

Table of Contents

Introduction	4	The First Professional Woman Astronomer	47
Standards and Benchmarks	6	Dangerous African Mammals	48
Interesting Places and Events	7	You Wouldn't Want to Live on Venus	49
Wait Until 2061	9	The Heaviest Flying Bird	50
Around the World in Seventy-Two Days	10	Bioluminescence at Sea	51
Antarctica	11	Lightning	52
The Taj Mahal	12	The Largest Volcano on Earth	53
Dinosaur Provincial Park	13	Jupiter—The Planetary Giant	54
Deer Cave, Malaysia	14	Tide Pools	55
Niagara Falls	15	The Extinct Quagga	56
Krakatoa	16	The KT Event	57
Mysterious Explosion in Russia	17	Animal Vision	58
July 4, 1826	18	Mercury	59
The Coastal Redwoods	19	Animal Messages	60
Ice Ages	20	The Human Brain	61
The Grand Canyon	21	Snow	62
The Metropolitan Museum of Art	22	Tornadoes	63
The Lincoln Memorial	23	The Laws of Motion	64
The Washington Monument	24	Clouds	65
The Appalachian Mountains	25	Lions	66
The Statue of Liberty	26	Water	67
Angkor Wat	27	The Human Eye	68
The Eiffel Tower	28	Goblin Sharks	69
The World Cup	29	A Plant Larger Than a Whale	70
Mount Rushmore	30	From the Past	71
The Wall	31	She Was Dressed to Meet an Iceberg	73
The Himalayas	32	The Female Paul Revere	74
Ellis Island—Gateway to America	33	He Loved His Mother	75
The Iditarod Sled Dog Race	34	The Rosetta Stone	76
The World Series	35	The Mausoleum of Halicarnassus	77
The Golden Gate Bridge	36	The Invention of Basketball	78
Daytona International Speedway	37	Laura Ingalls Wilder: Pioneer Author	79
Hoover Dam	38	Food on the <i>Mayflower</i>	80
Scientifically Speaking	39	The Library at Alexandria	81
Vermin of the Skies	41	John Adams Defends British Soldiers	82
The Lost Planet	42	The Travels of Marco Polo	83
Rain	43	An Unusual Pharaoh	84
Decibel Levels	44	A Number Challenge	85
Natural Chimneys	45	The History of the Book	86
Threats to Earth	46	Female Pirates	87
		Kites	88

Table of Contents *(cont.)*

Presidential Pets	89	Checkers	131
The Iceman	90	Author Roald Dahl	132
Attempted Presidential Assassinations	91	Making Crayons	133
America’s Forgotten Warriors	92	American Idioms	134
The First Great Emperor	93	Fascinating People	135
Lincoln’s Man	94	Beverly Cleary	137
The First Ferris Wheel	95	He Mailed Himself to Freedom	138
Hatshepsut: The Lost Egyptian Queen	96	Hypatia	139
The Ford Model T	97	The Secret Soldier	140
The Gibson Homer	98	The Most Important Woman in America	141
Homer Plessy Refuses to Give Up His Seat	99	Buffalo Bill Cody	142
Old-Time Country Schools	100	“Eureka! I’ve Found It!”	143
The Triangle Shirtwaist Factory Fire	101	First Emperor of the United States	144
Making Maple Syrup	102	Steven Spielberg	145
Did You Know?	103	Galileo Galilei	146
Your Meniscus Is Leaking	105	One-Eyed Charley	147
The Compass in Your Nose	106	The Librarian Who Measured Earth	148
Snail Training	107	Sir Walter Raleigh	149
Earthworm Pets	108	The One-Armed Explorer	150
The Invention of Silly Putty®	109	Isaac Newton: Genius at Work	151
Your Hair Is Dead	110	Alexander the Great	152
How Big Is a Googol?	111	Sir Francis Drake	153
Sharks Are Survivors	112	Claude Monet	154
LEGO® Bricks	113	Steve Jobs	155
QWERTY	114	Oprah Winfrey	156
Grizzly Bears	115	Dizzy Dean	157
Slinkity Slinkys®	116	Michael Jordan	158
Keeping Toads and Frogs	117	Eliza Harris	159
Save That Pencil	118	Nelson Mandela	160
The Safety Pin	119	Louis Braille	161
Count to One Billion	120	Julius Caesar	162
Tsunamis	121	Bill Gates	163
Skunks	122	Leonardo Da Vinci	164
The Latin in Your English	123	Mae Jemison	165
Heartbeats	124	Willie Mays	166
Cricket-Jumping Contests	125	Answer Key	167
The Liberty Bell	126	Self-Monitoring Reading Strategies	174
“Big Mama” Oviraptor	127	Leveling Chart	175
Birthday Odds	128	Tracking Sheet	176
Be a Better Speller	129		
Frozen Food	130		



Warm-Up

Name _____

21

The World Cup

The World Cup is one of the biggest sporting events in the world. This great soccer championship features players from thirty-two nations. Each nation wants to win the cup by becoming the number one soccer team. The World Cup is a worldwide contest that takes place only once every four years. However, it holds the attention of much of the planet when the games begin. The World Cup was created in 1928, and the first World Cup games were held in Uruguay in 1930. It was an all-male contest at the time. The first women's World Cup was held in China in 1991.

Soccer is not quite as popular in the United States as basketball, football, or baseball. However, it still has millions of followers. People all over the world often get up in the middle of the night or skip work to watch their

nation's team compete. More than five billion people watch the final match on television. That is most of the people living on the planet. During the contests leading up to the final game, people in the winning nations often hold street parties to celebrate their teams' **victories**.

Some countries seem to be the best in the game for a period of time. When Pele played for Brazil in 1970, his team won the World Cup. Brazil's team is considered one of the greatest. Pele is regarded as the best soccer player by many fans. Brazil has won a total of five World Cups, far more than any other nation.

Check Your Understanding

- Who is Pele?
 - a coach
 - an average soccer player
 - a Brazilian team
 - one of the greatest soccer players
- When was the first women's World Cup?
 - 1928
 - 1997
 - 1930
 - 1991
- Which of the following is the best topic sentence?
 - paragraph one, first sentence
 - paragraph two, first sentence
 - paragraph three, first sentence
 - paragraph one, last sentence
- From the context of the passage, which is the best antonym for **victories**?
 - wins
 - happiness
 - results
 - defeats



/4

Warm-Up

16

Name _____

The Extinct Quagga

The quagga went extinct in 1887 when the last surviving member of the species died in a zoo. An animal is extinct if all the members of the species are dead. The quagga was an animal similar to a horse. It was native to the plains of South Africa. It looked like a cross between a horse and a zebra. The front of the animal was striped like a zebra. The rear was brown like a horse.

In the 1980s, scientists studied strands of DNA from a piece of quagga skin found in a museum. (*DNA* is a chemical found in each living thing. It is different and special for each species.) They discovered that the quagga was so closely related to the zebra that both species were from the same family line. They could tell that both species probably

developed from a common animal that lived before they existed. These scientists believed that all of the genes that were a part of the quagga's DNA exist in the living cells of wild zebras that still roam the African plains.

These scientists started a program to bring back the quagga by selecting zebras with fewer stripes on the rear of their bodies to mate. They hope to eventually discover one or more of these baby zebras whose DNA matches what they found in the quagga skin. If this experiment works, it will be the first species ever brought back to life.

Check Your Understanding

- What is the name of the chemical compound that codes genetic information in genes?
 - RNA
 - quagga
 - DNA
 - all of the above
- Which animal is the quagga most closely related to?
 - horse
 - zebra
 - camel
 - both b and c
- What is the main idea of the passage?
 - The quagga has been extinct for over one hundred years.
 - The horse is related to the quagga.
 - Scientists are trying to recreate the quagga by breeding closely related zebras.
 - The zebra is related to the quagga.
- Which of the following pieces of information is least relevant to the passage?
 - Quaggas became extinct in recent times.
 - The quagga is closely related to the zebra and the horse.
 - A movie was made about bringing back extinct species.
 - DNA is a chemical compound that codes genetic information.

/4

Warm-Up

8

Name _____

Food on the *Mayflower*

On September 6, 1620, a group of 102 passengers, including the Pilgrims and a few other families, set out from England to cross the Atlantic Ocean. They sailed on a crowded wooden ship called the *Mayflower*. The voyage took sixty-six days to reach the shore of what is now Massachusetts. The passengers slept and ate while crowded together in the main cabin. They rarely washed their hands and never bathed or changed their clothes. Their hair and clothes were covered with lice, fleas, and roaches. They also brought along farm animals, which added to the smell and filth of the voyage.

The travelers ate moldy green cheese, dried peas, salty beef, and dried fish. They fought to keep the mice and rats on the ship away

from these foods. They sucked on rock-hard biscuits to make them soft enough to swallow. The biscuits often had tunnels in them made by maggots. The voyagers also ate dried vegetables, such as turnips, parsnips, onions, and cabbages. One of their favorite foods was dried ox tongue.

The travelers used some spices, such as ginger and cloves, to cover up the taste of spoiled food. To overcome the salty taste, they drank beer, wine, and ale. Even the children drank these! Clean, fresh water was seldom available. On a few rare occasions, passengers were able to use fireboxes to make soup, dumplings, and oatmeal. Life aboard the *Mayflower* was no “picnic,” but all hoped for a better life in the new world.

Check Your Understanding

- Which of these was *not* a problem faced by the voyagers on the *Mayflower*?
 - The food was very salty and often spoiled.
 - The rats and insects got into their food.
 - They didn't have much fresh water.
 - They didn't have spices to season their food.
- Where might the passengers have found fresh water?
 - in barrels on the ship
 - from rain falling on the ship during storms
 - from the Atlantic Ocean
 - in a refrigerator
- What is the main idea of the passage?
 - The *Mayflower* passengers had a good trip to the new world.
 - The food on the *Mayflower* was not very pleasant to eat, but there was enough to survive on.
 - The *Mayflower* was a pleasure cruise for rich travelers.
 - There were 102 passengers.
- From the context of the passage, what can you infer about the children on the *Mayflower*?
 - They made many sacrifices during the voyage.
 - They were spoiled by their parents.
 - They were better fed than adults.
 - They were treated to tasty foods.

/4

Warm-Up

6

Name _____

Your Hair Is Dead

The hair on your head, arms, and any other place on your body is dead protein pushed through the skin by hair follicles. There are about five million hair follicles throughout the human body. You have approximately 120,000 follicles on your head. You have about 108,000 hairs on your head at any one time. If your hair averages two inches in length, you have 18,000 feet of hair on your head. If the hair on your head averages five inches long, you have about 45,000 feet of hair on your head. The average hair on your head grows about half an inch a month, and it grows fastest in the morning. You lose about seventy hairs a day. Your body will produce about one hundred feet of dead protein in a day and seven miles of hair in a year.

Hair **hibernates**. It grows in cycles. On the scalp, each hair grows continuously for three to five years and then enters a resting phase of about three months or so. The hair is shed but not replaced immediately. After another resting phase of several months, the follicle produces a new hair. You don't have to worry too much though. About 90 percent of the scalp is in the growing phase at all times. Eyebrow hairs stay short because their growing phase only lasts ten weeks. Eyelashes are replaced about every three months. You will grow about six hundred complete eyelashes in a lifetime. So brush your hair and enjoy it!

Check Your Understanding

- What is the meaning of the term **hibernates**, when referring to hair?
 - Hair goes through several colors.
 - Hair sleeps every night.
 - Hair grows in cycles and then enters a resting phase.
 - Hair falls out and leaves you bald.
- How often are eyelashes replaced?

a. every ten weeks	c. every six months
b. every three to five years	d. every three months
- What is the author's purpose in writing the passage?

a. to encourage you to care for your hair	c. to inform the reader
b. to entertain the reader	d. to change your mind
- What can you infer about your own hair from the passage?
 - Some of the hair follicles are in a resting phase right now.
 - Hair grows at different rates in different parts of the body.
 - Red hair grows faster than black hair.
 - both a and b

/4



Warm-Up

Name _____

19

Steve Jobs

Steve Jobs had a lot of imagination and curiosity as a child. He enjoyed making spy movies at home with his friends in the neighborhood. His curiosity led him to do dangerous things, like stick a metal hairpin into an electric socket. (He was badly burned!) He also drank ant poison and had to have his stomach pumped at the hospital. He was not very well behaved in school and often wasted time. He was interested in anything scientific. He worked on inventions, took apart machines to see how they worked, and combined chemicals.

Jobs had few friends and didn't like school until he met Steve "The Woz" Wozniak. They met in high school. Woz was a whiz with electronics and was always inventing new **gadgets**. Jobs and Woz spent a lot of time building gadgets. Jobs even called the owner of a computer company to get some free parts.

What he got was a good summer job building computers.

After a short stint at college and a job working with Atari®, Jobs and Woz created their own business. They worked out of Jobs's family garage. They named the company after a happy summer Jobs had spent picking apples in Oregon. They called it Apple Computers®. They created the Apple I Computer®, which was a success. They soon created a better version, the Apple II®, which was also successful. By the time he was twenty-five, Jobs was already worth over 250 million dollars. He would go on to make the Macintosh®. He would continue to develop computers and the products that use them, such as the iPod® and iPhone®. Steve Jobs is considered one of the most inventive people in the world. He is also a very successful businessman.

Check Your Understanding

- How did Steve Jobs name his computer company?
 - after his favorite apple
 - after a memory of a happy summer job in Oregon
 - after his best friend
 - in honor of his mother
- From the context of the passage, what is a **gadget**?
 - something mechanical created to do a job
 - a kind of computer
 - a computer expert
 - a college class
- Which happened second in Jobs's life?
 - He met Woz, and they became friends.
 - He worked one summer for Atari.
 - He invented the Apple II.
 - He made spy movies at home.
- Which of the following facts is *not* relevant to the career of Steve Jobs?
 - He built the Apple I Computer in a box.
 - They introduced the Apple II in 1977.
 - Steve Jobs was sent to Germany by Atari to solve a problem.
 - As a kid, Steve Jobs had to have his stomach pumped at the hospital.



/4