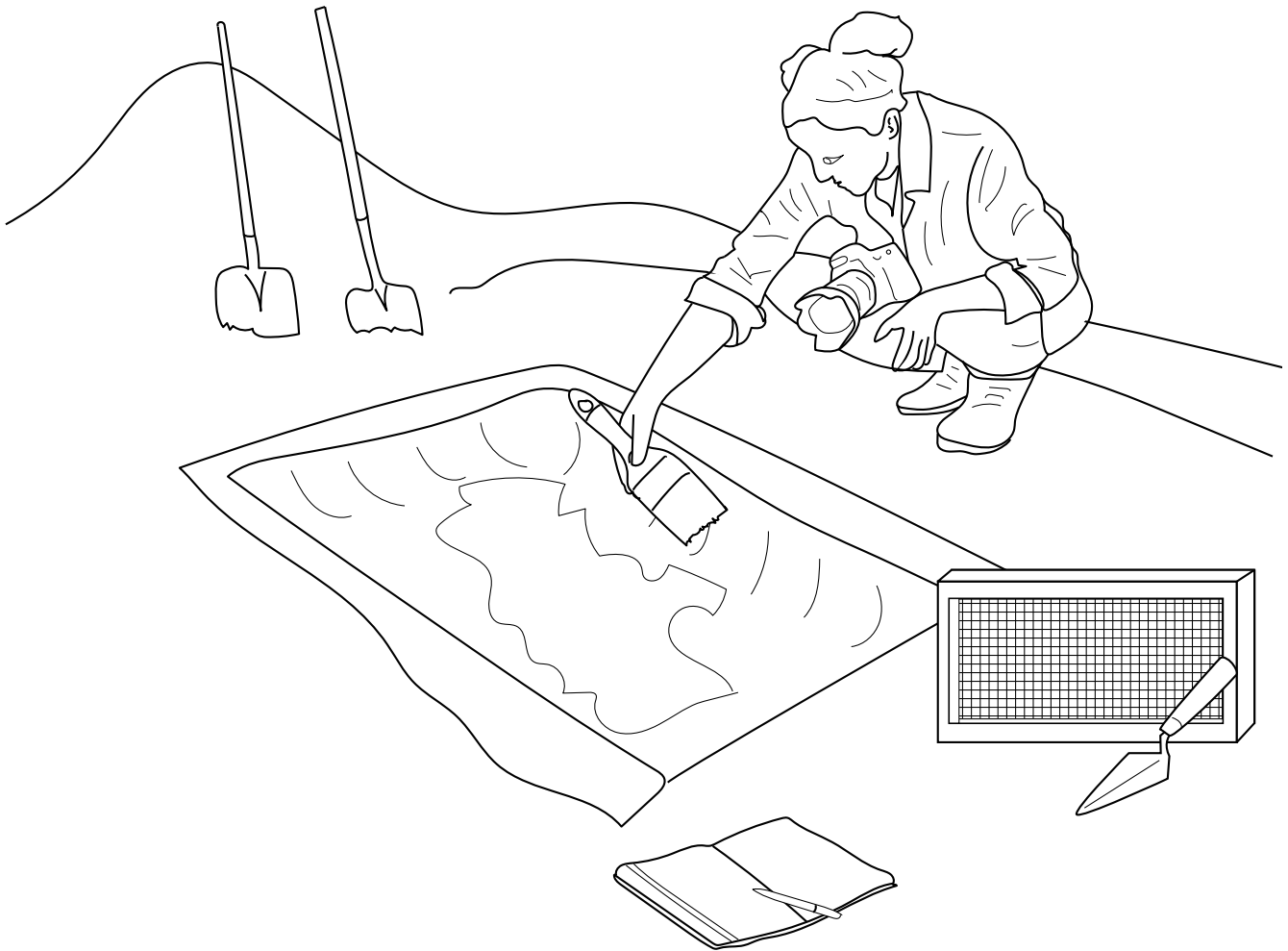
1. When did Mount Vesuvius erupt and bury the cities of Pompeii and Herculaneum in volcanic ash?
 - a. 1980
 - b. 1492
 - c. 79
 - d. 503

2. Approximately how long ago did humans arrive in North America?
 - a. 1 million years ago
 - b. 22,000 years ago
 - c. 200,000 years ago
 - d. 500 years ago

3. A major earthquake in the year 365 destroyed most towns on which Mediterranean Sea island?
 - a. Atlantis
 - b. Crete
 - c. Madagascar
 - d. Tahiti

WHAT'S MISSING?

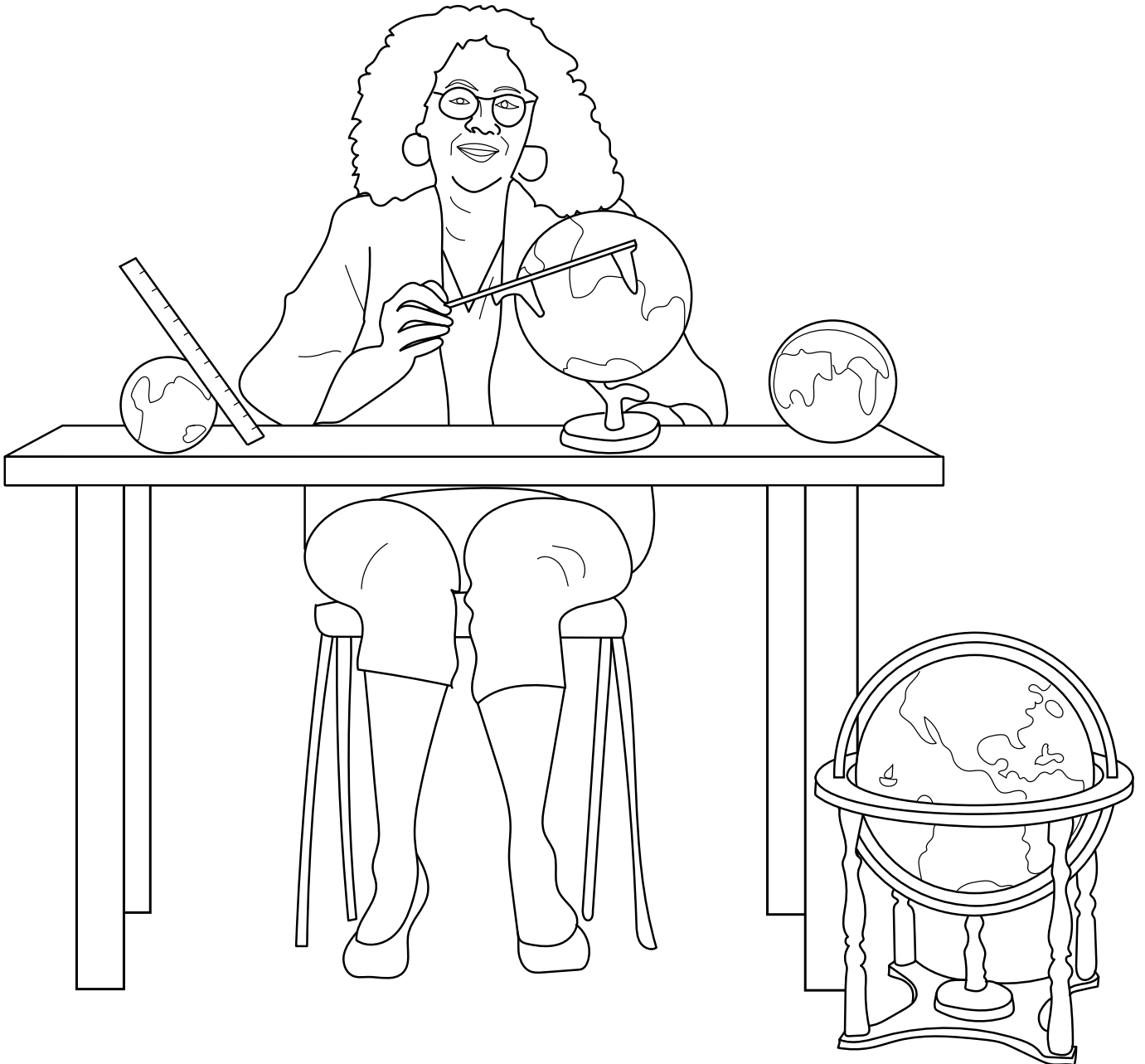
Can you find the five items that are missing in this picture compared with the image on page 2? The answers are on page 48.

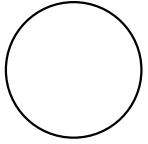


WHAT MY PARENTS THINK...

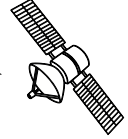
When I say, "I measure changes to the size and shape of Earth."

WHAT AM I?





SATELLITE



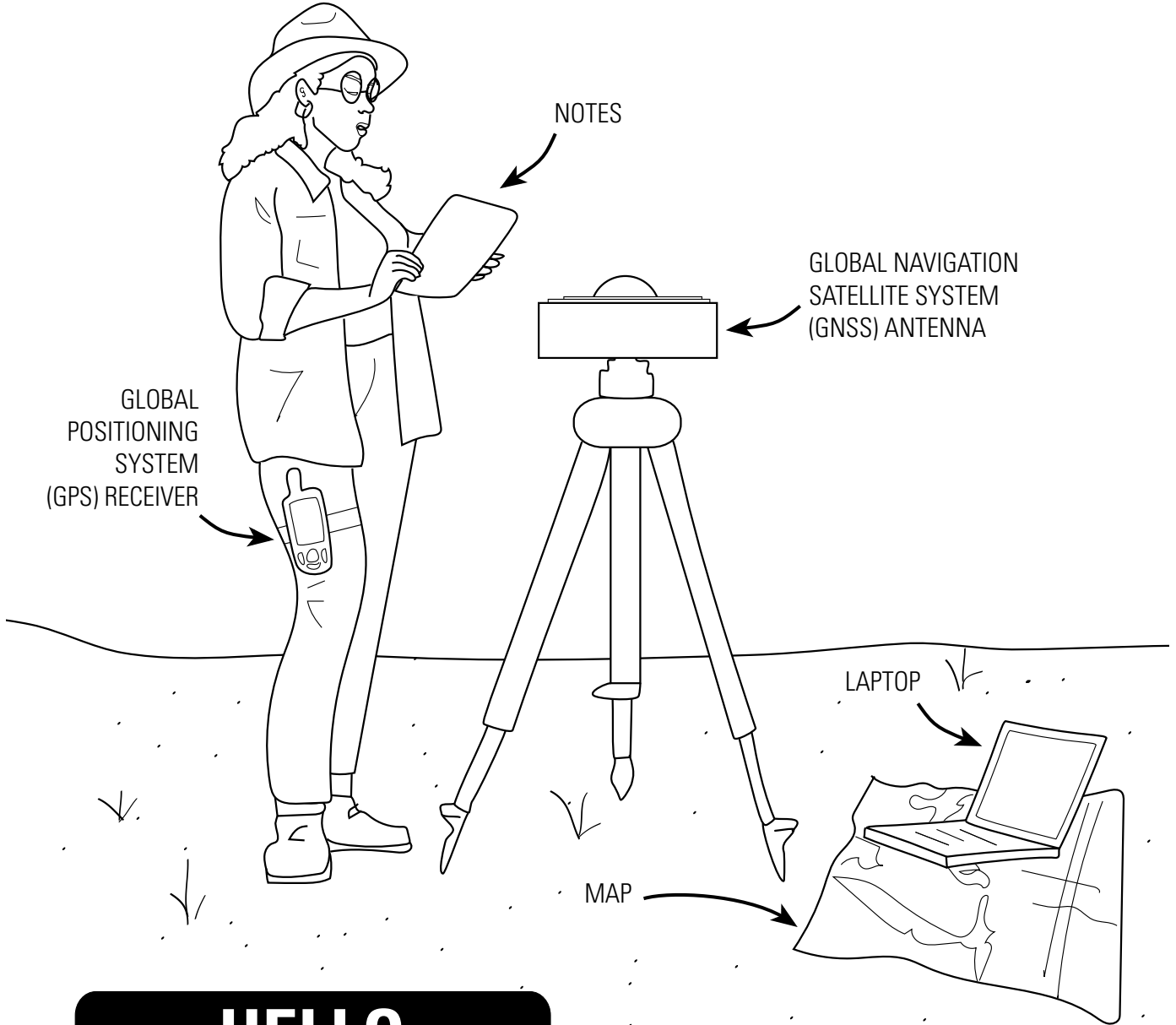
NOTES

GLOBAL NAVIGATION
SATELLITE SYSTEM
(GNSS) ANTENNA

GLOBAL
POSITIONING
SYSTEM
(GPS) RECEIVER

LAPTOP

MAP



HELLO

I AM A...

GEODESIST

Someone who studies the size and shape
of the Earth

DID YOU KNOW?



Earth is not round, but slightly
oval. It is wider along the equator
than around the poles.

GEODESIST

ge-od-e-sist

What it is: Someone who studies the size and shape of the Earth.

How it's said: GE ODD EH SIST

What it means: The term "geodesist" means "someone who divides the Earth up."

- geo- = Earth
- daiein- = to divide
- -ist = person

JOKING AROUND



Why does the Earth enjoy spinning?
Because it's fun to make a day of it.

TEST YOUR SMARTS

1. Approximately how many miles is the distance around the Earth?
 - a. 80 miles
 - b. 400 miles
 - c. 25,000 miles
 - d. 80,000 miles

2. Which one of these options is *not* a layer of the Earth?
 - a. Crust
 - b. Mantle
 - c. Veneer
 - d. Core

3. How fast does Earth spin around its axis?
 - a. 100 miles per hour
 - b. 1,000 miles per hour
 - c. 10,000 miles per hour
 - d. 25,000 miles per hour

SUDOKU

Fill every box with a number so that each row, column, and 3×3 grouping contains all the numbers from 1 to 9 without repeating any. The answers are on page 49.

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

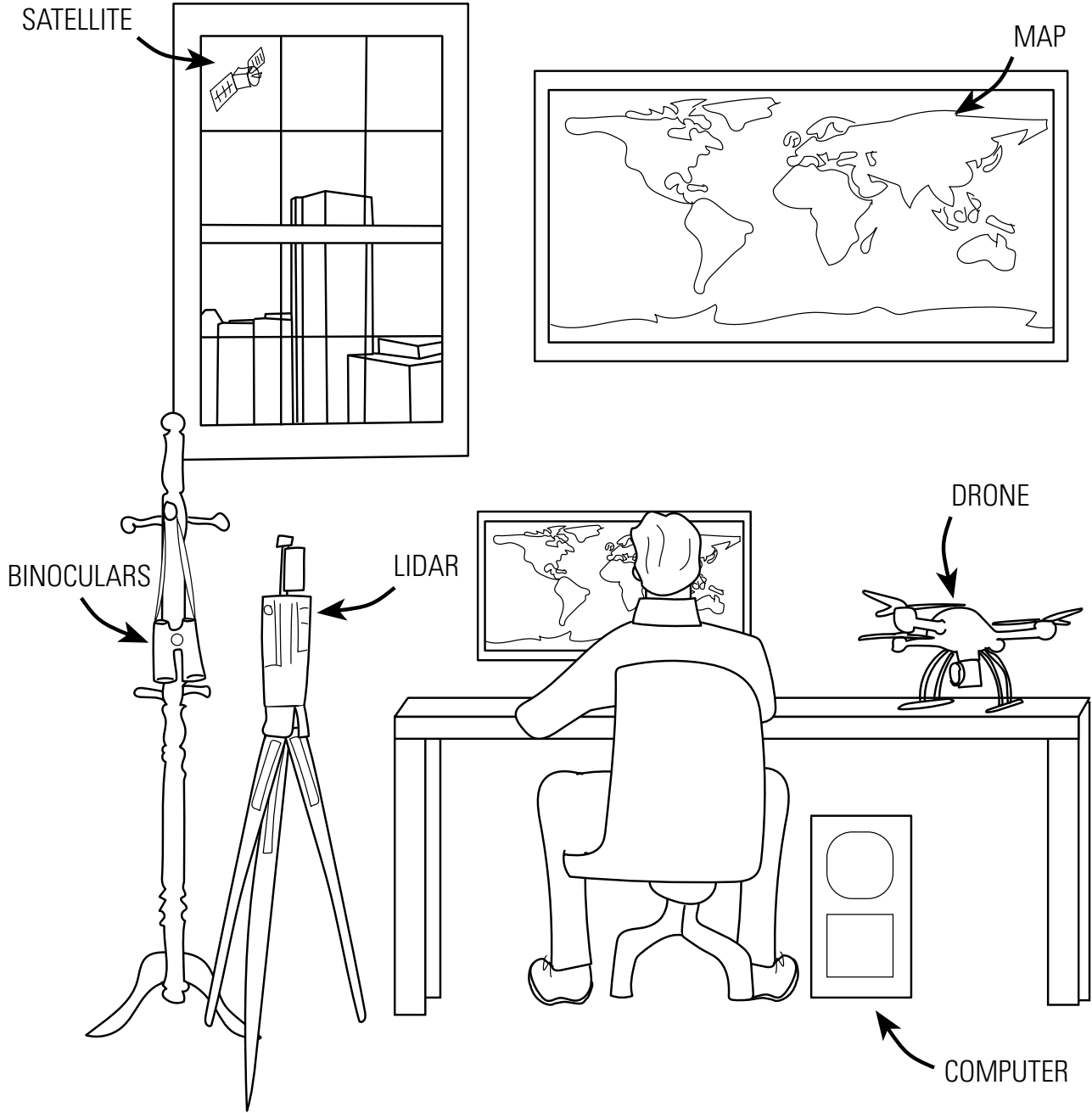
			ROW		
COLUMN			3x3 GROUPING		

WHAT MY PARENTS THINK...


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

WHAT AM I?





HELLO
I AM A...
GEOGRAPHER
Someone who studies the Earth's features and how we interact with them

DID YOU KNOW?
 Mauna Kea, located on the island of Hawaii, is taller than Mount Everest, but nearly half of it is under the Pacific Ocean.

GEOGRAPHER

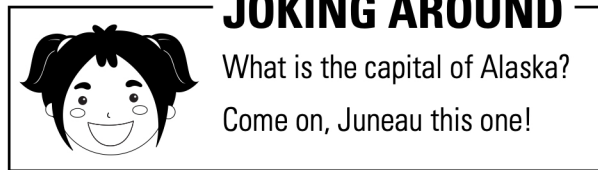
ge-og-ra-pher

What it is: Someone who studies the features, layout, and interrelationships of things on Earth.

How it's said: GEE AH GRAH FUR

What it means: The term "geographer" means "someone who describes the Earth."

- geo- = Earth
- -graphia = description
- -er = person



TEST YOUR SMARTS

1. What is the imaginary line that separates the Northern and Southern Hemispheres?
 - a. Prime meridian
 - c. Equator
 - b. Continental divide
 - d. International date line

2. Which type of map shows differences in how high or low the land surface is?
 - a. Topographic
 - c. Resource
 - b. Boundary
 - d. Physical

3. What satellites does the U.S. Geological Survey use to study landscape changes on Earth?
 - a. Landsat
 - c. LandEye
 - b. EarthView
 - d. GeoOrbiter

WORD SEARCH

The answers are on page 48.

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

BINOCULARS
 COMPUTER
 EXPLORE
 GEOGRAPHER
 GLOBE

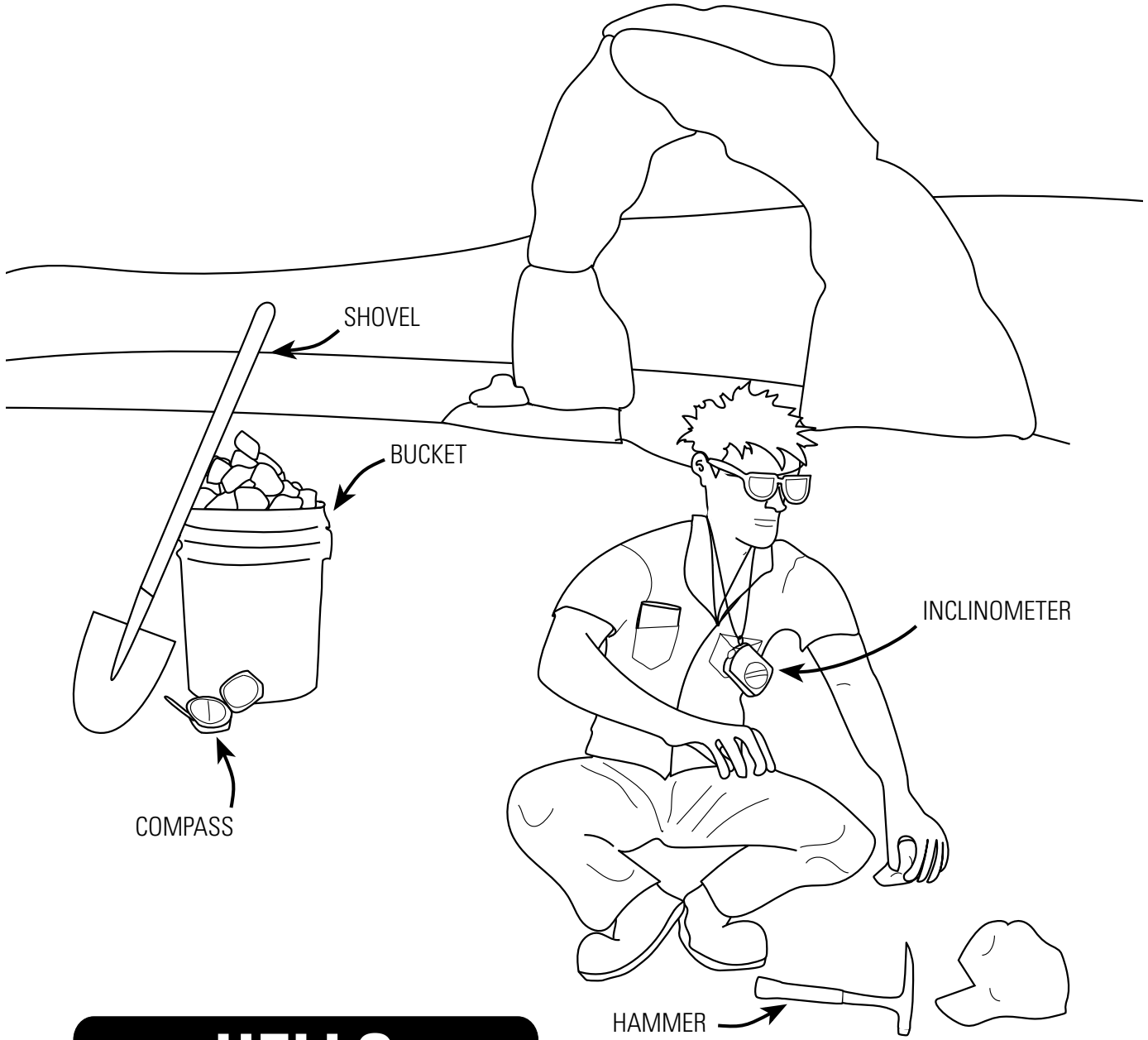
MAPS
 SATELLITE
 SURVEYOR
 TABLET
 WORLD

WHAT MY PARENTS THINK...


When I say, "I'm totally a 'rock' star.
Cuz, you know, I study rocks."

WHAT AM I?





HELLO
I AM A...
GEOLOGIST
Someone who studies the Earth

DID YOU KNOW?
 Antacids taste like chalk...because they are chalk! Chalk, or calcium carbonate, is a mineral that has many different uses, including in medicines!

GEOLOGIST

ge-o-lo-gist

What it is: Someone who studies the history, nature, materials, and processes of Earth.

How it's said: GEE AH LOW JIST

What it means: The term "geologist" means "someone who studies the Earth."

- geo- = Earth
- -ology = study of
- -ist = person



JOKING AROUND

What's a geologist's favorite ice cream?
Rock erode.

TEST YOUR SMARTS

1. What is the hardest mineral on Earth?

a. Quartz	c. Sapphire
b. Garnet	d. Diamond

2. How old are the oldest rocks on Earth?

a. 4.0 billion years old	c. 4.0 million years old
b. 1.0 billion years old	d. 1.0 million years old

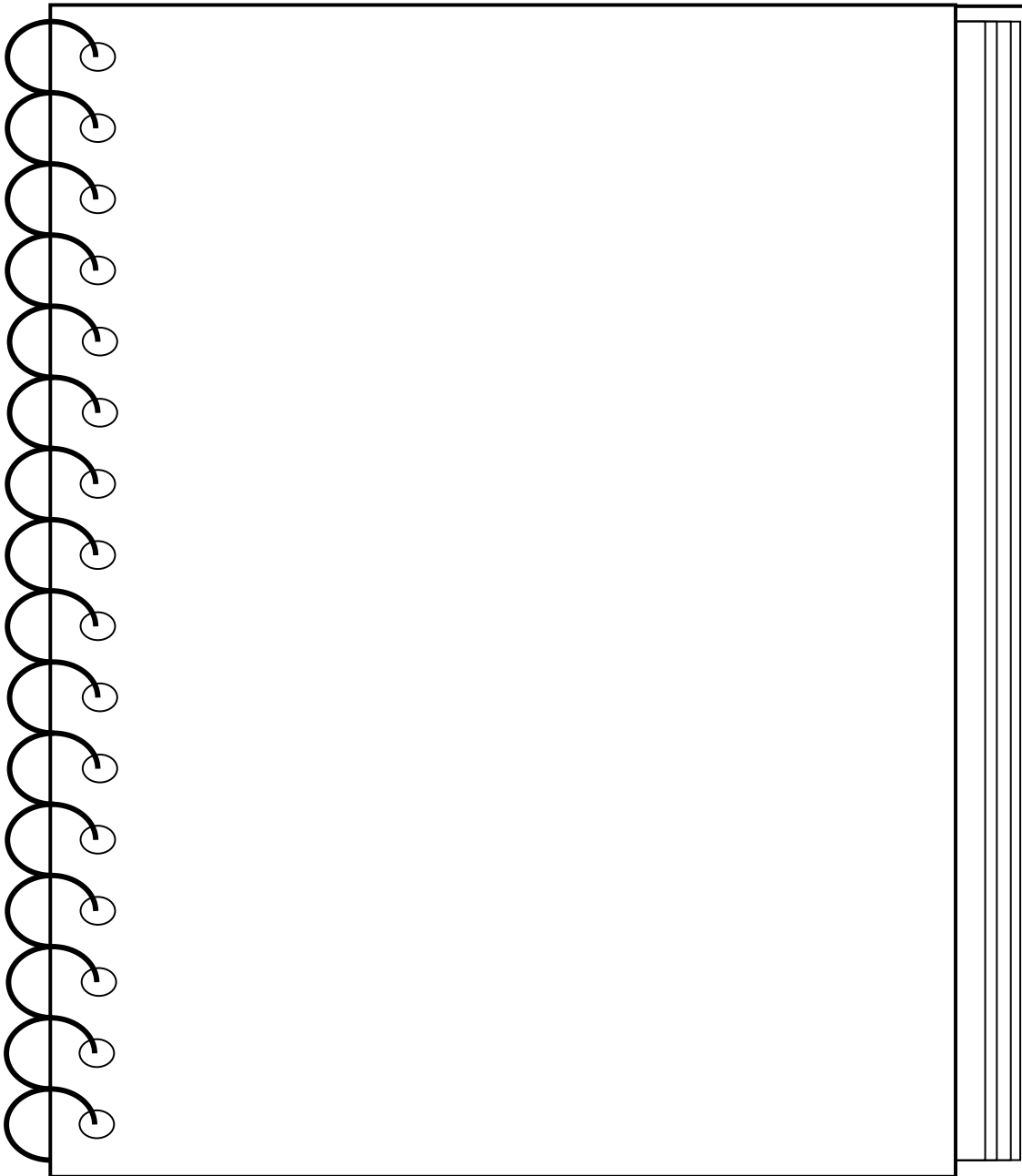
3. What is the deepest canyon in the United States?

a. Grand Canyon	c. Zion Canyon
b. Bryce Canyon	d. Hells Canyon

ROCK SKETCH

FIND A ROCK AND DRAW IT

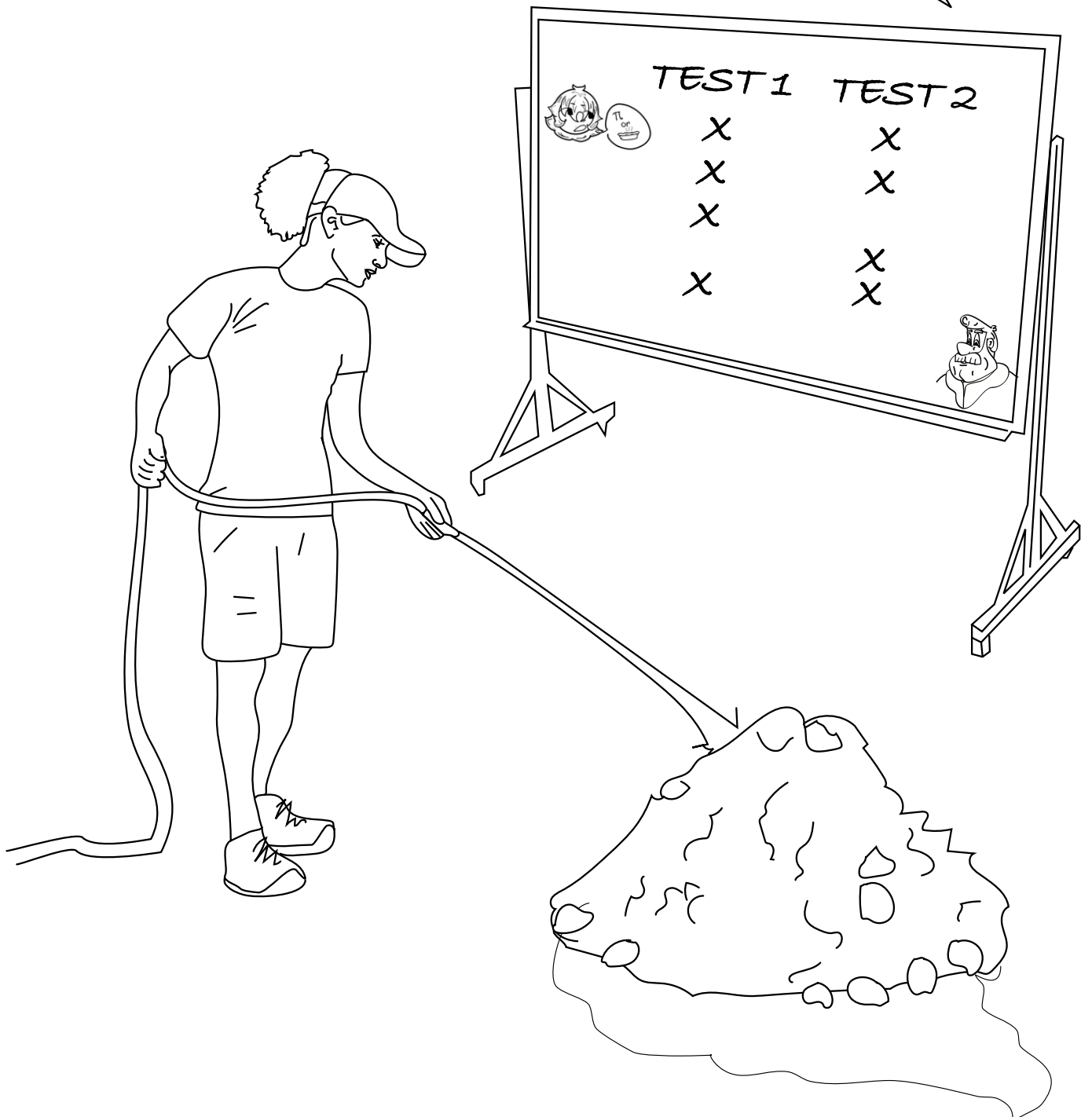
Geologists often sketch the rocks they see...you too could become a geologist! Look for an interesting rock outside and draw all the details you see (for example, crystals, layers, or fossils). Do you know what type of rock you have or where it came from?

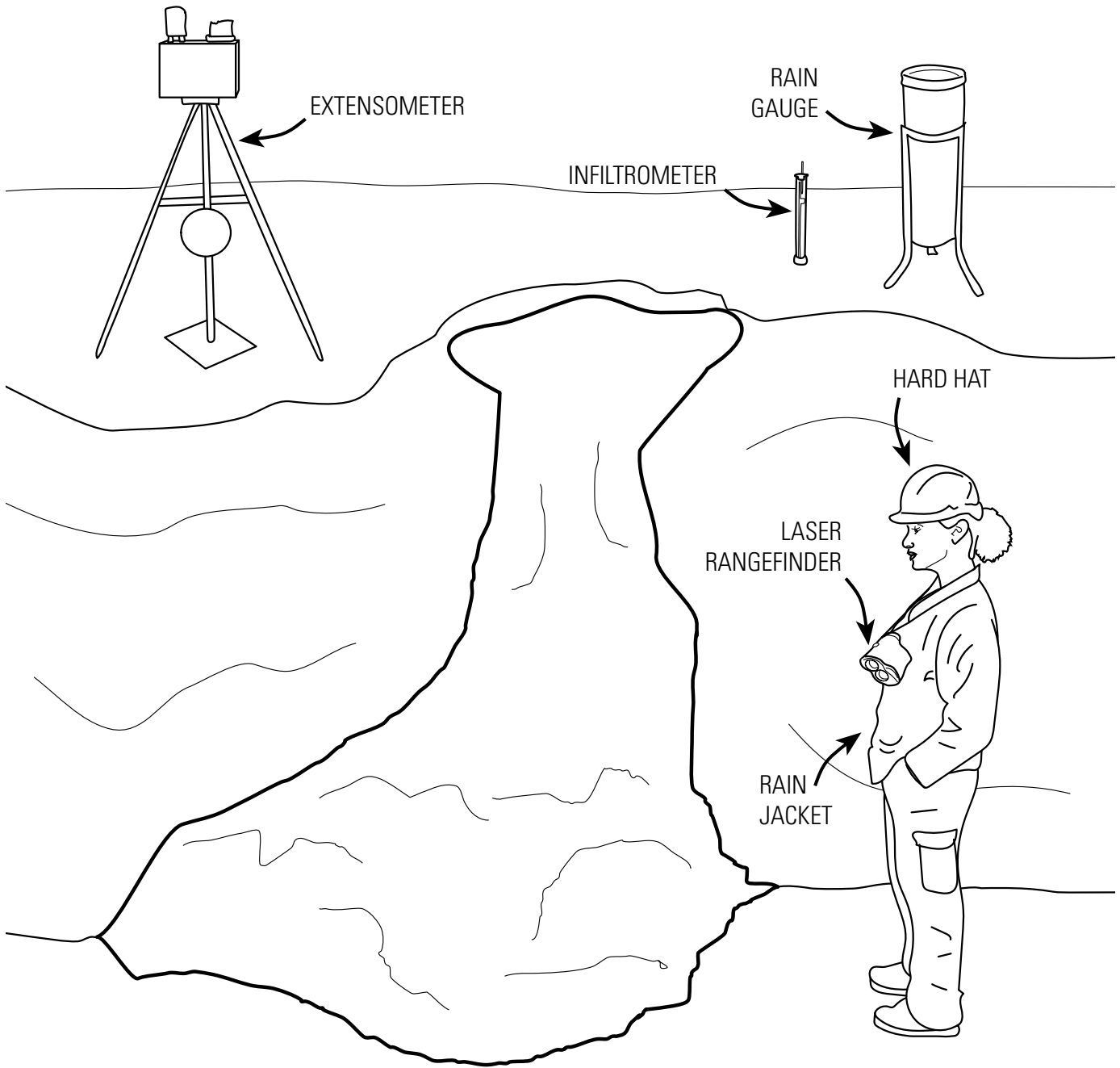


WHAT MY PARENTS THINK...

When I say, "I study how water makes the ground move."

WHAT AM I?





HELLO
I AM A...

GEOMORPHOLOGIST

Someone who studies Earth's surface features



DID YOU KNOW?

It's not just rain that causes landslides, but also earthquakes, volcanic eruptions, and even human activity.

GEOMORPHOLOGIST


ge-o-mor-phol-o-gist

What it is: Someone who studies the characteristics, origin, and change of Earth's surface features.

How it's said: GEE OH MORE FALL O JIST

What it means: The term "geomorphologist" means "someone who studies the shape of the Earth."

- geo- = Earth
- morpho- = shape
- -ology = study of
- -ist = person



JOKING AROUND

What makes mountains so funny?
Because they are hill areas.

TEST YOUR SMARTS

1. Which is *not* a type of landslide?

a. Debris flow	c. Rockfall
b. Earthflow	d. Rock throw

2. Which tool is *not* used to monitor landslide conditions?

a. Extensometer	c. Infiltrimeter
b. Rain gauge	d. Fathometer

3. What handheld tool is used to measure long distances?

a. Laser rangefinder	c. Velocimeter
b. Inclinator	d. Densitometer

WORD SCRAMBLE

The answers are on page 49.

NERFLMTETRIOI

TXMESNEETOER

NIRA EGUGA

RLASE RDIRNAEFENG

NARI JEKATC

OFRNLMDA

DLLNESDIA

ESIBRD OWLF

WOAERLFHT

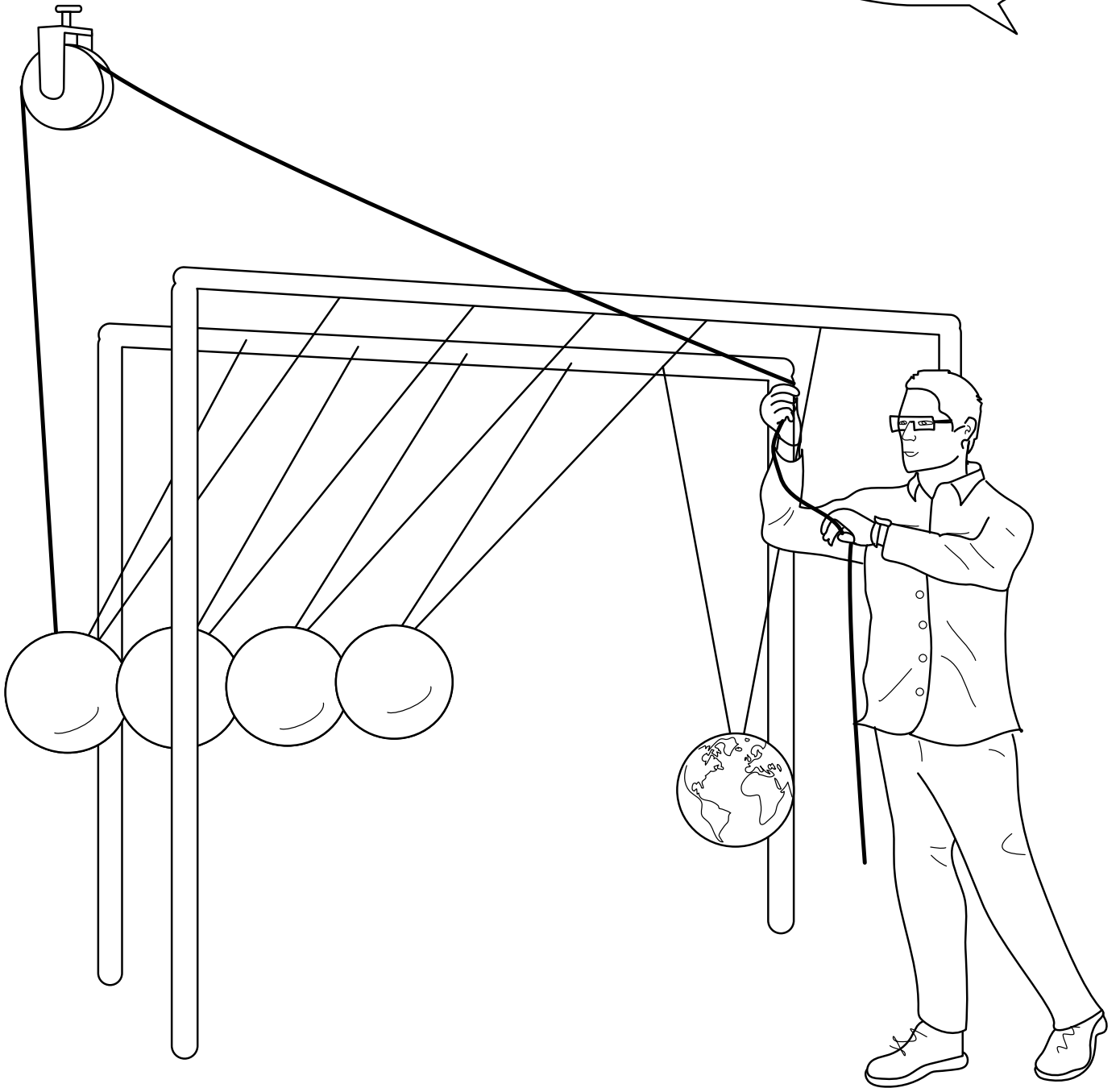
RKACLFLO

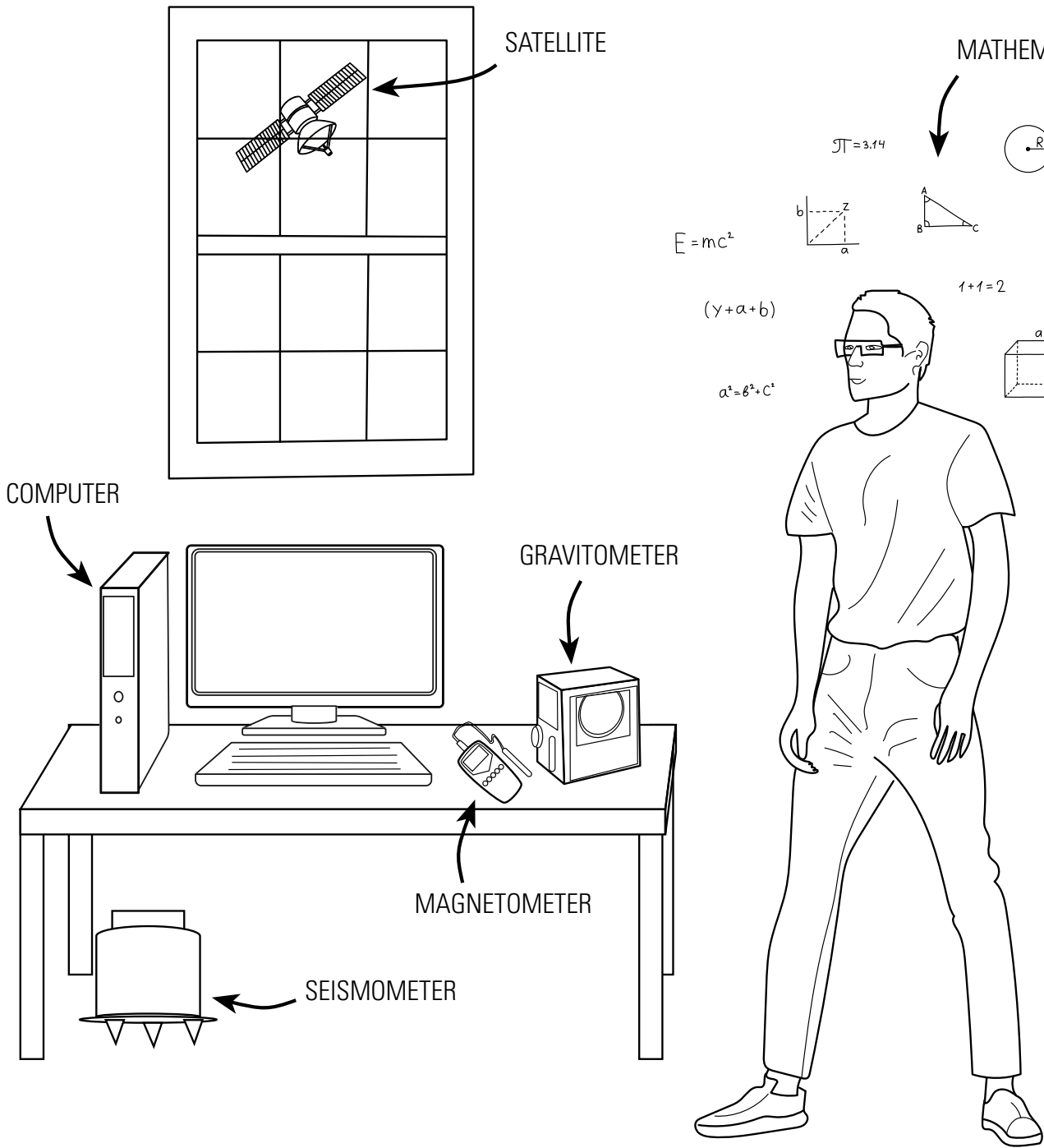
- | | |
|---------------|-------------------|
| DEBRIS FLOW | LANDSLIDE |
| EARTHFLOW | LASER RANGEFINDER |
| EXTENSOMETER | RAIN GAUGE |
| INFILTROMETER | RAIN JACKET |
| LANDFORM | ROCKFALL |

WHAT MY PARENTS THINK...

When I say, "I look at how different forces affect Earth."

WHAT AM I?





HELLO
I AM A...
GEOPHYSICIST
Someone who studies the materials and energy of the Earth

DID YOU KNOW?
Earth's crust is made up of 15 large tectonic plates and many smaller microplates.



GEOPHYSICIST

ge-o-phys-i-cist

What it is: Someone who studies the materials and energy of Earth and its atmosphere.

How it's said: GEE OH FIZZ IH SIST

What it means: The term "geophysicist" means "someone who describes the Earth's natural design."

- geo- = Earth
- physika- = natural things
- -ist = person

JOKING AROUND



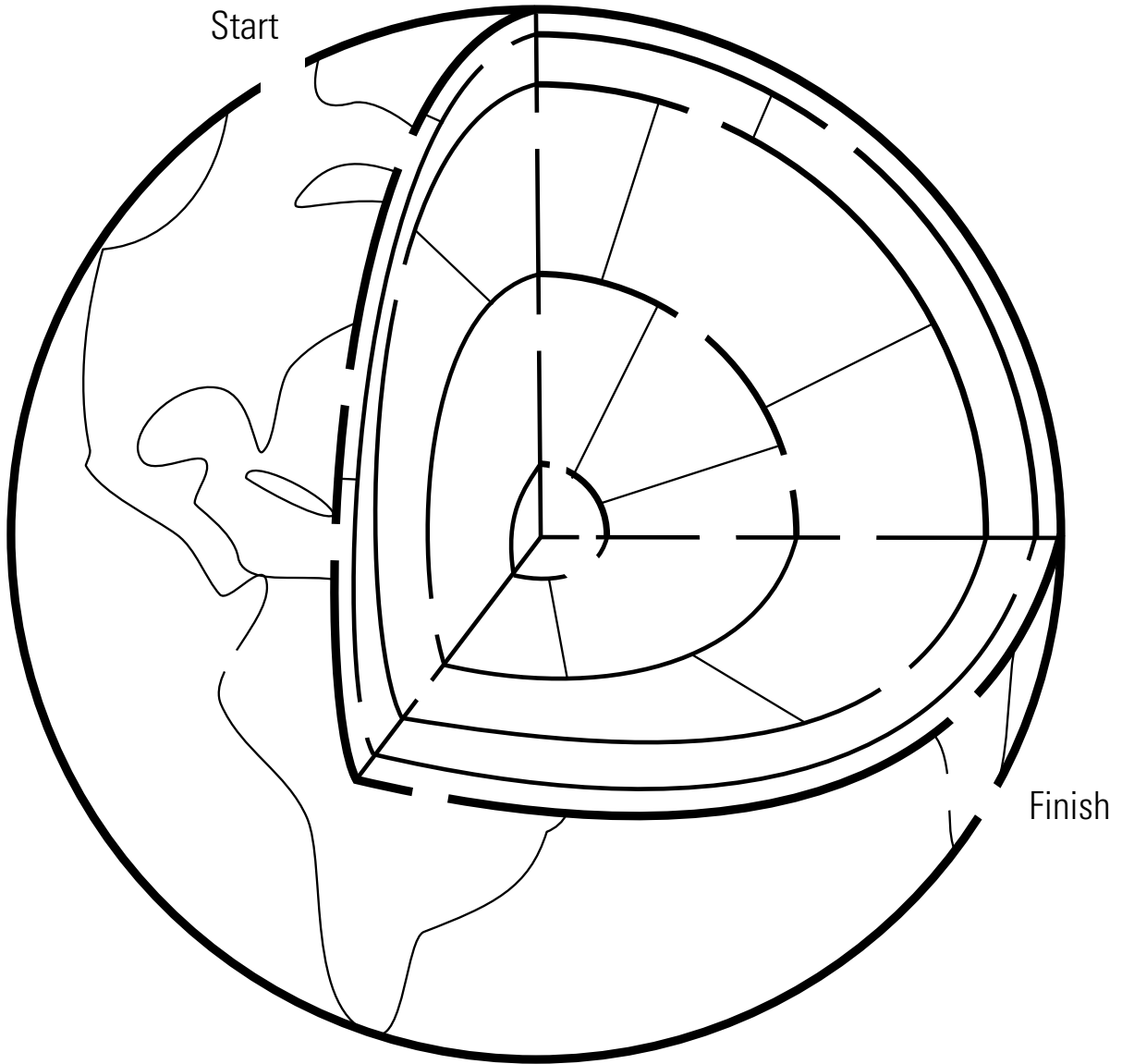
What did one tectonic plate say to the other?
Why so much friction?

TEST YOUR SMARTS

- What is the technical name for the northern lights?
 - Terram luminaria
 - Aurora borealis
 - Lumen lunae
 - Lacus aqua
- What is directly affected by sunspots, solar storms, and space weather?
 - Telecommunications
 - Umbrella manufacturing
 - Long-haul truck shipping
 - Crop harvesting
- When did scientists discover and describe plate tectonics?
 - 1660s
 - 1760s
 - 1860s
 - 1960s

EARTH MAZE

The answer is on page 50.

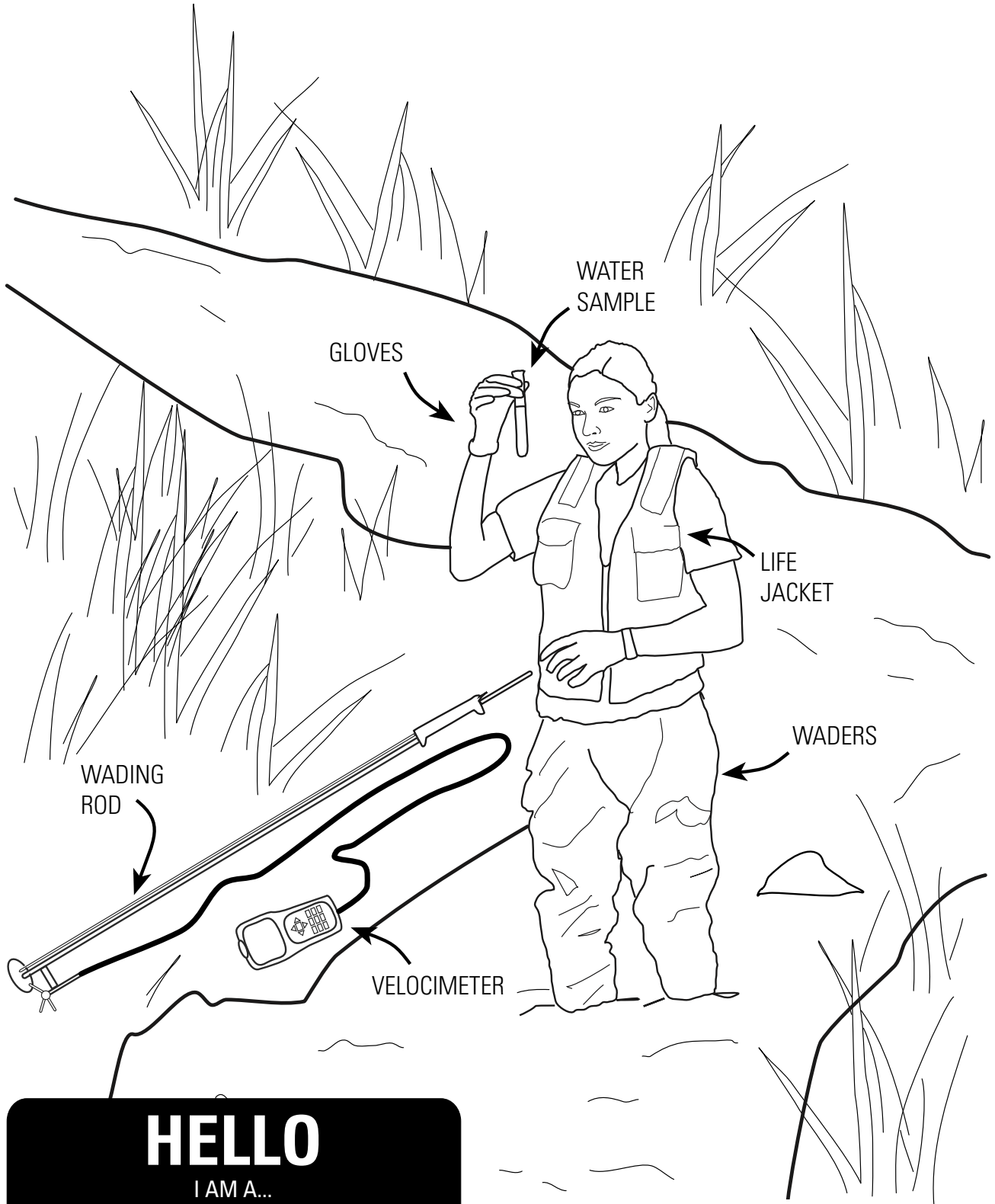


WHAT MY PARENTS THINK...

When I say, "I don't chase waterfalls, but I stick to rivers and the streams I'm used to."

WHAT AM I?





HELLO
I AM A...
HYDROLOGIST
Someone who studies water



DID YOU KNOW?

About 60% of the human body is made up of water.

HYDROLOGIST

hy-drol-o-gist

What it is: Someone who studies where water is, its quality, and how it functions above and below ground.

How it's said: HI DRAWL OH JIST

What it means: The term "hydrologist" means "someone who studies water."

- hydro- = water
- -ology = study of
- -ist = person



JOKING AROUND

What state does the Mississippi River flow in?
Liquid.

TEST YOUR SMARTS

1. At what temperature does water freeze?
 - a. 0 degrees Fahrenheit
 - b. 10 degrees Fahrenheit
 - c. 32 degrees Fahrenheit
 - d. 100 degrees Fahrenheit

2. What is the chemical name for water?
 - a. Sodium chloride (NaCl)
 - b. Dihydrogen monoxide (H₂O)
 - c. Sodium bicarbonate (NaHCO₃)
 - d. Hydrogen peroxide (H₂O₂)

3. What tool measures streamflow velocity?
 - a. Streamometer
 - b. Speedometer
 - c. Odometer
 - d. Velocimeter

WORD SCRAMBLE

The answers are on page 50.

SMFAROTELW

VEOTMELICRE

DWAESR

IEFL AKCTEJ

ARETW-YQTUIAL SNROES

LTBAET

LOVEGS

RRUBTITYA

SEEHAWTDR

GIHLYTDROOS

HYDROLOGIST

GLOVES

LIFE JACKET

STREAMFLOW

TABLET

TRIBUTARY

VELOCIMETER

WADERS

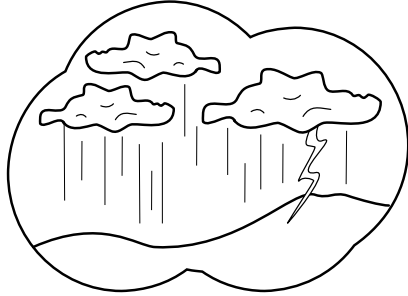
WATER-QUALITY SENSOR

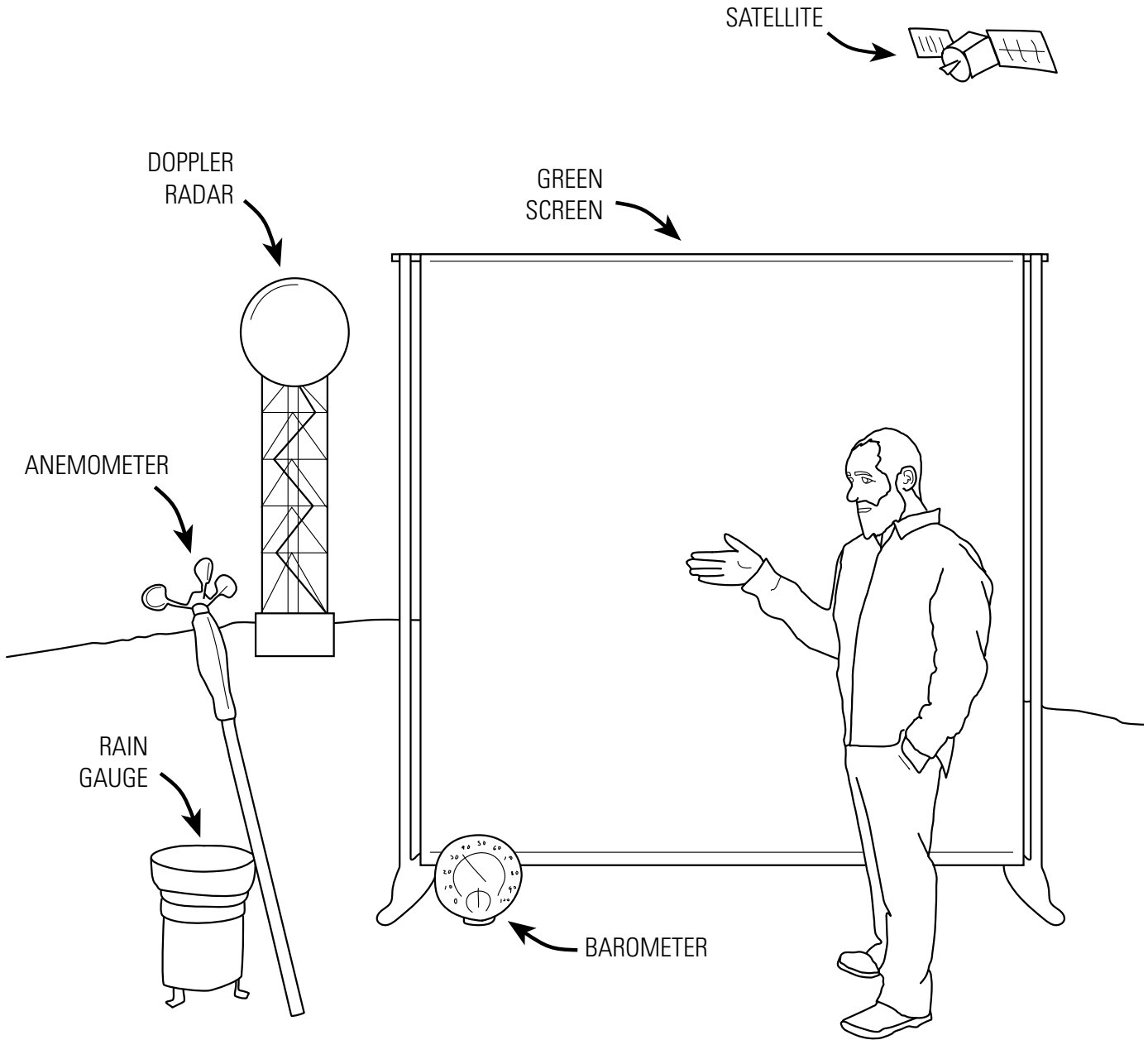
WATERSHED

WHAT MY PARENTS THINK...

When I say, "I talk about the weather all day."

WHAT AM I?





HELLO
I AM A...

METEOROLOGIST

Someone who studies weather and climate

DID YOU KNOW?



The coldest temperature ever recorded on Earth was -128.6°F in Antarctica in 1983.

METEOROLOGIST

me-te-o-ro-lo-gist

What it is: Someone who studies the atmosphere, weather, and the climate.

How it's said: ME TEE O RAH LOW JIST

What it means: The term "meteorologist" means "someone who studies things high up in the air."

- meteōron- = high up things
- -ology = study of
- -ist = person

JOKING AROUND



What's the opposite of a cold front?
A warm back.

TEST YOUR SMARTS

1. What do we call the area in the United States that experiences the most tornadoes?
 - a. Twister belt
 - b. F5 funtown
 - c. Windy ridge
 - d. Tornado alley

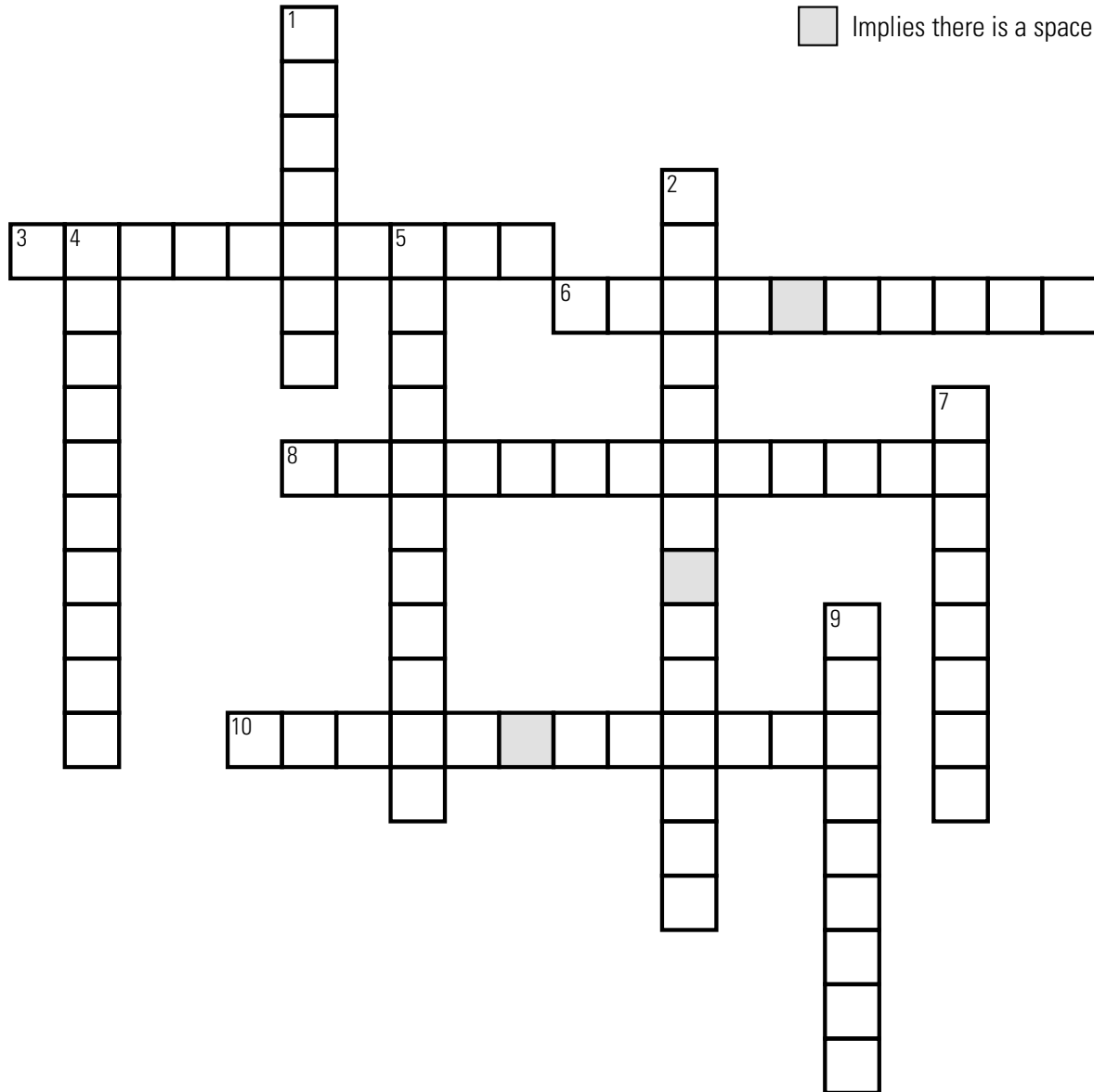
2. At what speed does a tropical storm become a hurricane?
 - a. 74 miles per hour
 - b. 101 miles per hour
 - c. 127 miles per hour
 - d. 146 miles per hour

3. Which condition is *not* part of a "red flag warning" for increased wildfire activity?
 - a. Low humidity
 - b. Time of day
 - c. Warm temperatures
 - d. Strong winds

1. d, 2. a, 3. b

CROSSWORD

The answers are on page 51.



ACROSS

3. Devices that fly around the Earth that collect weather information
6. A scientific instrument for collecting and measuring the amount of rainfall
8. Term that describes all rain, snow, sleet, or hail
10. A person who follows and documents tornados and other extreme weather events

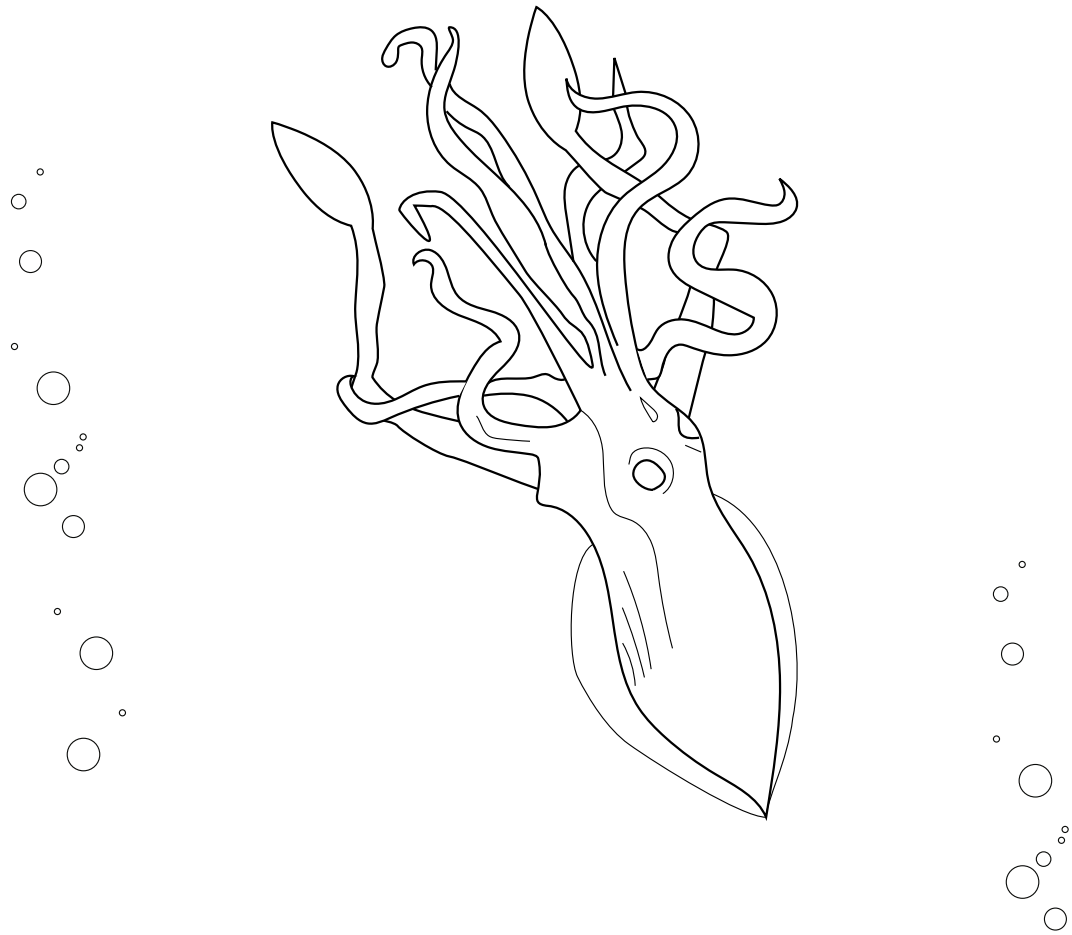
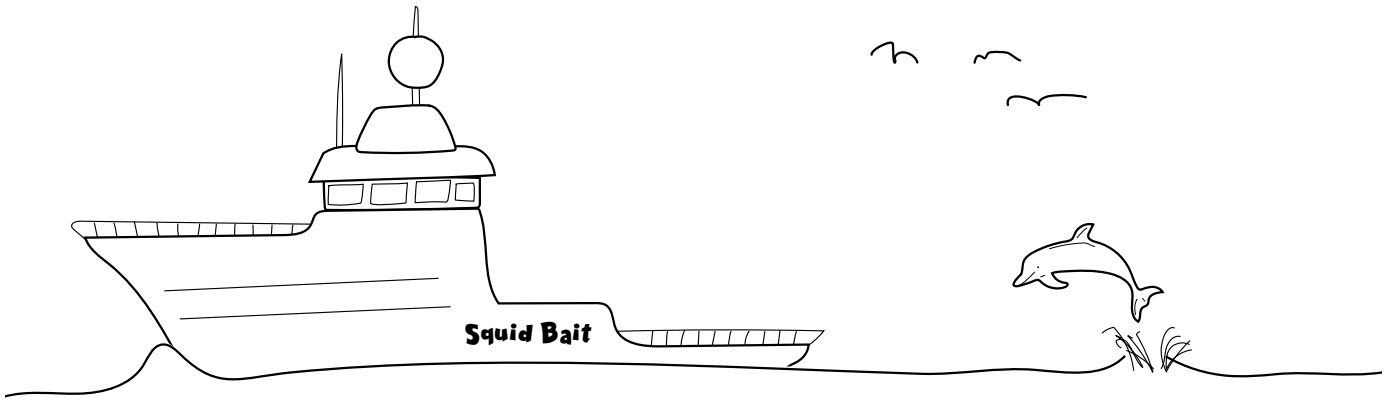
DOWN

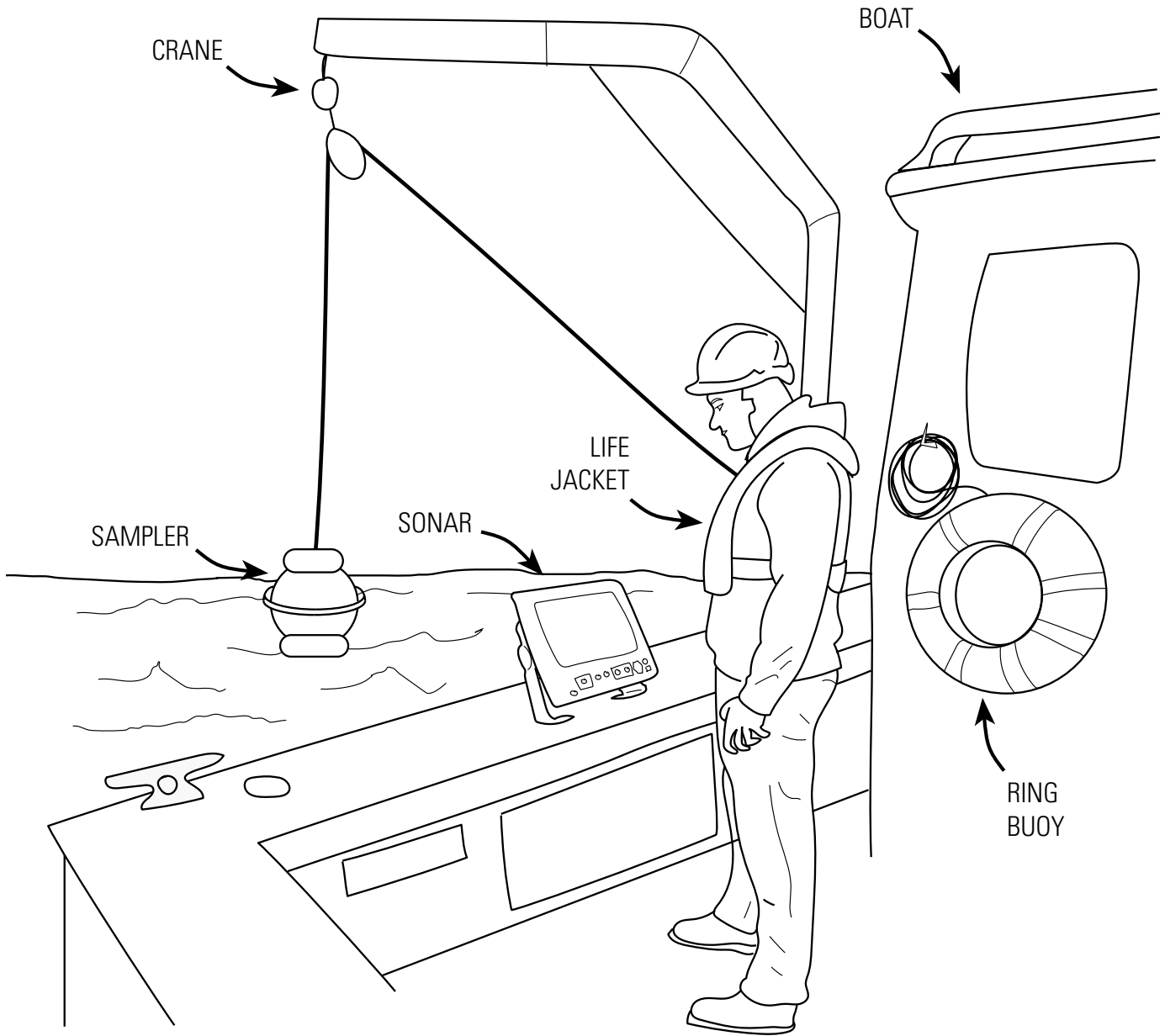
1. Fluffy cloud formation with rounded tops and relatively flat bottoms
2. Term for our planet's average weather conditions becoming more severe over the last several decades
4. The layer of gases surrounding the earth or another planet
5. Term to describe how hot or cold something is
7. The quantity of snow accumulated within a given area
9. An instrument that measures atmospheric pressure, especially for forecasting the weather and determining altitude

WHAT MY PARENTS THINK...

When I say, "I explore the mysteries of the deep blue sea."

WHAT AM I?





HELLO
I AM AN...

OCEANOGRAPHER

Someone who studies the ocean

DID YOU KNOW?



The blue whale is the largest animal to ever exist on Earth.

OCEANOGRAPHER

O-cea-nog-raph-er

What it is: Someone who studies the water, plants, and animals of the ocean.

How it's said: OH SHUH NOG RAFF FER

What it means: The term "oceanographer" means "someone who describes the seas."

- ocean- = the seas
- -graphia = description
- -er = person

JOKING AROUND



What did the ocean say to the shore?

Nothing, it just waved.

TEST YOUR SMARTS

1. Which ocean is the largest?

a. Pacific	c. Southern
b. Atlantic	d. Indian

2. What is the deepest part of the ocean?

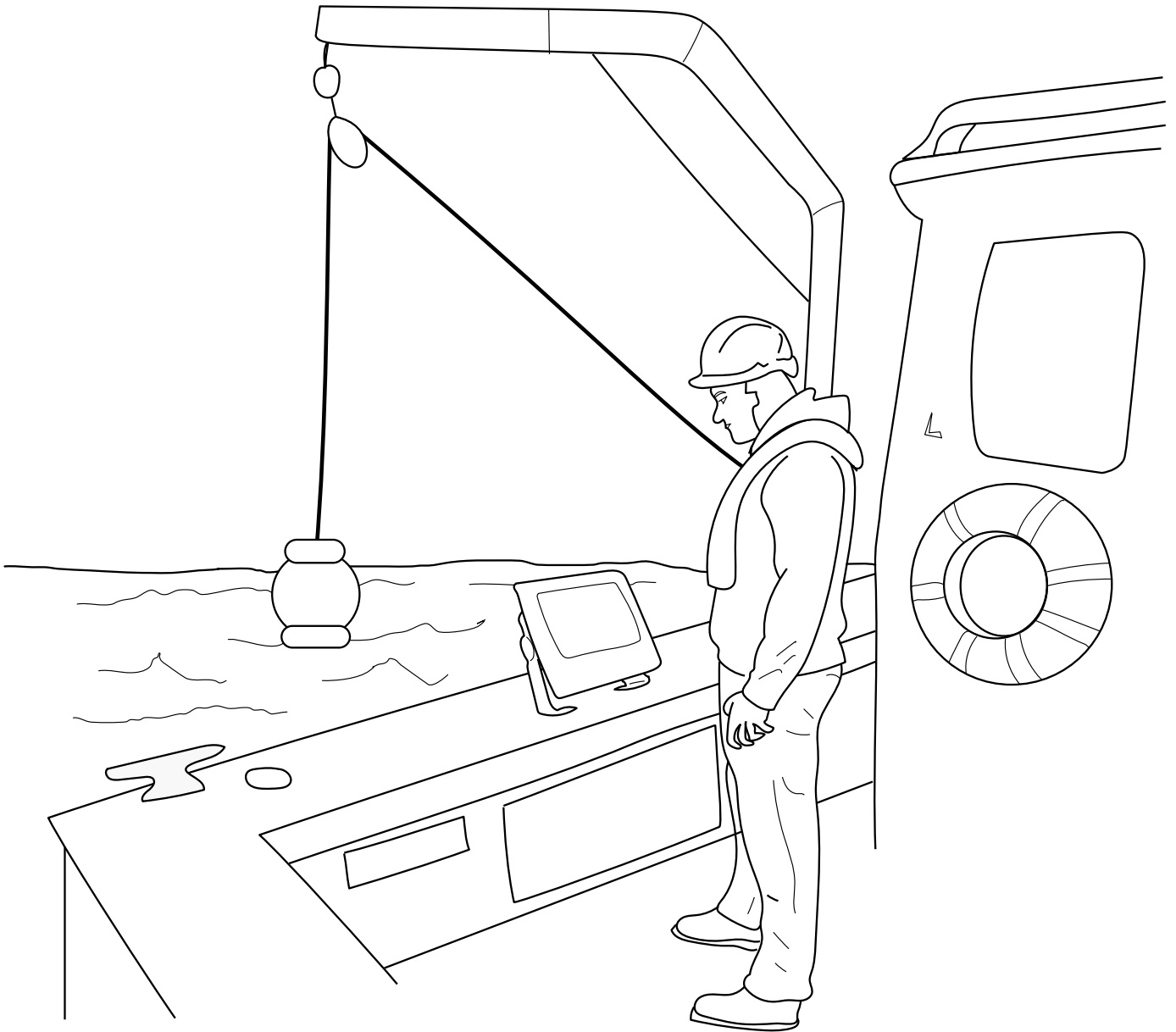
a. Mariana Trench	c. New Britain Trench
b. Acapulco Trench	d. Milwaukee Deep

3. What percent of Earth's surface is covered by the ocean?

a. 25%	c. 70%
b. 50%	d. 90%

WHAT'S MISSING?

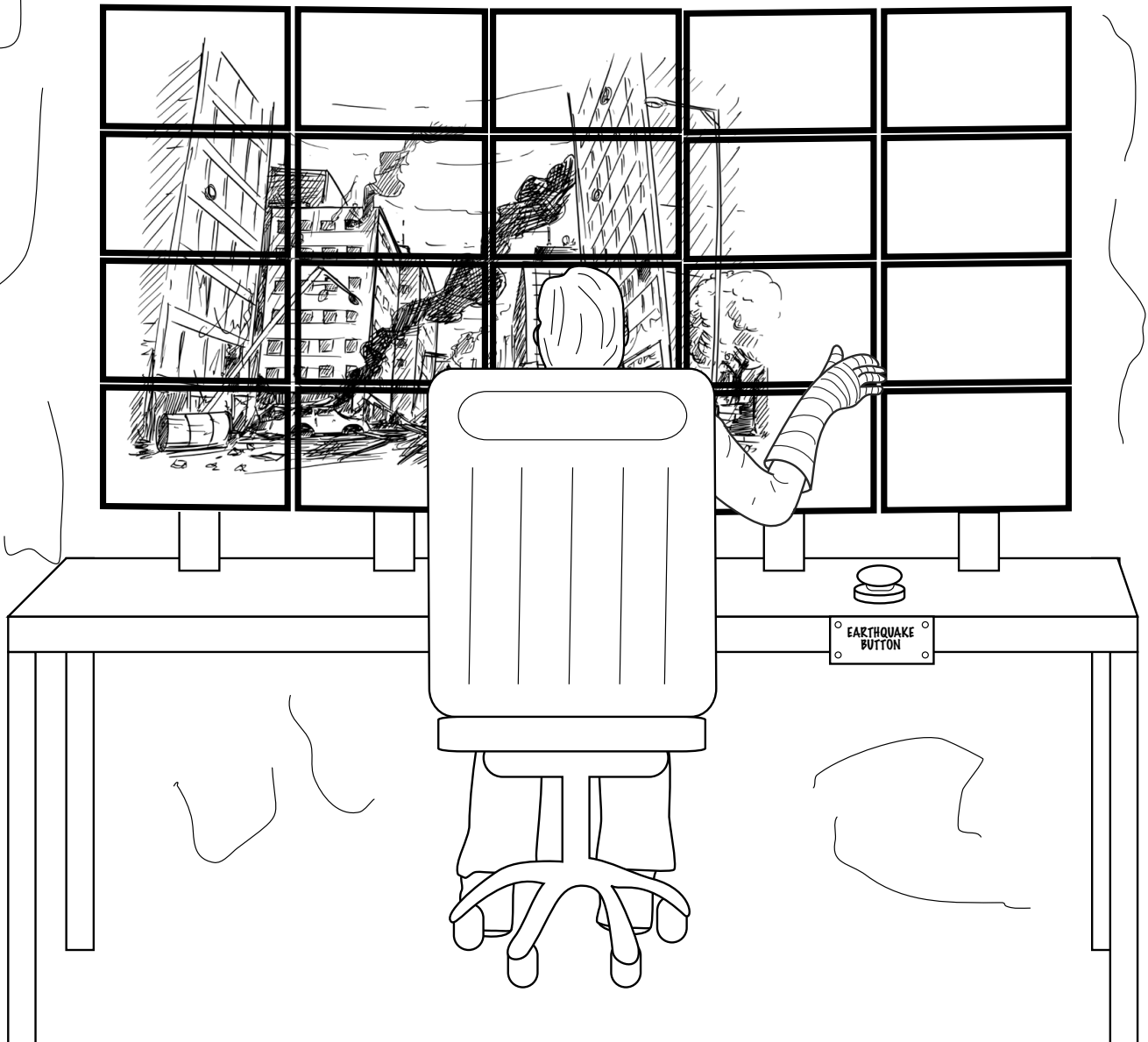
Can you find the five items that are missing in this picture compared with the image on page 33? The answers are on page 51.

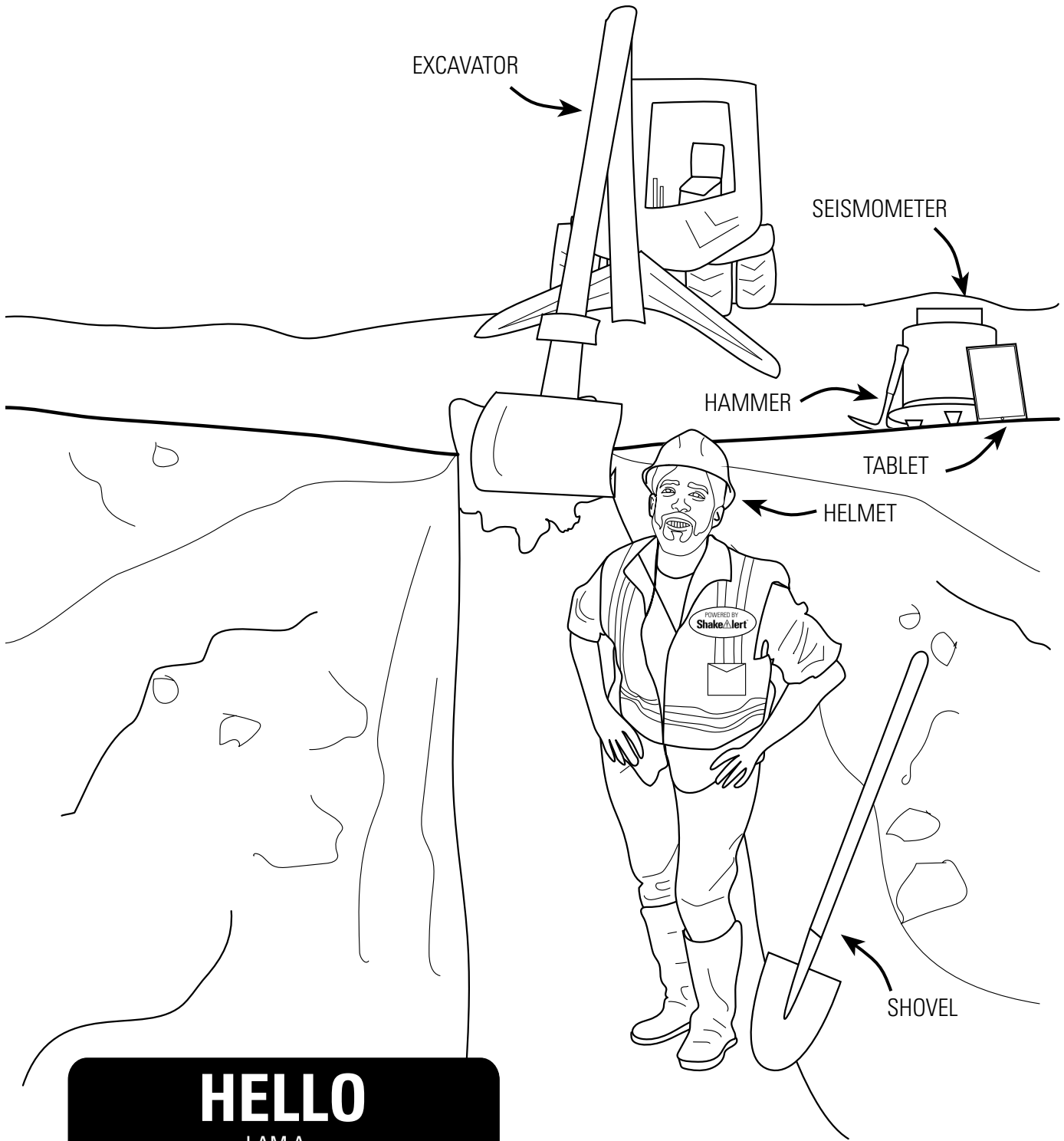


WHAT MY PARENTS THINK...

When I say, "I know all about how earthquakes work."

WHAT AM I?





HELLO
I AM A...
SEISMOLOGIST
Someone who studies earthquakes



DID YOU KNOW?

The largest earthquake ever recorded occurred on May 22, 1960, near southern Chile. The earthquake was measured as a magnitude 9.5.

SEISMOLOGIST

seis-mol-o-gist

What it is: Someone who studies earthquakes.

How it's said: SIZE MAUL OH JIST

What it means: The term "seismologist" means "someone who studies shaking."

- seismos- = shaking, shock
- -ology = study of
- -ist = person

Live in California,
Oregon, or Washington?
Sign up for
ShakeAlert for early
warning notifications
for earthquakes



JOKING AROUND



What is an earthquake's favorite type of music?
Rock 'n roll.

TEST YOUR SMARTS

- What are the series of small earthquakes after a large one called?
 - Subshocks
 - Aftershocks
 - Foreshocks
 - Postnominals
- How many detectable earthquakes occur each year around the world?
 - 500
 - 5,000
 - 50,000
 - 500,000
- Where was the biggest earthquake ever recorded in the United States?
 - Hawaii
 - Alaska
 - Washington
 - California

WORD SEARCH

The answers are on page 51.

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

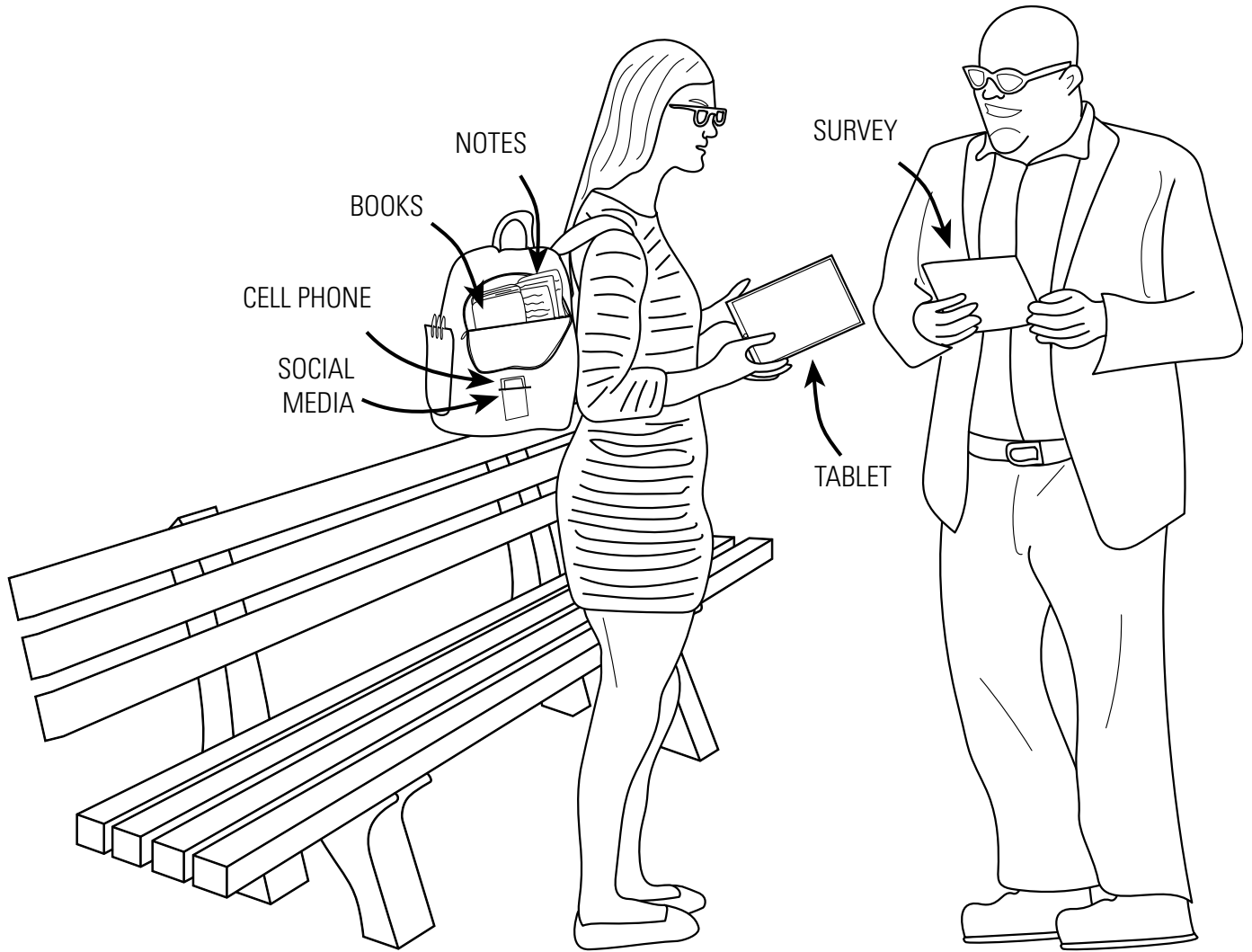
AFTERSHOCK	MAGNITUDE
EARTHQUAKE	SEISMOMETER
EPICENTER	SHAKING
FAULT	SHOVEL
HAMMER	TREMOR

WHAT MY PARENTS THINK...

When I say, "I try to figure out why people act the way they do."

WHAT AM I?






HELLO
I AM A...

SOCIOLOGIST
Someone who studies human behavior

DID YOU KNOW?



Fear causes one of four responses: Fight, Flight, Freeze, or Fawn.

SOCIOLOGIST

so-ci-ol-o-gist

What it is: Someone who studies how people behave in groups or around others.

How it's said: SO SEE AUL OH JIST

What it means: The term "sociologist" means "someone who studies the people around them."

- socius- = companion, ally
- -ology = study of
- -ist = person

JOKING AROUND



Why do teens travel in groups of 1, 3, or 5?
Because they "can't even."

TEST YOUR SMARTS

- Most people in the United States can connect to a stranger by how many degrees of separation?
 - 6
 - 19
 - 75
 - 352
- In which type of natural disaster are people advised to "drop, cover, and hold?"
 - Volcanic eruption
 - Flood
 - Earthquake
 - Wildfire
- What is often credited as the largest gathering of people in United States history?
 - March on Washington, 1963
 - Apollo 11 astronaut parade, 1969
 - New Year's Eve, New York, 2000
 - Chicago Cubs victory rally, 2016

SUDOKU

Fill every box with a number so that each row, column, and 3×3 grouping contains all the numbers from 1 to 9 without repeating any. The answers are on page 51.

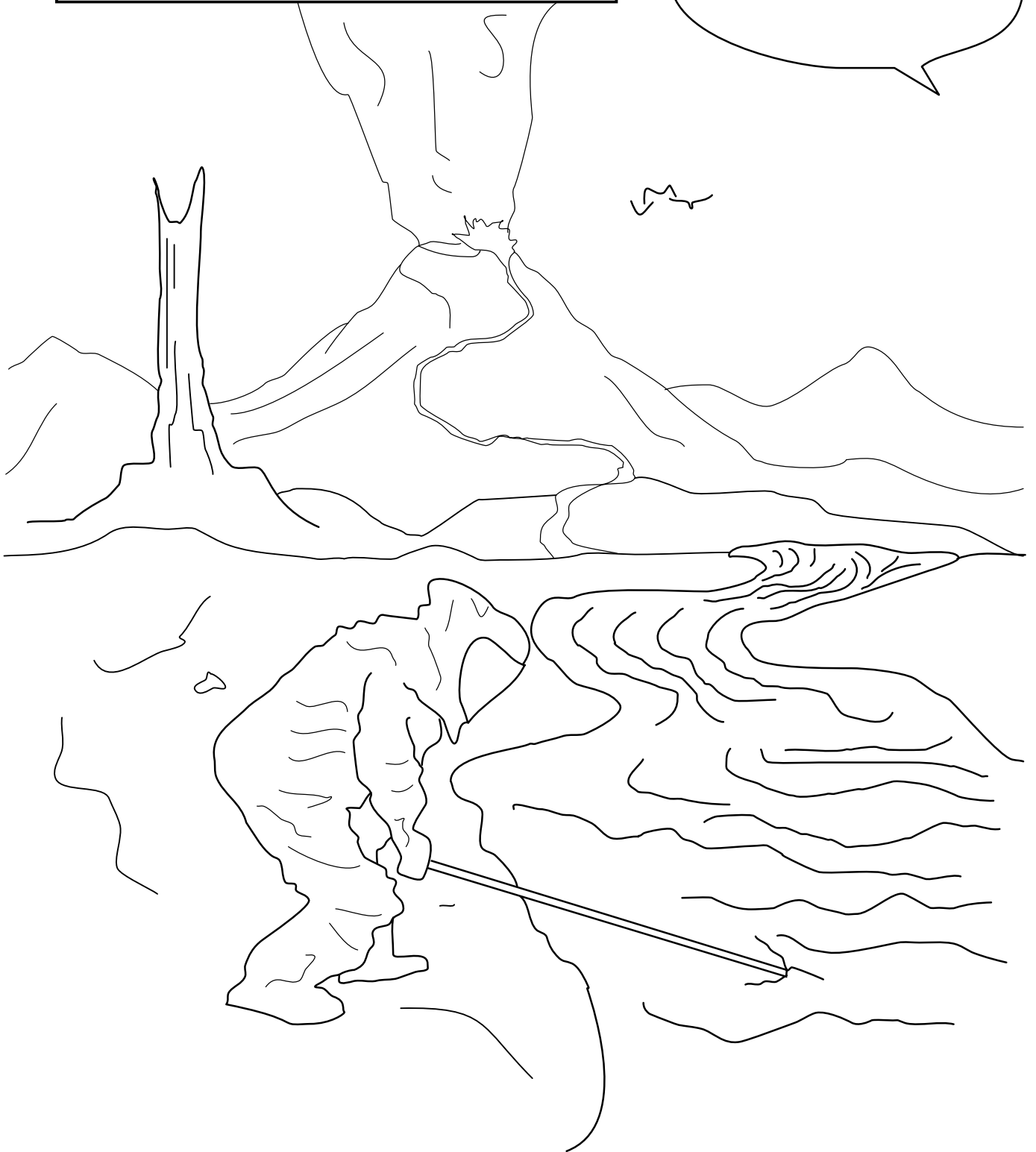
	6	1	9	3		7	8	
3	5		7		8	6		9
8		9		6	1		4	5
1		5	4	2		9	6	
	4	7		1	9	5		8
9	2	3	5		6		7	4
5	3	8	1	7		4	9	
2		4	6	9	3	8		7
7	9			5	4		3	1

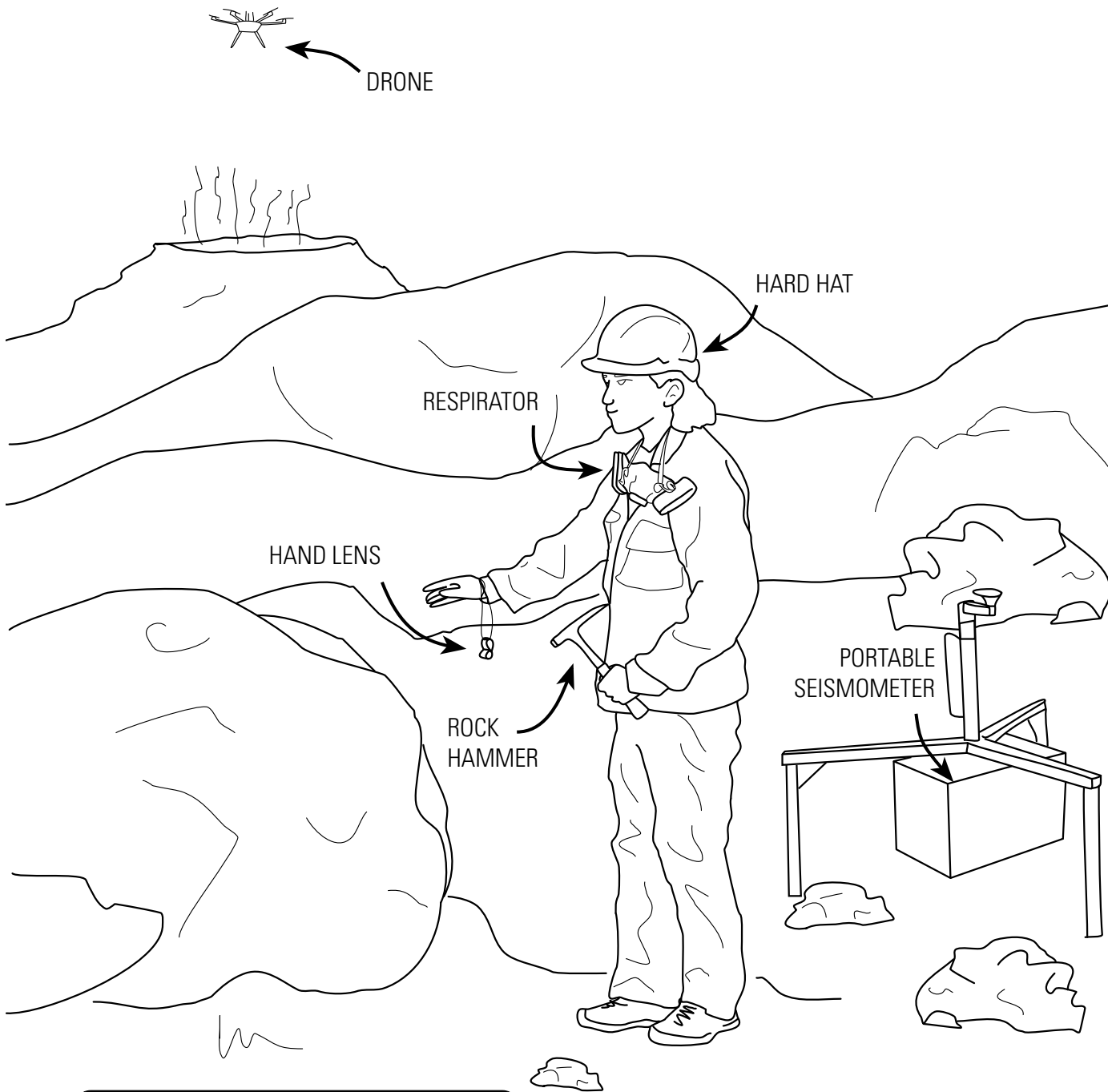
			ROW		
COLUMN			3x3 GROUPING		

WHAT MY PARENTS THINK...

When I say, "I poke around active lava whenever I get a chance."


WHAT AM I?





HELLO
I AM A...
VOLCANOLOGIST
Someone who studies volcanoes

DID YOU KNOW?
Volcanoes are classified as active, dormant, or extinct.



VOLCANOLOGIST

vol-can-o-lo-gist

What it is: Someone who studies volcanoes.

How it's said: VOLL CAN AH LOW JIST

What it means: The term "volcanologist" means "someone who studies the Roman god of fire."

- Vulcan- = Roman god of fire
- -ology = study of
- -ist = person

The Volcano
Notification Service
sends you email
updates about
volcanoes in the U.S.



JOKING AROUND



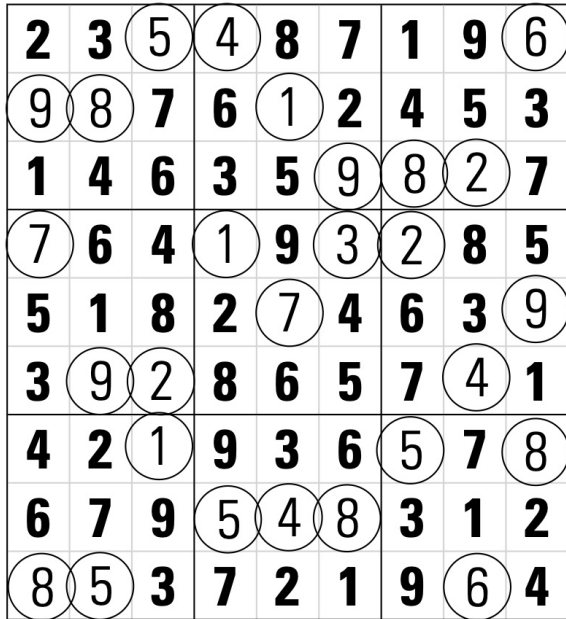
Why are volcanoes so mischievous?
Because they are erupt to no good.

TEST YOUR SMARTS

- Which of these is *not* a type of volcano?
 - Shield volcano
 - Composite volcano
 - Cinder cones
 - Lava mounds
- What U.S. state is the most volcanically active?
 - Alaska
 - Hawaii
 - Washington
 - California
- Which volcanic rock looks like dark broken glass?
 - Obsidian
 - Basalt
 - Pumice
 - Rhyolite

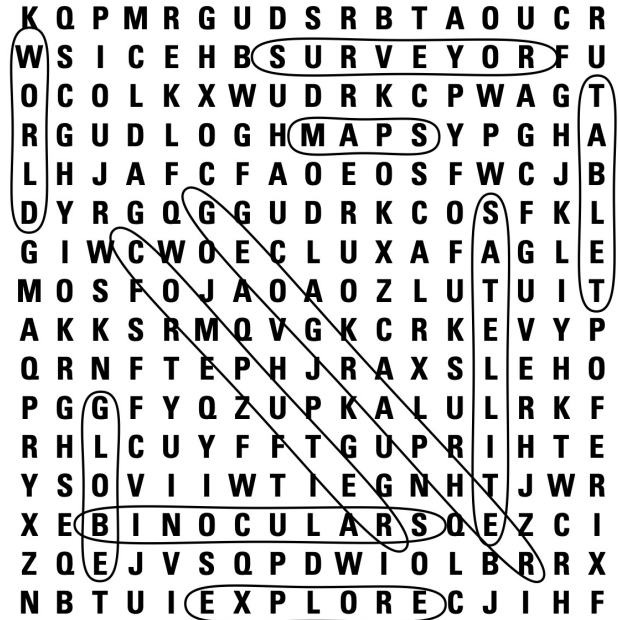
Puzzle answers

Pg. 4—Camera strap, broken vase, eyebrow, glasses, shovel handle



Pg. 8

NERFLMTETRIOI
 TXMESNEETOER
 NIRA EGUGA
 RLASE RDIRNAEFENG
 NARI JEKATC
 OFRNLMDA
 DLLNESDIA
 ESIBRD OWLF
 WOAERLFHT
 RKACLFLO

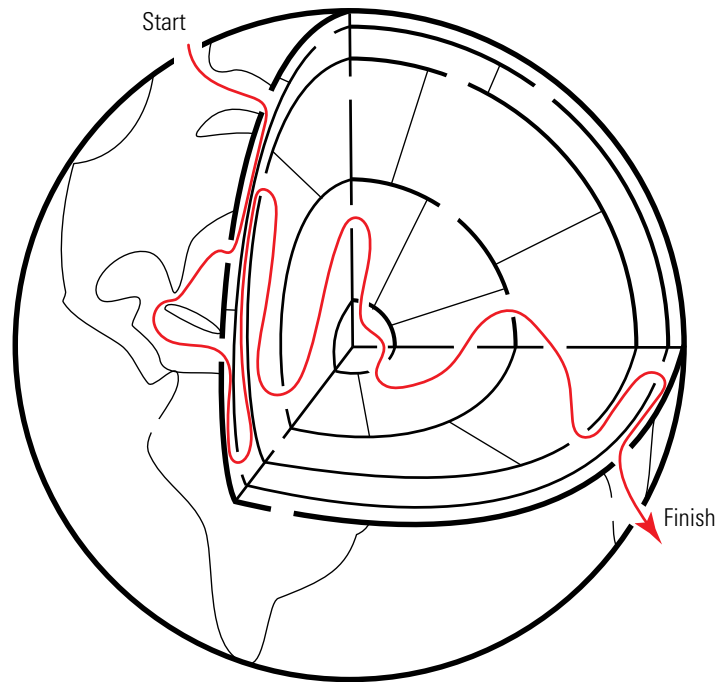


Pg. 12

INFILTRMETER
EXTENSOMETER
RAIN GAUGE
LASER RANGEFINDER
RAIN JACKET
LANDFORM
LANDSLIDE
DEBRIS FLOW
EARTHFLOW
ROCKFALL

Pg. 20

Puzzle answers



Pg. 24

SMFAROTELW

VEOTMELICRE

DWAESR

IEFL AKCTEJ

ARETW-YQTUIAL SNROES

LTBAET

LOVEGS

RRUBTITYA

SEEHAWTDR

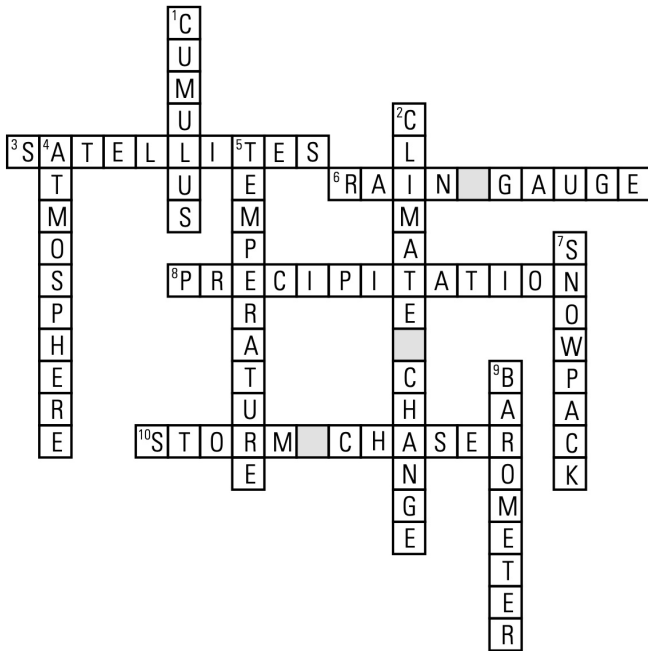
GIHLYTDROOS

STREAMFLOW**VELOCIMETER****WADERS****LIFE JACKET****WATER-QUALITY SENSOR****TABLET****GLOVES****TRIBUTARY****WATERSHED****HYDROLOGIST**

Pg. 28

Puzzle answers

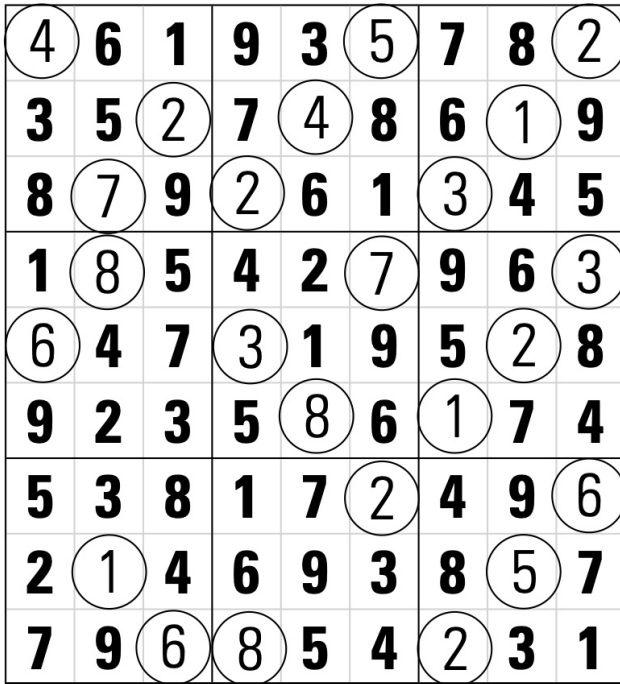
Pg. 35—Cleat hole, life jacket belt, ring buoy belt, sampler ring, sonar keyboard



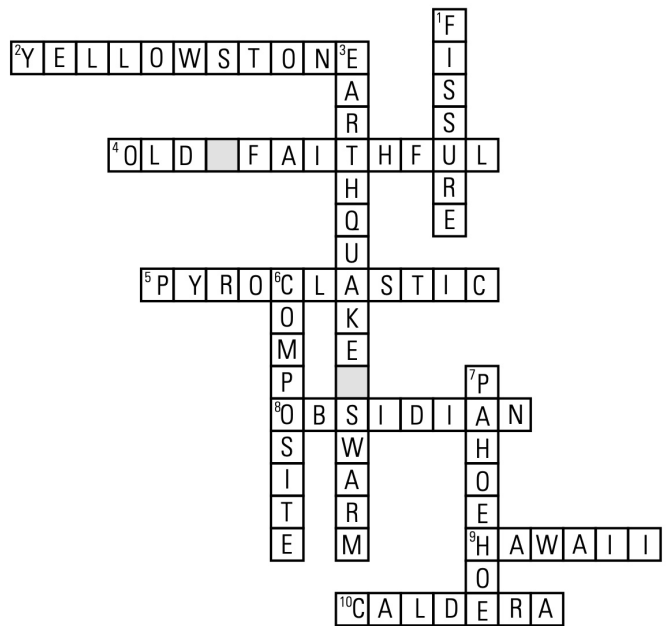
Pg. 32



Pg. 40



Pg. 41



Pg. 42



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GEODESIST!!!

GEOMORPHOLOGIST!!!

HYDROLOGIST!!!



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