英语阅读丛书

READING IVa LABORATORY

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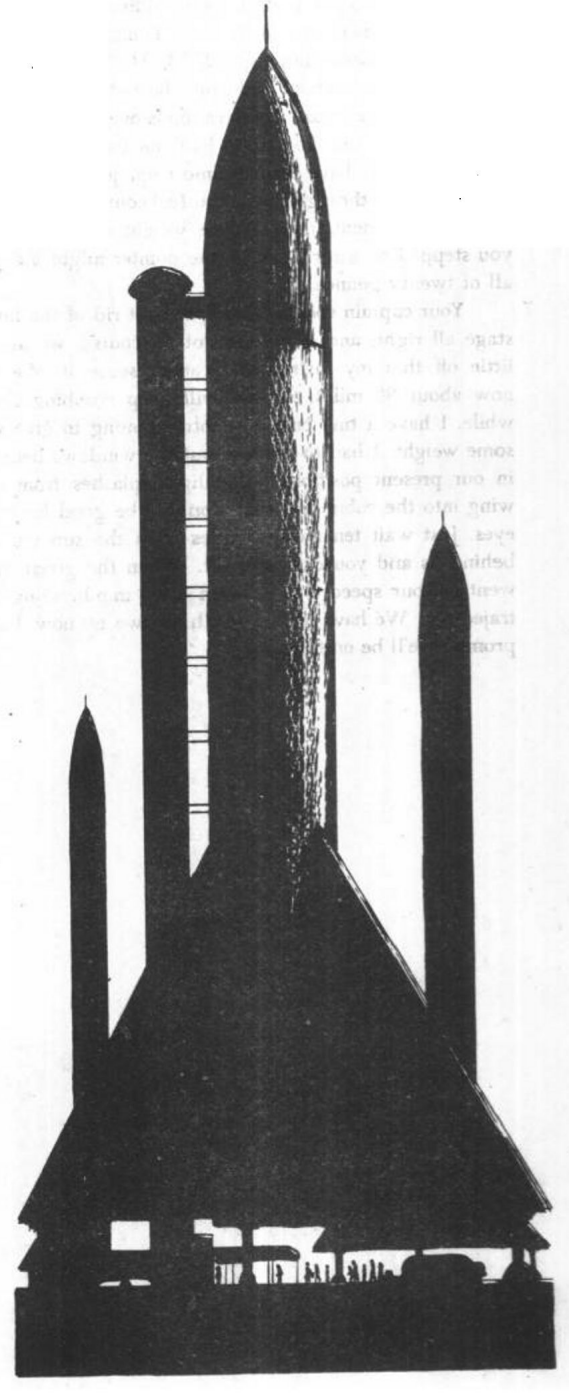
POWER BUILDER

1

ROCKET TO LONDON

by Willy Ley

Reprinted from THE ROTARIAN, March, 1958.



1 The year is 1970. At the Long Island rocket port you have to go to Boarding Facility 6 for Flight 21—the rocket liner for London. When you get there, you find a covered mobile escalator ready to lift you to the rocket door; some people get very squeamish when they look down and find that it is about 150 feet from the door to the ground.

2 At the door the stewardess takes over. You have to climb half a dozen steps of a vertical ladder which is normally hidden in the floor of the center aisle. You've chosen seat 18 because somebody has told you the seats far back are better. True, you'll be over the wing, but there isn't much to see anyway.

3 Seat 18 is, of course, a contour chair with two belts, one in the normal place, and one just below the knees. Your arms fit into upholstered troughs with a safety clamp across them. The stewardess will offer you a pill which you can refuse if you want to, but most passengers will take it. Why be uncomfortable if it can be avoided? The voice of the captain coming over the loudspeaker will tell you that take-off will be in seven minutes. The acceleration will be around three g's (gravities) at its worst. When it gets bad, the captain tells you, just hold your breath for the few seconds it will take. He may add that nobody quite knows why holding your breath for that short time makes you feel better, but it is a fact that it does.

4 For those seven minutes you can look out the window at the other rocket passenger liners, each stationed about 1,000 feet away from the terminal building. In over-all appearance these towering spaceships take two shapes. One is that of a large delta-winged rocket standing on its tail, carrying the smaller delta-winged upper stage (which is the one that houses the passengers and makes the whole trip) on its nose. The other shape is that of the lower stage carrying the upper stage pickaback.

5 Your stewardess warns you that take-off is close and checks to see that you are securely strapped in. Then she straps herself to her chair as the rocket motors begin to thunder at the precise predicted instant. They sound much louder to the people outside than to the passengers. You begin to be squeezed to the upholstery: the ship is

lifting. In front of the cabin—which is above your head—luminous figures tick off the seconds which have lapsed since take-off. After "65" the figures turn red: high acceleration ahead.

6 Ten seconds later they are white again and the sound of the rocket motors seems different; the upper stage is now operating on its own. Things repeat as before, white figures jumping: 32, 33, 34, 35 . . . turning red again after a while. Suddenly the red figures are replaced by a green star. Acceleration is over; the ship now flies on momentum. You try to look out the windows and notice that they have turned almost opaque. Just a faint light shimmers through them. You feel completely weightless for a moment, then a little weight comes back; if you stepped on a spring scale, the pointer might indicate all of twenty pounds.

7 Your captain speaks: "Well, we got rid of the lower stage all right; and if we are not on course, we are so little off that my instruments cannot sense it. We are now about 80 miles up and will keep climbing for a while. I have a tiny cruising motor running to give you some weight. I had to blacken out the windows because in our present position the sunlight splashes from one wing into the cabin and that wouldn't be good for your eyes. Just wait ten more minutes—then the sun will be behind us and you can look out. When the green light went on, our speed was an even 8,400 m.p.h. along the trajectory. We have lost an m.p.h. or two by now, but I promise we'll be on time."

8 The stewardess helps you to "fold" your chair, which means that it assumes a shape closer to a normal chair. You can loosen your straps, but it is not recommended that you take them off completely. You don't know how to behave when weighing nearly nothing. You get a few refreshments soon, and the windows become transparent. You look at the black sky and at the stars which look clearer than they ever did before. You probably doze off. . . .

9 Is that a faint and very high scream? You can't be quite sure, but the captain tells you: "The screech you hear just means that we have re-entered the atmosphere. Stay in a seated position from now on, but please fasten your belts." The windows are again not transparent anymore, because metal shutters on the outside have closed them to protect them from the air rushing by. The air-conditioning machinery prevents you from knowing or feeling it, but the ship is heating up; the sharp nose begins to glow a dull red.

10 Without much advance warning there is a steep bank; you know that the ship must be quite slow now or else it could not do that. You feel the draw on the ship as it prepares to land—then the bump of the landing. You have travelled for one hour and fifteen minutes, with less than four minutes of it under acceleration. With some trouble you straighten up and walk to the covered escalator.

11 Just beyond the horizon there is London.

HOW WELL DID YOU READ?

Can you recognize the use of a rhetorical question for effect?

1. When the writer in paragraph 3 asks the rhetorical question, "Why be uncomfortable if it can be avoided?" he wants

   A. the reader to think of reasons why a rocket passenger should be uncomfortable
   B. an answer to this question based on the information given in the selection
   C. to make the reader feel as if he is a passenger making the choice

2. Why does the writer introduce paragraph 9 with "Is that a faint and very high scream?"

   A. to notify the reader that the rocket ship is taking off
   B. to draw attention to the fact that the rocket has re-entered the atmosphere
   C. to show that rocket windows must be protected from the air rushing by

Evaluate the evidence.

3. Which of the following supports the writer's statement that the speed of the rocket ship must be quite slow on landing?

   A. The ship lands with a bump.
   B. There is an unexpected steep bank.
   C. Less than four minutes of the trip were under acceleration.

4. Which statement from the article best indicates that the rocket trip will not be a scenic flight?

   A. For those seven minutes you can look out the window at the other rocket passenger liners.
   B. True, you'll be over the wing, but there isn't much to see anyway.
   C. You try to look out of the windows and notice that they have turned almost opaque.

5. Which statement is the best evidence that the rocket is commencing the take-off?

   A. You begin to be squeezed to the upholstery; the ship is lifting.
   B. After "65" the figures turn red: high acceleration ahead.
   C. Acceleration is over; the ship now flies on momentum.

Can you read between the lines?

6. The reason for a covered mobile escalator was to

   A. keep rain, snow, and dust off the passengers
   B. avoid falls from the escalator
   C. prevent passengers from looking down and feeling uneasy

7. The rocket described in this article was

   A. an intercontinental ballistic missile
   B. a one-stage pickaback rocket
   C. a two-stage rocket

Evaluate the facts.

8. This article describes

   A. what rocket passenger travel might be like in the future
   B. a rocket ship of 1970
   C. the duties of a stewardess on board a rocket ship

VOCABULARY BUILDING

A. Semantic Variations

A word may have more than one meaning. We call these differences in meaning "semantic variations."

Directions: For each italicized word, decide which semantic variation best conveys the meaning of the author. Write the appropriate letter.

1. *port* (1)

   A. place where ships load and unload
   B. left side of of a ship, facing toward the bow
   C. any of a class of very sweet wines

2. *contour* (3)

   A. line that bounds anything
   B. system of plowing
   C. outline of a figure or body

3. *terminal* (4)

   A. point of current entry or departure in an electric current
   B. forming the end
   C. originating or ending point for transportation

4. *delta* (4)

   A. fourth letter of the Greek alphabet
   B. anything triangular
   C. alluvial deposit at the mouth of a river

5. *lapsed* (5)

A. passed
B. became void
C. made a slip or slight error

6. *scale* (6)

A. graduated series
B. relative size or extent
C. instrument for measuring weight

7. *position* (7)

A. condition with reference to place; location
B. condition with relation to circumstances
C. posture or attitude of the body

8. *normal* (8)

A. sane
B. usual
C. average

9. *atmosphere* (9)

A. quality that creates an impression in a work of art
B. normal pressure of the air at sea level
C. gaseous envelope surrounding the earth

10. *bank* (10)

A. rising land
B. sloping movement
C. shallow place

B. Classification

Certain words in this selection can be placed under one of these three classifications:

A. Space travel B. Time C. Furniture

Directions: Write an *A*, a *B*, or a *C* to show into which classification each word falls.

11. trough (3)
12. gravities (3)
13. instant (5)
14. upholstery (5)
15. seconds (6)
16. trajectory (7)

C. Suffixes

Suffixes may be added to words for various reasons.

Directions: Column II lists reasons for adding suffixes. Write the letter that shows the reason for adding the suffix to each word in Column I.

I	II
17. stewardess	***A.*** to make a noun from a verb
18. suddenly	***B.*** to designate "without"
19. weightless	***C.*** to indicate feminine gender
20. acceleration	***D.*** to change an adjective to an adverb

D. Synonyms

Synonyms are words with meanings that are alike.

Directions: The first word in each line comes from the selection you have just read. One of the other three words in each line is a synonym; the others are not. Write the synonym.

21. vertical	horizontal, upright, flat
22. securely	quietly, safely, slowly
23. operating	working, failing, building
24. towering	noisy, high, colossal
25. luminous	glowing, lively, odorous
26. squeezed	pressed, placed, raised
27. opaque	bright, dark, transparent
28. course	fine, route, coarse

E. Syllables

re/fuse un/com/fort/a/ble jump/ing a/void/ed

A syllable always contains at least one vowel. The vowel letters are *a, e, i, o, u,* and sometimes *y*.

Directions: Write the words below. Draw lines between the syllables: syl/la/ble

29. stationed
30. replaced
31. boarding
32. predicted
33. re-entered
34. prevents
35. recommended

2

Discovery by Accident

by Michael Harrison

Reprinted from ELIZABETHAN, London.

1 In the long history of man's inventiveness, discoverers seem to fall into two classes. The first is the ingenious person who sets out to find the solution to a problem. The second is the lucky one who appears to stumble upon something by accident.

2 But we should be clear what we mean by "accident." For the "accidental" aspect of many great discoveries is that something unusual has happened when there is an observant person present who *notices* what has happened, and sets to work to find out *why*.

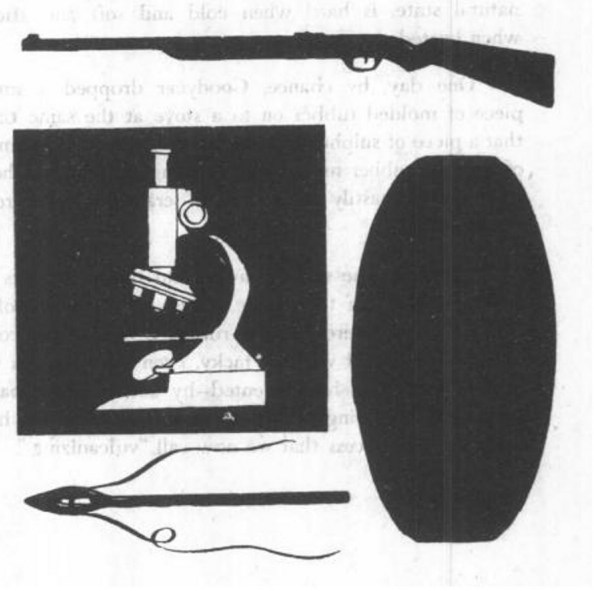
3 The best example of this happened so long ago that no one now can say who was the inventor. Consider the wheel, without which we should have neither clocks nor motorcars, neither airplanes nor steamships.

4 But men had been making wheels for tens of thousands of years before someone thought of using them to make work easier. Skeletons of people who died fifty thousand years ago were discovered to be wearing little wheels as articles of personal adornment; wheels are painted on their pottery and carved on their bone implements. Their children must have played with small wheels, yet thousands of years had to pass before someone thought of making a larger wheel and fitting it to a sled, thus making a cart.

5 During the First World War, Mr. Harry Brearley, a well-known expert in metals, was asked to investigate the problem of the "pitting" which spoiled gun barrels after being fired for a certain length of time. In his research, the first thing that Mr. Brearley did was to order a number of barrels to be made of new steel alloys. One of these alloys contained a higher percentage of chromium than had ever been used before.

6 A gun barrel was made of this new "chromium steel," but the first shot fired through it broke it into a dozen pieces. So the scraps were thrown on to the waste heap. A week or two afterwards, Mr. Brearley noticed that among the now rusty scraps of metal were a few which were as bright as when they had left the foundry. These were the broken pieces of the chromium steel barrel. From this accidental discovery developed the enormous benefits of "stainless steel."

7 The same desire to find out *why* lies behind one of the most valuable inventions of all time: that of penicillin. A culture of deadly bacteria that Dr. Alexander



Fleming was experimenting with became mouldy. He noticed that where the mould had formed, the deadly micro-organisms were dying fast. Had he then, he asked himself, found something which would actually kill the bacteria? With the help of some other scientists, he was able to cultivate the mould, which had been identified as *Pencillium Notatum*. Eventually, that mould was mass produced, and given to the world as the "wonder-drug," *penicillin*.

8 Behind the great rubber industry of today lies a story of one man's search and of his lucky discovery by accident. Charles Goodyear was an American who had been trying for years to find a way in which rubber could be made to produce a hard, non-sticky, and yet elastic substance. For the trouble is that rubber, in its natural state, is hard when cold and soft and sticky when heated.

9 One day, by chance, Goodyear dropped a small piece of molded rubber on to a stove at the same time that a piece of sulphur slipped out of his hand. The smell of burning rubber mixed with burning sulphur was horrible, and he hastily got a knife to scrape the mess from the stove top.

10 Feverishly he scraped away and threw the bits of boiling rubber on to a plate. But when it had cooled down, what a different sort of rubber it was! It was cold, and yet pliable. It was not tacky, even when it was reheated. Goodyear had invented—by accident—the basic method of preparing rubber for commercial use. He had invented the process that we now call "vulcanizing."

11 The pneumatic tire had been patented forty years before John Dunlop rediscovered it quite accidentally and through it laid the foundations for his immense rubber empire. Dunlop, a veterinary surgeon, had bought his small son a tricycle. In those days – seventy years ago – tricycles had solid wheels, and the going was rather bumpy for young Master Dunlop.

12 Looking around for some means of cushioning the rider from the shocks of an uneven road, Dr. Dunlop wondered what would happen if he cut off a length of rubber garden hose, just sufficient to encircle a tricycle wheel, closed the ends of the tube, and pumped air into it. (The tube, of course, was merely tied on to the wheel with cord, at first.) The idea was an instant success, and Dunlop at once saw the immense possibilities of fitting his "pneumatic" tires to tricycles, and bicycles for grown-ups as well.

13 It is said that when Elias Howe's wife complained to him that her sewing machine hardly did the job for which it was designed, Howe dreamed one night that a savage was chasing him with a gleaming spear which had a hole in the point. Howe woke up terrified but terribly excited. He had found the answer to the problem of making the lock stitch on a sewing machine, a problem which had baffled every inventor before. Put the eye in the point of the needle! There have been improvements since, but Elias Howe's basic idea remains the one on which the modern sewing machine works.

14 The list of discoveries by accident could fill a long book; and remember, most of them happened when somebody asked himself . . . *why?*

HOW WELL DID YOU READ?

Did you note important details?

1. The discovery of stainless steel was the result of
   - *A.* years of research by a metal expert to find stainless steel
   - *B.* an accidental detection of scraps of metal that had not rusted
   - *C.* a combination of the knowledge of several men in this field

2. Charles Goodyear was the American who invented a method for making
   - *A.* rubber hard when cold
   - *B.* a pneumatic tire
   - *C.* rubber pliable even when cold

3. The problem of making the lock stitch on a sewing machine was solved by
   - *A.* a dream
   - *B.* many months of hard work
   - *C.* improving the machine

Who was the inventor?

Column I lists some inventors mentioned in the story. Match the correct name to the invention listed in Column II.

Column I	Column II
4. Harry Brearley	*A.* the pneumatic tire
5. Alexander Fleming	*B.* making a lock stitch on a sewing machine
6. John Dunlop	*C.* penicillin
7. Elias Howe	*D.* vulcanizing of rubber
	E. stainless steel

What does the writer believe?

8. The writer asserts that "accidental" discoveries mean more than discoveries by chance because there has to be
   - *A.* a need for something the inventor is seeking
   - *B.* an observant person present who notices what has happened and sets out to find why
   - *C.* an expert to enlist the aid of other scientists

VOCABULARY BUILDING

A. Context

Often you can determine the meaning of a word from its context—the sentence or paragraph in which the word appears.

Directions: Find a word in the selection which means:

1. the ability to create (1)
2. watchful; alert (2)
3. examine in detail; inspect (5)
4. advantages; services (6)
5. excitedly (10)
6. soft; easily bent (10)
7. groundwork; basis (11)
8. confused; bewildered (13)
9. advances; something added to increase the value (13)
10. fundamental; original (13)

B. Semantic Variations

A word may have more than one meaning. We call these differences in meaning "semantic variations."

Directions: For each italicized word, decide which semantic variation best conveys the meaning of the author. Write the appropriate letter.

11. *appears* (1)
    - *A.* comes into sight
    - *B.* is placed before the public
    - *C.* seems

12. *culture* (7)
    - *A.* product developed for study
    - *B.* way of living
    - *C.* development by education

13. *trouble* (8)
    - *A.* disorder
    - *B.* bother
    - *C.* problem

14. *shocks* (12)
    - *A.* horrors
    - *B.* sudden bumps
    - *C.* groups of sheaves

15. *accident* (14)
    - *A.* chance
    - *B.* misfortune
    - *C.* a nonessential circumstance

16. *long* (14)
    - *A.* extended
    - *B.* lengthy
    - *C.* outstretched

C. Syllabication

pa / per va / cant

When there is one consonant between two vowels, syllable division is usually before the consonant.

Directions: Divide these words into syllables. Draw lines between the syllables.

17. solution
18. chromium
19. elastic
20. produce
21. prepare

D. Word Endings

history + an = historian
discovery + es = discoveries

When a suffix beginning with a vowel is added to words ending in *y*, the *y* is changed to *i* and the suffix added.

Directions: All of these words are governed by this rule. Add the ending and write the new word.

22. veterinary + an
23. possibility + es
24. terrify + ed
25. controversy + al
26. comedy + an

E. Vowel Combinations

The *ea* yowel combination in *mean* has a long *e* sound; in *head* the same combination has a short *e* sound.

Directions: Write the word with the long vowel sound from each of the following pairs.

27. deadly, heap
28. clear, cheat
29. easier, wear
30. heated, search
31. Goodyear, dream

F. Diphthongs

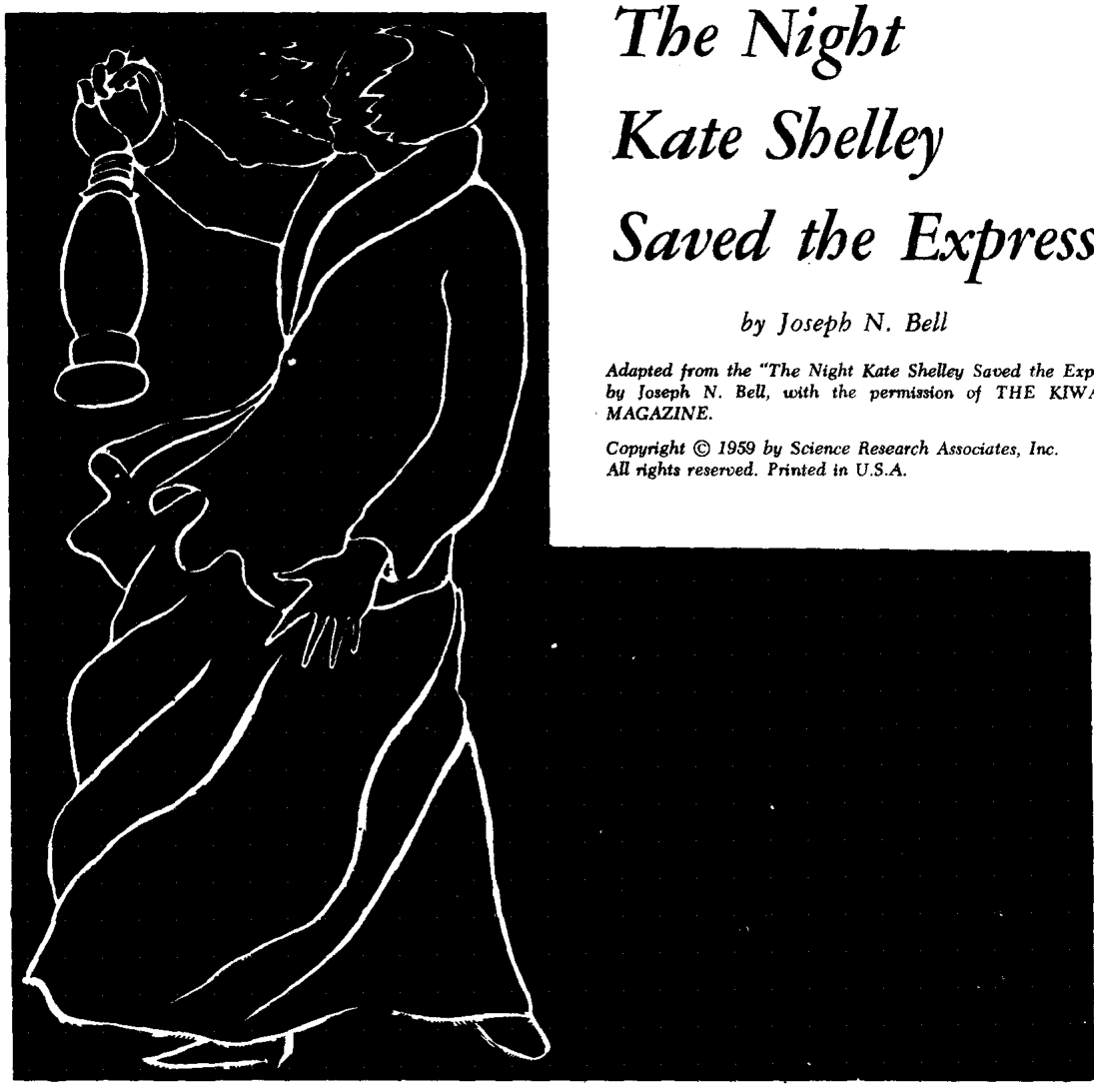
ou – house *oo* – could *o* – shoulder

A diphthong is a speech sound that glides from one vowel to another in the same syllable. Sometimes *ou* does not have the diphthong sound but has an *o* sound as in *over* or an *oo* sound as in *book*.

Directions: The following words are from the selection. From each pair, choose the word that has the diphthong *ou* sound as in *house* and write the word.

32. should, without
33. thought, thousand
34. found, mould
35. bouquet, around

3



The Night Kate Shelley Saved the Express

by Joseph N. Bell

Adapted from the "The Night Kate Shelley Saved the Express" by Joseph N. Bell, with the permission of THE KIWANIS MAGAZINE.

1 Spanning the Des Moines River in central Iowa is the longest double-track railroad bridge in the nation, the Kate Shelley Bridge. Today it is strong and secure, and towers safely some 180 feet above the usually placid waters. But there was a night when an earlier bridge across this river was neither strong, nor secure, nor safe; a night, too, when the waters of the Des Moines, furious and foam-flecked, reached up to drag the ancient railroad trestle down into their depths. On such a night, a fifteen-year-old girl named Kate Shelley performed an act of heroism that engraved her name forever in the archives of railroading history.

2 Shortly after the Shelley family moved to Moingona, Iowa, Kate's father – who had worked for the railroad – died suddenly, leaving Kate – then thirteen – to care for an invalid mother and three younger brothers and sisters.

3 The summer of 1881 had been wet. Throughout June, rains soaked the ground and made Honey Creek more belligerent than it had ever been before. Then, on the night of July 6, the skies really unloaded. Violent rain beat down for hours, and both Honey Creek and the Des Moines River became torrents of water.

4 Into this nightmare of rain, thunder, and lightning penetrated a sound familiar to young Kate – the nearby clanging of a locomotive engine. Kate knew who was in the locomotive and what they were doing, for whenever heavy rains threatened a washout, the railroad sent out

an engine, ahead of the regular trains, to make sure that the track was clear. Then, suddenly, there was a frightening, rending, grinding crash, followed by the insistent hiss of escaping steam.

5 Kate knew instantly what had happened and what she had to do. Grabbing her father's old railroad lantern from the wall, she ran out into the knee-deep water around her house. Leaning into a whipping wind, she struggled to the nearby tracks, and then made her way haltingly along them to the edge of the wrecked Honey Creek Bridge.

6 It was an hour before midnight when she got to the place where the steel rails twisted off into nothingness. Backing off, she held up her forlorn little lantern and, through the murk, searched the swirling waters below. She could see nothing, although she thought she heard a voice calling for help. Then a heavy bolt of lightning fleetingly revealed the whole tableau beneath her. For an instant, she could see two men clinging desperately to tree limbs in the swirling waters; then darkness again.

7 With sinking heart, young Kate Shelley realized that by just standing there she could do nothing for these men, and that she *must* get help. Then another shocking realization struck her. The Midnight Express, coming from the West, was due at Moingona at 11:27 p.m.

8 Again Kate knew what she had to do. Already soaked to the skin by the driving rain, she retraced her steps until she reached the near end of the old Des Moines River Bridge, which was waving and wavering above the flooded river. There was no other way for Kate to get into Moingona except to pick her way across this bridge, praying every step of the way that she could make it before the Express reached and passed Moingona. If she were too late, not only would the train plunge into Honey Creek, but also Kate Shelley would be trapped on the narrow wooden trestle, with no way to get out of the path of the oncoming train except to plunge into the waters below — to almost certain death.

9 Halfway out on the trestle, a rampaging gust of wind plucked the lantern from Kate's hands and dashed it into the river. In total darkness, punctuated only momentarily by flashes of lightning, she crept on her way. There was not time to brood over what was already lost. Now on her hands and knees, Kate used the rail as a guide to edge forward.

10 In the meantime, the Moingona station was crowded with townspeople who had sought shelter there. The night operator was worried about the test crew and wondered why there had been no word from them.

11 Suddenly the door of the station burst open, and a strange apparition appeared in the doorway. Drenched beyond recognition, exhausted, and frightened now that the ordeal was over, Kate Shelley gasped her news to the stationmaster.

12 "Stop the Express! The Honey Creek Bridge is out. And *please* get somebody out there to help the test crew. They're about to drown in Honey Creek."

13 The rest is anticlimactic. True to her railroading tradition to the last, Kate insisted upon going along on the rescue engine, in defiance of orders that she stay in Moingona and rest. She led the rescuers to the spot where she had seen the two men in the water. They were still there; the rescuers were able to reach them and drag them ashore.

14 What about Kate Shelley? For a few fabulous weeks, her name was a byword all over America. Newspapers everywhere told of her heroics. But this shy youngster, who had always lived in quiet anonymity, was ill-prepared for publicity and was grateful when it finally dwindled off. But Kate was never forgotten. When hard times fell on the Shelley family in the early 90's and it seemed that they would lose their home, a Chicago newspaper learned of Kate's plight and raised enough money to pay off the Shelleys' mortgage.

15 In 1903, Kate accepted a long-standing offer from the Chicago and Northwestern Railroad to become one of the nation's first woman station agents.

16 Today, the "Kate Shelley 400" makes daily runs over the Kate Shelley Bridge — the only railroad bridge, and one of the few trains, to be named after a woman. Although modern engineering has virtually eliminated the possibility of another washout ever taking place, there are those who insist that on stormy nights in Iowa, the ghost of Kate Shelley stands silent vigil to insure the safety of the railroad passengers who travel through her countryside.

HOW WELL DID YOU READ?

Follow the time order.

Below, in jumbled order, is a brief outline of the events of this story.

1. Write the letter of the statement that describes the second episode in the story.
2. Write the letter of the statement that describes the third episode in the story.

A. Kate Shelley saw that the Honey Creek Bridge was wrecked.
B. The "Kate Shelley 400" and the Kate Shelley Bridge are both named after this heroic girl.
C. Violent rains had made a raging torrent out of the Des Moines River and Honey Creek.
D. Kate made her way across the Des Moines River Bridge and warned the Express.

What was the writer's purpose?

3. The author's main purpose in writing this story was to

A. describe the dangers of railroading in the late 1800's
B. show how quickly people forget a heroic action
C. describe the heroism of Kate Shelley

4. Why was the scene described in paragraph 3 included just prior to the description of the wreck in paragraph 4?

A. It describes so vividly the flooded conditions of Honey Creek and the Des Moines River.
B. It enables the reader to understand the cause of the wreck.
C. It enables the reader to understand why Kate's subsequent action was so brave.

What inferences can you draw from known facts?

5. The longest double-track railroad bridge in the United States is called the Kate Shelley Bridge because

A. the railroad company wished to honor Kate Shelley
B. Kate Shelley was one of the first woman station agents in the United States
C. Kate Shelley's father, a long-time railroadman, lived near the bridge

6. From the information in paragraph 15, one could infer that

A. woman's place is in the home
B. in 1903 it was unusual for a woman to be a station agent
C. the work of a station agent is too heavy for a woman

What can you conclude?

7. The facts that a Chicago paper raised money to pay off Kate's mortgage and that a train and bridge are named in her honor best support the conclusion that

A. for a few fabulous weeks, her name was a byword all over America
B. this shy youngster . . . was ill-prepared for publicity
C. Kate was never forgotten

What did the writer say?

8. Skim the story and then write the numbers of the two paragraphs where the writer definitely states that it was the Honey Creek Bridge that was wrecked.

VOCABULARY BUILDING

A. Context

Often you can determine the meaning of a word from its context – the complete sentence or paragraph in which the word appears.

Directions: Find a word in the selection which means:

1. peaceful; calm (1)
2. historical records (1)
3. furious; angry; hostile (3)
4. rushing floods (3)
5. loudly splitting (4)
6. hopeless; miserable appearing (6)
7. violent; furious (9)
8. soaked; thoroughly wet (11)
9. trying experience (11)
10. namelessness; without being known (14)

B. Semantic Variations

A word may have more than one meaning. We call these differences in meaning "semantic variations."

Directions: For each italicized word, decide which semantic variation best conveys the meaning of the author. Write the appropriate letter.

11. *soaked* (3)

A. thoroughly wet
B. became slowly known
C. took in by absorbing

12. *penetrated* (4)

A. reached and passed through
B. entered and spread throughout
C. arrived at an understanding

13. *whipping* (5)

A. snatching
B. lashing
C. overlaying

14. *punctuated* (9)

A. emphasized
B. divided with punctuation marks
C. interrupted at intervals

15. *operator* (10)

A. telegraph worker
B. surgeon
C. stockbroker

16. *word* (10)

A. command
B. countersign
C. message

C. Syllabication

ta / ble un / cle mar / ble

If a word ends in *le* and a consonant comes directly before the *l*, this consonant usually begins the last syllable.

Words ending in *ckle* are exceptions, for example, *pick / le*. Because the *c* is silent, the *k* goes with the first syllable.

Directions: Say these words to yourself. Write the words. Draw lines between the syllables.

17. double
18. trestle
19. buckle
20. struggle
21. trickle

D. Prefixes

belief – disbelief happy – unhappy
magnetize – demagnetize

The prefixes *dis, un,* or *de* are all used to mean "the opposite of."

Directions: Decide which prefix, *dis, un,* or *de,* is used with each word below. Add the prefix and write the new word.

22. advantage
23. mobilize
24. militarize
25. fortunate
26. certain

E. Suffixes

teachable – capable of being taught
visible – capable of being seen

The suffixes *able* and *ible* mean "capable of being."

Directions: With each sentence below is a base word, in parentheses. Change the meaning of this word by adding the suffix *able* or *ible*, and use the new word to complete the sentence.

27. The salesman assured the customer that his merchandise was of the best quality _____ (obtain).
28. Many old books are still _____ (use) despite their age.
29. The assault victim gave the police a vivid account of the _____ (horror) beating he had received.
30. All _____ (perish) vegetables must be sold very quickly.
31. The warm, humid weather was barely _____ (tolerate).

F. Word Endings

hope – hoping improve – improvement

Words ending in a silent *e* usually drop the *e* before an ending or suffix beginning with a vowel. But they usually retain the *e* if the ending or suffix begins with a consonant.

Directions: Add the endings or suffixes indicated to each of the words below. Write the new word.

32. complete + ly
33. choose + ing
34. approve + al
35. disclose + s

4

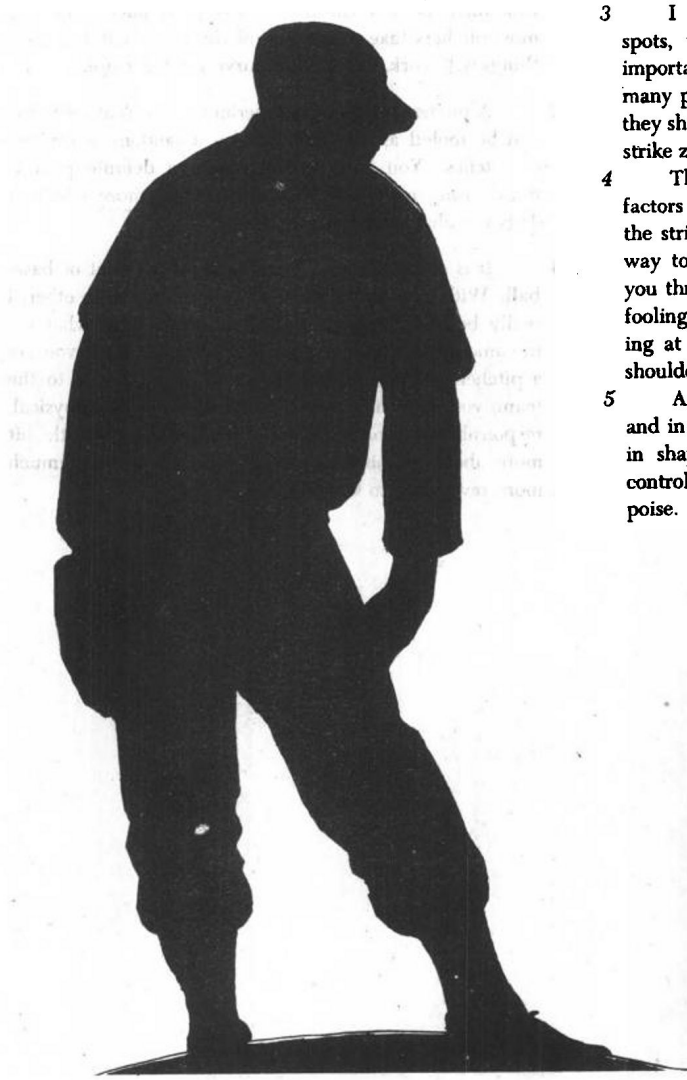
Sal Maglie on the Art of Pitching

as told to Roy Terrell

Adapted from SPORTS ILLUSTRATED © 1958 TIME, Inc., March 17, 1958, Volume 8, No. 11.

1 After twenty years in organized ball, I believe these are the things that make a big league pitcher:

Control, both of his pitches and of himself.
Confidence and determination.
Knowledge and experience.



2 This may appear to be a very simple list, but it is not nearly so simple as it sounds. In talking about control, for example, I mean that real pinpoint control that enables a pitcher to put the ball exactly where he wants it every time. The type of confidence and determination I mean is the kind that keeps a pitcher going when everything says to him that he is beaten. And when I say knowledge, I mean the real, deep, inside knowledge one gains not just through time spent at a job but, even more, from lots of study and experimentation. These things are not simple at all.

3 I mentioned control first, the ability to pitch to spots, to clip those corners or – sometimes almost as important – barely to miss them. It is surprising how many pitchers really don't know the strike zone the way they should. But it is also important to remember that the strike zone changes with the hitter and the way he stands.

4 The actual control of a pitch depends upon so many factors – the release point, the smoothness of the delivery, the stride – that it has to be a natural thing. One good way to develop control is to have a target every time you throw. Even when warming up on the side lines or fooling around before a game, a pitcher should be throwing at a spot: the other fellow's right knee, or his left shoulder, or the buckle on his belt.

5 As for control of self, I consider it just as important, and in some ways more so. I don't mean merely staying in shape, although that is absolutely necessary. Self-control means controlling your temper and retaining your poise. If a pitcher can keep his head even when they're

hitting him pretty hard, then he is still in control of the situation. Self-control also means controlling your mind, concentrating everything you have on the job at hand.

6 In some ways confidence and determination may sound like different things, but to a pitcher they have to go together. And without them no pitcher has ever become great. He has to be confident that he can beat the other team, and then he has to have the determination to do just that.

7 Determination really shows up when you get in a tight spot. I find that I just start to work harder. I notice that I'm pushing off the rubber harder, trying to get a little more on the ball. It doesn't always work, of course. You have to lose a few. But without that something extra when the going gets tough, you would certainly lose more than just a few.

8 Confidence works in a lot of ways. A pitcher has to be confident that his best pitch can get any batter out. I've had a lot of people ask me who I thought was under the most pressure in a tough spot with the count 3 and 2. I always say the batter. That's because I have enough confidence to believe that I can throw my big pitch in there for a strike, with the odds all in my favor that the batter isn't going to hit it. I'm a curve ball pitcher, and I just don't believe there is such a thing as a good curve ball hitter.

9 In baseball, there is no substitute for experience and the knowledge it brings. But for a pitcher, experience doesn't mean just sticking around in the big leagues for a few years and hoping to absorb enough knowledge merely by being there. He only gets experience and knowledge by working for them.

10 The one most important thing a pitcher gains from experience is knowledge of the hitters. I never quit studying them. I study them when I'm pitching and when I'm not. I watch them in batting practice and, when I'm not working a game, I watch them from the bull pen or the bench. I watch how they stride, and how they handle the bat. Every hitter is an individual, and I study him that way.

11 I think the pitches themselves are fundamental, of course. You grip a fast ball tightly, hold it deep in the hand, and let it slide straight off the fingers. You hold the curve out in the fingers a little more, throw it with the snap of the wrist, and let it go between your thumb and forefinger. The slider, which is a combination of these two, can be thrown either by releasing the index finger first and causing the ball to spin a little off center, or else by gripping the ball slightly off center. But the best pitch in baseball is the change of pace. For this, most pitchers take something off their fast ball, but other things will work, too. A slow curve is what I use.

12 A pitcher learns with experience, too, that no batter can be fooled all the time just by a random assortment of pitches. You have to pitch with a definite plan in mind, using one pitch to make another more effective. This is called setting up the batter.

13 It is often said that pitching is 90 per cent of baseball. With two top pitchers working against each other, I really believe that figure is about right. But whatever the amount, pitching is a big part of baseball. If you are a pitcher and you realize how important you are to the team, you carry a big psychological, as well as physical, responsibility. And if you're a fan, knowing a little bit more about pitching can make baseball just that much more rewarding to watch.

HOW WELL DID YOU READ?

What was the writer's opinion?

The writer gave his opinion about the art of pitching in big league ball. Write the letter of the statement that best completes the idea of the writer.

1. A big league pitcher must have control of
   - *A.* the batting order
   - *B.* the number of years he spends in the big league
   - *C.* both his pitches and himself
2. A big league pitcher must be confident that
   - *A.* his experience and knowledge are superior to other pitchers'
   - *B.* he can beat the other team
   - *C.* his own team will score many runs
3. A big league pitcher has to
   - *A.* pitch with a definite plan in mind
   - *B.* be rewarded for his efforts
   - *C.* use a slow curve often

Did you get the point?

The writer uses the terms *psychological* which means "pertaining to the mind," and *physical* which means "pertaining to the body" in order to show that pitching is a big job.

Directions: For each of the phrases below, write *A* if it concerns something that is psychological, and *B* if it concerns something physical.

4. gaining a knowledge of the hitter from experience
5. concentrating everything on the job at hand
6. staying in shape
7. having confidence and determination
8. gripping a fast ball tightly

VOCABULARY BUILDING

A. Context

Often you can determine the meaning of a word from its context – the complete sentence or paragraph in which the word appears.

Directions: Find a word in the selection which means:

1. build; create (4)
2. balance; stability (5)
3. fixing the attention; focusing (5)
4. replacement (9)
5. essential; basic (11)
6. chance; haphazard (12)
7. variety; miscellaneous group (12)
8. mental (13)
9. bodily (13)
10. satisfying; compensating (13)

B. Semantic Variations

A word may have more than one meaning. We call these differences in meaning "semantic variations."

Directions: For each italicized word, decide which semantic variation best conveys the meaning of the author. Write the appropriate letter.

11. *type* (2)
    - *A.* kind
    - *B.* pattern or model
    - *C.* metal block used in printing
12. *control* (2)
    - *A.* domination
    - *B.* ability to regulate
    - *C.* check
13. *sound* (6)
    - *A.* announce
    - *B.* pronounce
    - *C.* appear or seem
14. *tough* (7)
    - *A.* strong
    - *B.* stubborn
    - *C.* hard to bear
15. *pressure* (8)
    - *A.* oppression
    - *B.* force
    - *C.* stress
16. *snap* (11)
    - *A.* quick, neat motion
    - *B.* snatch
    - *C.* sharp, crackling sound

C. Syllabication

test / ed mind / ed fin / ished

When *ed* is added to a word that ends in a *t* or a *d* sound, the *ed* is a separate syllable. When *ed* is added to a word that does not end in a *t* or a *d* sound, *ed* is not a separate syllable.

Directions: Write the following words. Draw lines between the syllables.

17. mentioned
18. rewarded
19. assorted
20. controlled
21. depended