Janet Guthrie

Race Car Driver and Physicist

Why would a well-educated young woman choose a career as a mechanic and race car driver? Janet Guthrie's family and friends would never understand why a woman who had a wonderful job as a physicist in the aerospace department of Republic Aviation would want to throw away her life on racing cars.

Janet's love for adventure led her to the racing world. She sold everything she owned, including her XK-120 Jaguar. Her goal was to build her own race car from scratch. She bought a brand new Toyota and promptly tore it down. It took her a year to rebuild it so that it would be able to compete. Since she had no steady job, life was a struggle. She had to abandon her apartment for a single room in the back of a store. Only odd jobs kept her alive and paid for the parts she needed for her car. Finally, worn out and virtually penniless, Janet took a job as a technical editor for Sperry Rand.

Although she could find no racing sponsor, she did not give up. She kept making appointments and attempting to sell the world on the idea of a female race car driver, but sponsors thought a woman was too much of a risk. Finally, someone took a chance and asked her to race. She finished that race and continued to win in club races and some professional ones. At last Janet set her sights on a race that would test her endurance: the Indianapolis 500.

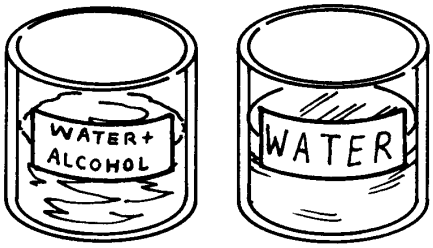
In 1976 Janet attempted to qualify for the Indy 500, but car problems eliminated her. But that same year she did become the first woman to race for the National Association for Stock Car Auto Races. In 1977 she became the first woman to race in the Indy 500; the following year she placed ninth in her Texaco-sponsored #51 racer at Indianapolis.

Janet Guthrie is a pioneer. The thrill of racing caused her to decide that a life driving off into the sunset was better than sitting at a desk. Her spirit of adventure paid off not only for her but also for every other woman whose career leads her to the speedway.

Suggested Activities

1. **Discussion Questions**
   - *Knowledge:* What kinds of jobs did Janet do before and while she worked toward becoming a race car driver?
   - *Creative Thinking:* If you wanted to become a race car driver, how would you find someone to sponsor you?
   - *Application:* Draw your conception of the fastest race car of the future.
   - *Analysis:* Why was it so difficult for Janet to find a sponsor and become a professional race car driver?
   - *Synthesis:* Did Janet's experiences before her professional career as race car driver help her in any way?
   - *Evaluation:* Do you think that Janet was happy with her life as a race car driver?
   - *Affective:* Do you think that racing cars is hazardous? Do you think it is more hazardous for women than for men?
2. **Skills Focus**
   - *Language and Communication Skills:* Write a letter to a fictional company. Attempt to convince them to support you and your race car for the Indy 500.
   - *Independent Study Skills:* What are the names of other well-known races? What kind of education is needed to become a mechanic today? Why are mechanics in short supply? Why do they make so much money today?
   - *Manipulative Skills:* Draw a flag that would represent you as you drive your car down the speedway somewhere in the world. Explain each symbol below your drawing.
3. **Science**

   Antifreeze Experiment: Most car engines use antifreeze to keep the water in the radiator from freezing. How does antifreeze work? Try placing a small container of water in the freezer along with an equal amount of alcohol in a similar container. Which freezes first? Why?



4. **Research and Debate**

   Conservation of Fuel: Many people believe that car races should be banned because the drivers use so much fuel. Have students divide into two debate teams. One team should represent the race car drivers and the other represent the fuel conservationists. Have students research and prepare a debate on this most controversial issue.

Recommended Reading

Teacher Reference

Olney, Ross. *Janet Guthrie.* Harvey House, 1978.

Things That Go! How to Make Toy Boats, Cars, and Planes. Troll, 1987.

Student Reading

Barrett, N.S. *Racing Cars.* Watts, 1984.

Graham, Ian. *Racing Cars.* Gloucester Press, 1990.

Daredevils

Many women—like Janet Guthrie—have loved the exhilaration of speed. Many have seen the challenge of testing new machines and new means of transportation and have accepted—and even welcomed—it. Some of these women and their feats are described below. Their names, which are in all capitals, are scrambled. You must unscramble them to learn more about women and travel, speed, and transportation. (A list of their names at the bottom of the page may help you with your task. You may use the name more than once.)

_____ 1. Her claim to fame was not envied by many because MEDAAM CHRDAANBL was the first victim of the dangerous profession of aviation when she burned to death in her balloon on July 8, 1819.

_____ 2. SSRBAONE ED AL CHORE was awarded the 36th Flying Certificate in 1910 and was killed in 1919. She was the first woman to die in an aircraft accident.

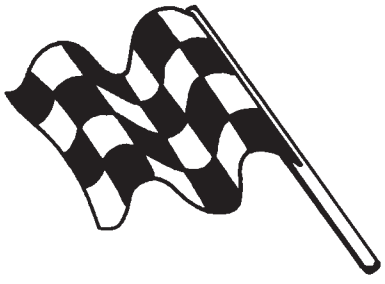
_____ 3. The first woman to negotiate a landing using instruments alone when visibility was nil was CJQEEUNIAL OACCHNR.

_____ 4. The first woman to cross the sound barrier was CJQUEEALNI RHCCNOA.

_____ 5. ENNA RGHEBDLIN was the wireless radio operator for Charles Lindbergh on many occasions.

_____ 6. LEMAAI TRHAARE was the first woman to fly across the Atlantic.

_____ 7. AANNH SCHRTIE set a record for women gliders by doing ninety-six miles in a straight run.



Amelia Earhart

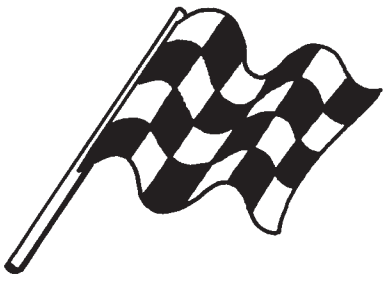
Madame Blanchard

Anne Lindbergh

Jacqueline Cochran

Baroness de la Roche

Hanna Reitsch



Answer Key

Page 7
1. Icarus
2. ornithopters
3. hot air balloons
4. dirgible
5. gliders
6. Wright Brothers
7. French Bleriot

Page 26
6. 1940—Winter
3. 1935—Prairie
8. 1943—Happy
1. 1932—Big
5. 1939—Shores
2. 1933—Farmer
4. 1937—Creek
7. 1941—Little

Little House in the Big Woods–1932
Farmer Boy–1933
Little House on the Prairie–1935
On the Banks of Plum Creek–1937
By the Shores of Silver Lake–1939
The Long Winter–1940
Little Town of the Prairie–1941
Those Happy Golden Years–1943

Page 38
Across
3. camomile
5. implored
7. currant
8. gooseberry

Down
1. exert
2. sieve
4. mischief
6. parsley

Page 45
1. Ellipse
2. Parabola
3. Hyperbole
4. Circle

Page 48
1. allergy
2. x-ray
3. surgeon
4. gynecologist
5. physical therapist
6. disease
7. podiatrist
8. medicine
9. endocrinology
10. pediatrics
11. neurological
12. pathology
13. cardio-pulmonary
14. obstetrics
15. anesthesiology

laser–specialist

Page 51
1. eyepiece
2. tube
3. arm
4. revolving nosepiece
5. low power lens
6. high power lens
7. stage
8. stage clips
9. inclination joint
10. mirror
11. mirror fork
12. base

Page 54
1. octopus
2. goby
3. anglerfish
4. archerfish
5. blowfish
6. sawfish
7. lantern fish
8. croaker
9. salmon
10. sea horse

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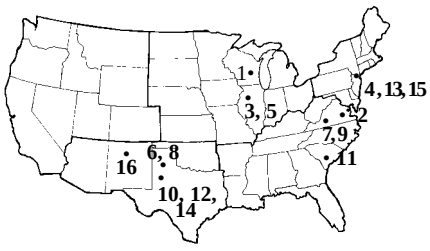

Page 61
3	Step 4
1	Step 1
4	Step 6
2	Step 5
6	Step 3
5	Step 2

Page 64
1. box
2. lens
3. view finder
4. shutter release
5. flash socket
a. shutter release
b. view finder
c. box
d. flash socket
e. lens

Page 67
H
L
M
I
A
A
A

Mahalia

Page 70
3 *Bright Eyes*
10 *Poor Little Rich Girl*
11 *Rebecca of Sunnybrook Farm*
9 *Little Miss Broadway*
2 *The Bluebird*
1 *Just Around the Corner*
4 *The Little Colonel*
8 *The Littlest Rebel*
6 *Dimples*
12 *Stowaway*
5 *Curly Top*
7 *Heidi*

Page 74
1. birdie	5. bogey
2. hole-in-one	6. eagle
3. fairway	7. green
4. handicap	8. woods
	9. irons

Page 77
Freestyle	**Breastroke**
.10	.01
.09	.11
.02	.03
.87	.80
.82	.32
Sum 1.90	Sum 1.27
Backstroke	**Butterfly**
.20	.70
.21	.02
.06	.44
.88	.15
.85	.15
Sum 2.20	Sum 1.46

Page 80
1. Madame Blanchard
2. Baroness de la Roche
3. Jacqueline Cochran
4. Jacqueline Cochran
5. Anne Lindbergh
6. Amelia Earhart
7. Hanna Reitsch

Page 83
Across
1. serve
4. overhead smash
6. fault
8. let
9. set

Down
2. volley
3. footfault
5. deuce
7. lob
8. love

Page 90
1. 1	8. 8
2. 9	9. 3
3. 2	10. 11
4. 6	11. 10
5. 4	12. 12
6. 5	13. 14
7. 7	14. 13

Social Security

Page 93
Franklin Roosevelt
Harry Truman
Dwight Eisenhower
John Kennedy
Lyndon Johnson
Richard Nixon
Gerald Ford
Jimmy Carter
Ronald Reagan
George Bush
William Clinton

Page 96
Across
1. ambition
6. majored
7. legislative
8. neuromuscular

Down
2. Texas
3. President pro tem
4. orator
5. university

Page 99


Page 106
1. justices
2. chief
3. president
4. federal
5. constitution
6. foreign
7. lower
8. appeals
9. appeal
10. administrative
11. district
12. one
13. trial
14. cases

