

CHEAPER BY THE DOZEN

LIVING  
LITERATURE  
SERIES

FRANK and ERNESTINE GILBRETH

A PERMA-BOUND PRODUCTION

TEACHER'S GUIDE

GUIDE WRITTEN BY KATHY SAMMIS

*This guide was prepared using the 1975 Bantam edition, © 1963. Other editions may differ.*

**SYNOPSIS**

In this episodic book, the authors fondly and very humorously remember their childhood years as two of the twelve Gilbreth children in a most unusual household. The chapters are not arranged chronologically.

**Chap. 1:** We are introduced to the Gilbreth household and its head, Dad, a large, exuberant, self-confident man who, with Mother, runs a scientific management company whose office is in the house and is usually full of children. Dad runs the twelve-children household along the principles of scientific management and the elimination of wasted motion (motion study). The children record their daily hygiene activities and homework on charts. Dad devises ways for himself and the children to carry out household chores (including taking baths) in the most efficient, motion-saving manner. When Dad gives his assembly-call whistle, all the children scramble to assemble in the quickest possible amount of time, to face Dad's wrath for some infraction, to be assigned jobs or errands, or, more likely, to get some wonderful surprises.

**Chap. 2:** The family car is a Pierce Arrow that is so balky and impractical, its nickname is Foolish Carriage. Dad is a terrible driver; the children have to serve as lookouts on family drives. When he bought the car, Dad scared each child in turn with the electric horn. One day little Billy turns the tables on Dad, who decides he loves a joke on himself, at least after the fact.

**Chap. 3:** Dad loves to take the family on outings in Foolish Carriage, even though the way he drives terrifies Mother and alarms the children. Each of the oldest children is responsible for one of the youngest ones, in all things, not just car rides. Anne, the oldest, is in charge of Dan; Ernestine, of Jack; Martha, of Bob. Mother takes care of baby Jane, and the intermediate children—Frank, Bill, Lill, and Fred—take care of themselves. On the car outings, Dad loves to call attention to his brood. When people ask, "How do you feed all those children?" Dad gives his stock answer, "Well, they come cheaper by the dozen, you know." He also uses this line to try to get discounts on tolls, movies, train tickets, or anything else.

**Chap. 4:** Outings in the car usually feature a picnic stop. Dad considers eating to be "unavoidable delay," time that should be used for instructional purposes. So he always finds interesting things to show the children and talk about on picnics, like ant colonies.

**Chap. 5:** We now learn about Dad's and Mother's backgrounds. He started as a bricklayer and became a very successful building contractor by applying motion study methods to achieve amazing speed records. Mother graduated from the University of California with a degree in psychology. When they married, they merged their expertise to become pioneers in the new field of management psychology as well

as motion study. At home, they then apply their concept of an employee-employer board to set up a Family Council, which meets weekly and votes on household decisions. The Council allocates household chores among the children and then outvotes Dad on getting a collie dog.

**Chap. 6:** Dad comes up with a way to use constructively the "unavoidable delay" of time spent in the bathrooms for things like bathing, tooth brushing, and hair combing. He sets up a victrola in both the boys' bathroom and the girls' bathroom. The children must play French- and German-language records whenever they're using the bathrooms, and soon they are all speaking at least some of each language (Dad, however, cannot understand a word of either). When Dad uses motion study to develop an efficient typing method for the Remington company, he of course brings the method home and uses it to teach almost all the children touch typing, avoiding Billy's question, "Can you type touch system, Daddy?" Dad also uses the "unavoidable delay" of dinner hour as an instruction period, holding forth on matters of "general interest," i.e., topics that interest him, which can range from motion study to India to mental mathematics.

**Chap. 7:** Part of Dad's master management plan is for the children to skip grades in school, which is efficient, and possible because they learn so much at home. He takes the children in person to enroll them, and charms the teachers and principals with periodic classroom visits so they are more than willing to skip the children. The children, though, find Dad's school visits embarrassing. As for church, Dad has nothing to do with church or formal religion, but Mother makes sure the children attend Sunday School. Her friendship with a woman from church leads to a hilarious visit to the Gilbreth household by an unsuspecting New York woman who wants Mother to form a local chapter of a national birth control association.

**Chap. 8:** Dad offers his time-motion management services to the government during World War I. While he is away, Mother takes the children to California for a visit with her family. The long train trip is predictably difficult, with the baby train sick, Lill down with a broken foot, and Mother expecting another baby in three months.

**Chap. 9:** At first, the children are on their best behavior in the Mollers' house, being quite subdued out of respect for Papa and Grosie (the grandparents). On the day that Grosie gives a formal tea, the children rebel and soak themselves and their uncomfortable formal clothes in the sprinkler. Everyone likes it better now that the children run shouting and playing through the house, and everyone cries when it is time to leave. But the return train trip is a disaster: all the children come down with whooping cough.

**Chap. 10:** While he is checking on almost all the children when they have measles, Dr. Burton announces they need to have their tonsils out once they're well. This gives Dad a great idea; he has been trying to make motion study movies

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of surgical procedures. He arranges for the doctor to take all the children's tonsils out on one day at the house in a series of operations that Dad's assistant films. Dad makes light of the children's worries about being operated on, and blithely goes off himself later to have his tonsils out—only to fall apart and return home moaning. And none of the movies come out.

**Chap. 11:** The Gilbreths spend summers in a cottage on Nantucket Island that Dad names "The Shoe," after Mother and the old woman who lived in one. (After the Gilbreths' first summer there, the neighbors move their own house a mile away). Dad promises there will be no formal studying on vacation, but he finds ingenious ways to teach the children informally. He leaves Morse code messages on the table and paints Morse code messages all over the walls of the house; then he paints the Morse code alphabet on the bathroom walls and dormitory ceiling, so the children are driven to decode the messages. He uses a telescope and wall paintings to get the children involved in astronomy. He fails, however, to teach Mother to swim.

**Chap. 12:** Dad acquires the *Rena*, a catboat, on Nantucket and teaches the children how to sail. On each voyage, Dad becomes an iron-fisted captain of yore with a crew of shanghaied landlubbers; the older children are his mates, and the younger ones the crew of seamen. Everyone throws themselves into the role-play—not that they have any choice, of course.

**Chap. 13:** This chapter finally gives us a rundown of the chronological order of births, noting where each child was born and in what order, with amusing anecdotes, but giving only a few corresponding dates. Dad is entranced with the first baby, Anne, and immediately tries to teach her skills that are developmentally impossible. As each daughter is born, Dad becomes resigned to being the Last of the Gilbreths, although he is delighted to introduce his "harem" to visitors, and especially loves to bring out the current baby, the "latest model." Predictably, Dad is overjoyed when the first boy, Frank Jr., finally arrives. Overall, Mother and Dad are pleased to have six of each, boys and girls. (Although everyone in the book talks about the Gilbreth family as consisting of twelve children, the second daughter, Mary, died when she was a very young girl, so there were never actually twelve Gilbreth children alive all at once. Mary's death, though, is not mentioned in the book; Mary herself is mentioned only once, on page 104, when her birth is noted.)

**Chap. 14:** Dad is an enthusiastic photographer, taking family pictures as often as possible. He has a special affinity for flash powder; the bigger the flash, the better, for him, leaving charred ceilings and odd expressions on the children's faces in the photos. Dad also often sets up family publicity photos and newsreels in connection with his motion-study projects, which generally embarrass the children by revealing too many details (sometimes false) about their unusual family life.

**Chap. 15:** Entertaining dinner guests is always interesting in the Gilbreth household, with the children applying Dad's rules to guests. (e.g., "Do you think that what Mr. Fremontville is saying is of general interest?" and "No need to gobble your grapefruit like a pig.") When Aunt Anne takes over the household when Mother and Dad are away, the children give her a particularly hard time at the dinner table, but she cows them when she gets as mad as Dad does about their misbehavior. The children do manage to drive another guest to distraction

when she tries to give them all intelligence tests and asks invasive questions.

**Chap. 16:** Dad often takes the children to the movies on Saturday night, going through a routine of pretending he will not let them sit through two shows and then reluctantly giving in. Even better are the skits the children put on for Dad and Mother, usually playing Dad and Mother with the children in tow inspecting a factory or Dad and Mother giving a lecture with the children as the audience. (NOTE: This chapter ends with an extremely offensive description of Dad, and then Mother, playing the part of performers in a pseudo-black minstrel show.)

**Chap. 17:** The older girls are teenagers, and the Jazz Age has begun. Anne, Ernestine, and Martha desperately work to overturn Dad's adamant opposition to silk stockings, teddies (rather than long underwear), and short skirts. Anne feels obliged to break the path for her younger sisters as well as herself. She cuts off her long hair; Mother soon takes the other girls for a barbershop bobbing. Anne gets a job and buys herself the offensive clothing; soon the other girls are wearing it too. Then Anne is asked out on her first date. Dad insists on going along as chaperone, but Foolish Carriage saves the day—it will not start, as usual, and Dad will not be seen dead in Joe's Tin Lizzie, so Anne gets to go off with Joe alone.

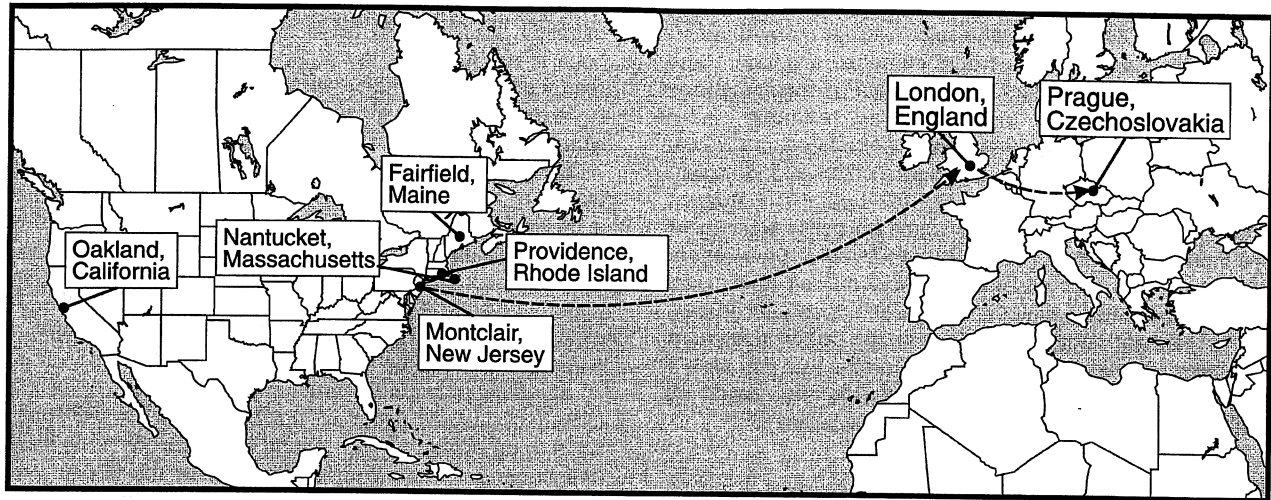
**Chap. 18:** All three girls are dating now, and Dad finally gives up on chaperoning the girls and their sheiks. It is hard to entertain their beaux in the house, though, because the intermediate children constantly spy on them and the youngest children climb all over them. On one memorable evening, the children trap one of Ernestine's sheiks peeping into her bedroom window from a tree in the yard.

**Chap. 19:** None of the children knew this beforehand, but Dad has a bad heart. That is one reason he has set up the household to run smoothly without supervision, and why the older children are responsible for the younger ones. He knew Mother was going to have to shoulder a load someday, and it happens on June 14, 1924, when Dad drops dead at the train station while on the phone with Mother. But the children agree that they can keep the household running while Mother takes over Dad's business responsibilities and continues her own.

### TIME LINE

- 1868 Frank Gilbreth, Sr. is born.
- 1878 Lillian Moller is born.
- 1901-09 Theodore Roosevelt is president.
- 1903 Frank Gilbreth and Lillian Moller meet in Boston.  
Nov. 17 Orville Wright makes the first powered flight in a heavier-than-air machine.
- 1904 Frank and Lillian get married in Oakland, California.
- 1904-09 The Gilbreths live in New York City; Anne, Mary, and Ernestine are born.
- 1904-14 The Panama Canal is built.
- 1906 April 18 An earthquake and fire in San Francisco kill 452 people.  
Upton Sinclair publishes *The Jungle*.
- 1908 Ford Motor Company introduces the Model T.
- 1909 Gilbreths move to Plainfield, New Jersey; Martha is born.  
The NAACP is founded.
- 1909-13 William Howard Taft is president.

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- 1910 Feb. 8** The Boy Scouts of America is chartered.
- 1911** Frank, Jr. is born.
- 1912** Mary dies of diphtheria; Gilbreths move to Providence, Rhode Island; Bill is born.  
**April 15** The *Titanic* is sinks after hitting an iceberg; 1,500 die.
- 1913-21** Woodrow Wilson is president.
- 1913** Willa Cather publishes *O Pioneers!*
- 1914** Lillian gets her Ph.D. from Brown University; Lill is born.  
**August** World War I begins.
- 1915** Edgar Lee Masters publishes *The Spoon River Anthology*.
- 1916** Fred is born.
- 1917 April** The United States enters World War I; Frank Gilbreth joins the Army.  
Lillian and the seven children visit the Mollers in Oakland; Dan is born.
- 1918 Nov 11** World War I ends.
- 1918-19** Influenza epidemic kills 400,000 in the United States.
- 1919** Jack is born; Gilbreths move to Montclair, New Jersey.  
Eighteenth Amendment establishes Prohibition.
- 1920** Bob is born in Nantucket.
- 1921-23** Warren G. Harding is president.
- 1922** Jane is born in Nantucket.  
Nineteenth Amendment guarantees women the right to vote.
- 1923 Aug. 2** Harding dies; Calvin Coolidge becomes president.
- 1924 June 24** Frank Gilbreth, Sr. dies.

### BIOGRAPHICAL SKETCH

As we learn from reading the book, the authors are two of the twelve children born to Frank B. Gilbreth and Lillian Moller Gilbreth, a building contractor and a psychologist respectively who pioneered in the fields of scientific management, motion study, and human relations. Ernestine, the Gilbreths' third child and third daughter, was born in 1908 in New York City. She graduated from Smith College in 1929, married sales executive Charles Carey in 1930, and worked as a department store buyer from 1930 until 1949 while also

raising two children. Frank B. Gilbreth, Jr., the fifth Gilbreth child and the first son, was born in 1911 in Plainfield, New Jersey. After his graduation from the University of Michigan in 1933, he began a career as a news reporter. He joined the staff of the Columbia, South Carolina, newspapers in 1947 and worked his way up to top management by the 1970s. He and his first wife Elizabeth had one child; after Elizabeth's death, he remarried and had two more children with second wife Mary. Ernestine and Frank collaborated on writing their memoirs about growing up in the unique Gilbreth household, and the manuscript was accepted by the first publisher they submitted it to. The book, titled *Cheaper by the Dozen*, came out in 1949 and was an instant best-seller. The sister-brother team followed up in 1951 with a sequel, *Belles on Their Toes*, about the years after Frank Gilbreth's death when Lillian Gilbreth reared and supported the family alone.

After *Belles*, Ernestine and Frank pursued solo writing careers. Ernestine authored three more comedies: *Jumping Jupiter*, a novel based on her experiences as a department store buyer; *Rings Around Us*, about her own married family life; and *Giddy Moment*, a farce revolving around lipstick. Frank has had a more extensive writing career, always infusing his works with the cheerful wit and good humor so characteristic of *Cheaper by the Dozen*. He described his own life experiences, especially fatherhood, in *I'm a Lucky Guy*, *How to Be a Father*, and *He's My Boy*. Frank returned to the subject of his parents, writing about the early years of their marriage, in *Time Out for Happiness*. None of Ernestine's or Frank's solo books were anywhere nearly as popular and well-received as their two collaborations.

### CRITICS' CORNER

Readers and critics alike were immediately charmed by *Cheaper by the Dozen*. Both it and *Belles on Their Toes* sold 500,000 copies each. They became Book of the Month Club selections, were both adapted for the stage, and were translated into many different languages. The film versions, by 20th Century Fox, came out in 1950 and 1952. Saturday Review called *Cheaper by the Dozen* "always entertaining, occasionally hilarious, occasionally touching." The *Christian Science Monitor* admired the book's "high standard of hilarity," adding, "[G]reat praise should be given the authors for their choice of anecdotes—of which, the reader feels sure,

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there must have been a large reservoir....The book is the greatest possible tribute by children to parents, and a living proof that the Gilbreths, at any rate, had so many children they knew just what to do—to the immense enjoyment and pleasure of all their readers." *Library Journal* recommended the book as "instructive, funny, and very readable," *Horn Book* called it a "rollicking tale," and *Booklist* accurately predicted, "Will be widely popular." Some critics did complain about the confusing chronology of the book, *The Atlantic Monthly* commenting, "The story would be better were there more landmarks in it of time and place by which the reader could steer." *The New York Herald Tribune Book Review* did not mind this, though, saying, "One hilarious chapter follows another," and concluding, "*Cheaper by the Dozen* is such an entertaining account of the growing Gilbreths that you wish it could have been written before [Frank Gilbreth's death in] 1924. The father of the Dozen would have enjoyed it."

### GENERAL OBJECTIVES

1. To gain an understanding of the principles of scientific management and the process and objectives of time-motion study
2. To consider the pros and cons of growing up in a very large family
3. To think about alternative ways of teaching and learning, outside the classroom
4. To become familiar with the social customs, fashions, means of transportation, household conveniences, and other details about life in the early-20th-century United States
5. To discuss enduring child and teen feelings of resentment, rebellion, embarrassment, and admiration toward parents
6. To explore the possibilities of conserving motion and time in everyday activities and the possible benefits of this

### SPECIFIC OBJECTIVES

1. To understand what Mr. and Mrs. Gilbreth do for a living and how and why they apply their business experiences and experiments to the running of their household
2. To solidify recognition of the various members of the Gilbreth household and the ways in which these individuals function within the family
3. To identify the various activities of the children to which Dad Gilbreth applies his time and motion studies and experiments
4. To note the various instructional approaches Dad develops to use during "unavoidable delays."
5. To examine the children's various comical, reluctant, enthusiastic, and embarrassed reactions to their father's exuberant plans, experiments, and routines
6. To identify similarities and differences in the ways the Gilbreth boys and the Gilbreth girls are treated.
7. To clarify vagueness in time and place, chronology, and numbers of Gilbreth children as described in the book
8. To consider which episodes in the book individual readers find particularly effective in terms of humor and emotion

### LITERARY TERMS AND APPLICATIONS

To enhance students' appreciation and understanding of

the novel, present them with these terms.

**autobiography:** a relatively full account of one's own life, usually a continuing narrative of important events. While this book tells a lot about the authors' growing-up years, it does not focus on the authors themselves, and it is not a continuing narrative or a full account of their lives. Contrast this term with memoir, below.

**biography:** a relatively full account of the life of a person, written by another person. This book is a memoir, rather than a biography, but it also is a partial biography of Frank Gilbreth, giving as it does information on his youth and rise to status of successful contractor and then management study expert. To be considered biography, the book would have to give much more detail about Frank Gilbreth's business career, his life outside the family.

**episodic structure:** narrative structure that consists of a loosely connected series of incidents. This memoir is structured in an episodic manner, and the episodes jump forward and backward in time quite often. Since the family moved several times, and spent a number of summers in Nantucket, and the authors give few dates within the narration, the episodic structure makes the sequence of events quite fuzzy and sometimes confusing to the reader.

**first-person and third-person narration:** a memoir is written in the first person, the author being "I" or authors being "we." In most of this memoir, we hear the authors' voices as "we," as in "So we'd all say we thought a ride would be fine." Since this memoir has two authors, the first-person "I" would be unclear with direct quotes. So the authors use the third person when quoting themselves, as in "'Honestly, Daddy,' said Ernestine, 'it's so embarrassing to go riding when you always make these awful scenes.'"

**memoir:** nonfiction in which the author or authors describe the people or events they have experienced during their lives. While an autobiography concerns itself mainly with the author, her or his life experiences, and the forming of her or his character, a memoir focuses more on the people and events of the author's life. In the case of this book, the authors describe the experience of growing up in a family of twelve children; they focus on family dynamics and the engaging, original character of their father rather than on themselves as individuals.

### SETTINGS

The settings are varied and not always clear. The main setting is the Gilbreth family home in Montclair, New Jersey, "an old but beautiful Taj Mahal of a house with fourteen rooms, a two-story barn out back, a greenhouse, chicken yard, grape arbors, rose bushes, and a couple of dozen fruit trees." It is mostly in this house that Dad applies his scientific management principles to management of his large family and household (including group tonsillectomy), and this is where the Family Council meetings take place, various visitors have challenging encounters with the Gilbreth clan, and the older girls struggle to entertain their dates unmolested. Several chapters tell about family outings in the gray Pierce Arrow tourer, an early crank-start model that is large enough to carry the whole family; it is also very cantankerous and impractical to own, so it is nicknamed Foolish Carriage. Around 1914, Mother takes her brood of seven children on a visit to her well-to-do parents' home in Oakland, California, where the children unleash their natural exuberance after a period of being oddly subdued. Summers are spent in a

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unique home on Nantucket Island, two lighthouses joined by a ramshackle cottage (with no hot water, shower, or bathtub) set on a flat stretch of land in Nantucket Town near the beach. Here Dad struggles unsuccessfully to teach Mother to swim and entices the children into informally learning about Morse code, astronomy, and sailing.

### CROSS-CURRICULAR SOURCES

For more information about the Gilbreth family, family life in general, the early 20th century, industrial engineering, puzzles and cyphers, astronomy, and other subjects and issues deriving from the book, consult these sources:

Frederick L. Allen, *Only Yesterday*

Sune Engelbrekston, *Stars, Planets and Galaxies*

Philip M. Isaacson, *Round Buildings, Square Buildings, and Buildings That Wiggle Like a Fish*

Michael and Marcia Folsom, *The Macmillan Book of How Things Work*

Irene M. Frenck and David M. Brownstone, *Manufacturers and Miners*

Martin Gardner, *Codes, Ciphers and Secret Writing and perplexing Puzzles and Tantalizing Teasers*

Kathryn Gay, *Ergonomics: Making Products and Places Fit People*

Frank B. Gilbreth, *Primer of Scientific Management*

John Gunter, *The Gunter Papers*

Max Heine, *Children: Blessing or Burden? (Exploding the Myth of the Small Family)*

Paul B. Janeczko, *Loads of Codes and Secret Ciphers*

David Macaulay, *Unbuilding and The Way Things Work*

Eve Merriam, ed., *Growing Up Female in America*

Frank Xavier Ross, *The Tin Lizzie: A Model-Making Book*

Robert Sobel and David B. Sicilia, *The Entrepreneurs: An American Adventure*

Gail Stewart, *1900s, 1910s, and 1920s*

Frederick Winslow Taylor, *Principles of Scientific Management*

Studs Terkel, *American Dreams Lost and Found and Working: People Talk About What They Do All Day and How They Feel About What They Do*

Also, consult these web sites:

"Dr. Lillian Gilbreth, PE," [http://www.njspe.org/75a\\_Gilbreth.htm](http://www.njspe.org/75a_Gilbreth.htm)

"Frank and Lillian Gilbreth Industrial Engineering Award," <http://www.iienet.org/gilbreth.htm>.

"The IE Trivia Page," <http://www.protech-ie.com/trivia.htm>.

"Lillian Gilbreth: An Engineer Whose Kids Were Cheaper By the Dozen," [http://www.suite101.com/discussion.cfm/womens\\_history/6970/latest/7](http://www.suite101.com/discussion.cfm/womens_history/6970/latest/7).

"Lillian Moller Gilbreth," <http://www.webster.edu/~woolfm/gilbreth.html>.

"Management History," [http://ollie.dcccd.edu/mgmt1374/book\\_contents/1...gmt\\_history.htm](http://ollie.dcccd.edu/mgmt1374/book_contents/1...gmt_history.htm).

"On Technology and the Human Factor," <http://www.armchair.com/warp/hf3.html>.

"Surgical Ergonomics Page," <http://www.dnai.com/~rberger/ergonomics/index.htm>.

### THEMES AND MOTIFS

A study of the central issues and situations in *Cheaper by the Dozen* should include these aspects.

#### Themes

- efficiency through time-motion methods

- effectiveness of innovative teaching methods
- large-family dynamics
- regimentation and efficiency
- scientific management at home and work
- family democracy and paternalism

#### Motifs

- humor
- family dinners
- receiving visitors
- teenagers in the Jazz Age
- early motoring
- early photography
- pregnancy and babies
- group illness and surgery
- Nantucket summers

### MEANING STUDY

Below are words, phrases, or sentences that have a particular meaning in the book. Explain each as it relates to the book. Use the page numbers given in parentheses to reread the term in context if you wish.

1. There were times when Dad had to resort to railway baggage scales to ascertain his displacement. (Chap. 1, p. 1)  
*(Sometimes, Dad weighs so much that a regular household scale will not work for him. He has to get on the baggage scales at a railroad station in order to find out how much he weighs. The link between heart disease/failure and extreme overweight was not understood back then; it is likely that Dad's very large girth contributes to his early death from a "bad heart.")*
2. It was a gray Pierce Arrow, equipped with two bulb horns and an electric Klaxon....[It] kicked Dad when he cranked. (Chap. 2, p. 9)  
*(These details show us that this is an early model Pierce Arrow, the type that starts by hand-cranking; the electric self-starter was invented in 1912. Early cars usually had hand-operated horns; you squeezed the bulb and the horn blew. A nifty accessory was the loud electric horn; Klaxon was a very popular type, and eventually the trademark name became a generic term.)*
3. "...to pay toll on my road." (Chap. 3, p. 16)  
*(In the early days of automobiling, some people put up private toll barriers on roads or bridges that crossed their property. Toll operators charged whatever the traffic would bear. Dad always tries to size up the toll man and makes an appeal for a cheaper or free toll by asking, "Do my Irishmen [or other nationality that matches the toll operator's nationality] come cheaper by the dozen?" The appeal usually works.)*
4. two victrolas (Chap. 6, p. 33) ... graphophone (Chap. 17, p. 158)  
*(Victrola is a trademarked name for a brand of phonograph, or record player; although it is a trademark name, it came to be used generically. Graphophone is another trademarked name for a brand of phonograph, not usually used generically. Dad sets up a victrola in both the boys' and the girls' bathrooms so the children can listen to French- and German-language records while attending to bathroom activities. Later, the graphophones or victrolas fill the house with jazz at all times once the Jazz Age has dawned, to Dad's immense annoyance.)*

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5. ...the house was quarantined. (Chap. 10, p. 74)  
*(In the days when it was impossible or difficult to treat infectious diseases and prevent their spread, a household would be quarantined if one of its members came down with a particular infectious disease. This meant that all people in the household could not go out in public, and people from outside were not allowed to visit. Martha is very unhappy at having to stay downstairs and inside by herself while all her siblings are upstairs recovering from the measles and the house is under quarantine.)*
6. ...during the confinements. (Chap. 13, p. 109)  
*("Confinement" is a term formerly used as a euphemism for childbirth, including the time in labor and the recovery period afterward. During the years when the Gilbreth children were arriving, childbirth at home was common, and middle- and upper-class people followed Victorian sensibilities in not referring outright to the process. In this era, women were quite confined during pregnancy and after birth, having to stay in bed for ten days to two weeks after birth and often having to refrain from appearing in public once the pregnancy was at an advanced, or even visible, state.)*
7. "Marguerite Clark and Mary Pickford have things pretty well lined up out there, you know." (Chap. 14, p. 122)  
*(Dad is referring to two popular movie actresses of the times, suggesting that Ernestine not try to take a lead role in their home-made promotional film.)*
8. minstrel show (Chap. 16, p. 147)  
*(Dad sometimes puts on one-man minstrel shows for the children, the minstrel show being a popular form of entertainment in the 1800s and early 1900s. The show featured white performers wearing black-face—makeup that was supposed to make them look like African-Americans—and playing instruments, singing songs, and carrying on joke routines in broad, supposedly black accents. Today, the idea of minstrel shows is extremely offensive, and the description on page 147 of the book of Dad playing his part "with his lower lip protruding and his hands hanging down to his knees" and shuffling up and down, followed by Mother's assumption of the role on page 148, will appall and offend many readers.)*
9. rouged lips and rolled stockings...flaming youth...It was the day of the flapper and the sheik, or petting and necking, of flat chests and dimpled knees....Girls were beginning to bob their hair. (Chap. 17, p. 148)  
*(These are all hallmarks of the Roaring Twenties, the Jazz Age, which the teenage Gilbreth girls are delighted with and Dad is horrified by. Up until now, only actresses and women of easy virtue wore makeup; now girls openly color their lips. Fashionably dressed girls wore their stockings rolled down under short skirts that revealed their knees; a stylish young woman like this was a flapper. Her stylish boyfriend was a sheik, and when they went out on dates, they threw out Victorian conventions and actually kissed and maybe even touched each other. The long hair that women had always worn suddenly went out of fashion, and girls and women began to cut their hair very short, in a bobbed style. Inch by inch, the teenage Gilbreth girls get Dad to yield as they adopt these new styles and social mores.)*
10. Dad had no confidence in the football heroes and other

sheiks who soon were pitching their tents and woo upon the premises. (Chap. 18, p. 165)

*(Once Anne has had her first date, Anne, Ernestine, and Martha all start dating regularly; their dates are called, in Roaring Twenties slang, "sheiks." "Pitching woo" is another slang term of the time, meaning the boys are paying amorous attention to the Gilbreth girls. Dad feels that boys are not just pitching woo, but that they are also around so much, it feels as if they're pitching tents and settling in permanently.)*

## COMPREHENSION STUDY

Answer the following questions in your own words. There is not always a right answer. Your judgment is important, and you should be ready to defend your answers by referring to passages in the book.

### Questions 1-4 (Literal Level)

1. What are the names and the occupation of Mr. and Mrs. Gilbreth, and what type of business do they run? What is the name of each Gilbreth child? List the children's names in the order in which they were born, along with the birth place of each. Add birth year if the book gives that information.  
*(Dad is Frank B. Gilbreth, a contractor and motion study expert. Mother is Lillian Moller Gilbreth, a psychologist; together, they run a business that conducts motion studies for business and industry and advises on psychology and human relations in management. The children, in order of birth are: Anne, Mary, Ernestine (all three born in New York City), Martha (born in Plainfield, New Jersey), Frank Jr. (born 1911 in Plainfield), Bill (born 1912 in Providence, Rhode Island), Lillian (Providence), Fred (born in Buttonwoods, Rhode Island, at a summer house), Dan, Jack (both born in Providence), Bob, and Jane (both born in Nantucket).*
2. Which of the children's activities does Dad try out his time and motion studies and experiments on?  
*(Dad takes movies of the children washing dishes so he can reduce their motions and make them more efficient. He installs charts in the children's bathrooms on which the youngsters record their daily hygiene and homework activities. He uses a system he developed for the Remington typewriter company to teach almost all the children the touch typing system. When he starts applying motion study to surgery, Dad decides the children will undergo group tonsillectomy; the movies his assistant will take of these repeated operations will surely reveal ways to perform tonsillectomies more efficiently. He breaks down the children's household chores into Therbligs (units of motion or thought) so each step of each chore can be performed in the most efficient manner.)*
3. In what ways does Dad use spare time and "unavoidable delays" as educational opportunities for the children?  
*(Eating, according to Dad, is an "unavoidable delay," so he devises ways not to waste this time. During picnics, he finds interesting, instructional things to talk about and show the children, like ant colonies or stone walls or factory buildings. At the dinner table, he insists on talking about matters of "general interest" that will impart useful information to the children; during family meals, the children learn mental arithmetic, table manners, facts about India. Time spent in the bathroom doing things like*

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bathing, tooth-brushing, and hair-combing is also "unavoidable delay." Dad tackles this by putting a victrola in both the boys' and the girls' bathroom and ordering the children to play French-language and German-language records whenever they are using the bathroom. Summer vacation in Nantucket is another stretch of open time. Dad has promised the children they would have no formal studying or teaching on vacation, but nevertheless he finds ingenious ways to teach them Morse code and astronomy.)

4. What things does Dad do that embarrass his children? (Some of Dad's embarrassing actions include: making scenes and gathering crowds on family outings in the *Pierce Arrow*; visiting the children's school classrooms, especially since he seems to break all the school rules in the process; publicity photos and writeups involving the family that appear in the local newspapers; calling attention to himself at the movies by crying and laughing very noisily; and, for the teenage girls, forbidding them to wear modern 1920s -style clothing and bobbed hair and, worst of all, insisting on himself or younger brothers going along on dates as chaperones.)

### Questions 5-7 (Interpretive Level)

5. Write character descriptions of both Mr. and Mrs. Gilbreth. How do their different personality traits combine to make them a good parenting team? (Dad Gilbreth is almost always immensely self-confident. He is proud of his business success, and is certain that the principles of scientific management and efficient motion can be applied to the running of his household and the training of his twelve children. Dad loves his children, likes to joke with them, and often gives in to their pleas for treats, but he also yells at them often when things do not go smoothly, and he hits and spansks them when he feels they need punishment. Mother Gilbreth, on the other hand, never disciplines the children. She does not shout, or get excited, or threaten, or spank. Instead, she sees each child as an individual and works to soothe and encourage each one in the way that is best for each child; she helps adapt Dad's one-management-plan-fits-all approach to each different child. She calms down Dad when he gets overexcited, intervenes when his corporal punishment might edge toward harshness, yet calmly goes along with his various educational and management plans and in doing so, gets the children to go along without much protest too. Dad is so exuberant about his plans and experiments, he cannot seem to recognize when something is not working or he is carrying things too far. At these times, Mother gently curbs him or subtly calls a halt, and Dad goes along with her.)
6. Why does Mr. Gilbreth set up the household along scientific management and motion efficiency lines? (He is inspired to do this because of his and his wife's profession in this field. But he has good practical reasons for his household management system. In a family that grows to thirteen, and the business office in the house, "some regimentation was necessary to prevent bedlam," as the authors admit. With an overwhelming number of household chores to perform, efficient ways of assigning and performing those chores are also needed. The assembly call, while often a nuisance for the children and performed only for Dad's enjoyment, is also very practical in case of emergency, such as evacuating the house when there is a fire. The roll-call helps prevent mistakes like leaving a child behind in a restaurant. The Family Council yields committees that check waste and make bulk purchases. Most importantly, Dad has set up a household system that operates smoothly without the constant supervision of himself or Mother, and a system of older children being responsible for younger ones; this will relieve the burden on Mother when Dad dies early of the bad heart he has known he has had for years.)
7. In what ways are the Gilbreth girls and Gilbreth boys treated differently? Why is this the case? In what ways are the girls and boys treated alike? (Differences in treatment of the girls and boys reflects the social reality of the early part of the 20th century in the United States. When household chores are allocated, the girls sweep, dust, and do the supper dishes, while the boys cut the grass and rake the leaves. Dad loves his girls and puts on a game display of satisfaction when each of the first four babies is female, but he is overwhelmingly excited when the first boy baby arrives and instantly announces he is going out to get some "toys suitable for a boy baby." He also semi-jokes that he and Mother can keep the little girls because they'll come in handy some day to "scrub the pots and pans and mend the socks of the men folk," an accurate prediction of the way the household chores are allotted, although the boys will do their full share of chores themselves. The attempts of the teenage girls to dress in the 1920s styles and go on dates are met with great paternal opposition; we know the boys will not have to take chaperones along on dates. But the girls have their way in the end, as we suspect they will. And overall the girls get equal treatment with the boys; all the children are expected to learn, be curious, explore, use their minds fully, and contribute their fair share to the running of the household.)

### Questions 8-10 (Critical Level)

8. What is the meaning of the book's title? Do the Gilbreths really have twelve children? (Dad Gilbreth has a stock response when people ask why he and Mother have so many children: "They're cheaper by the dozen!" That is an old saying based on the fact that you can often buy a dozen of a particular item at a lower cost per item than if you bought the items individually. There is a problem with this though. Mr. and Mrs. Gilbreth have indeed had a total of twelve children, but Mary—who is mentioned only once in the book, on page 104—died when she was a very young girl. [The book does not tell us this, but Mary, the second-born child, died in 1912, the year after Frank Jr., the fifth child, was born.] So after the last child, Jane, is born, there are actually only eleven Gilbreth children.)
9. How would you describe the chronology of this book? Does it proceed through time from earliest to latest events in the Gilbreth family? Do you find the organization of the book at all confusing? (The book is episodic, with the authors recording remembered events and management approaches and family milestones over time. These episodes are not arranged in any kind of chronological order, which can

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*get confusing, especially since the book mentions almost no dates, and the family lives in several different places and new babies are always being born.)*

10. One critic described this book as "always entertaining, occasionally hilarious, occasionally touching." What episodes did you find the most funny, and which did you find touching?  
(Answers will vary. Certainly the last chapter, telling about Dad's death is very touching.)

### Questions 11-13 (Creative Level)

11. Identify several specific issues/problems not addressed in the book that members of the Gilbreth family need to discuss and vote on. Then, conduct a Gilbreth Family Council meeting with classmates to tackle these issues.
12. Suppose you were one of the Gilbreth children. (Which one would you choose to be?) What do you like and dislike about being part of such a large family and growing up with Dad Gilbreth's management systems?
13. Imagine and describe a funny incident that occurs in the Gilbreth household that involves almost all of the family members.

## ACROSS THE CURRICULUM

### Art

1. Come to class dressed in flapper and sheik styles of the 1920s, and then act out some scenes between the teenage Gilbreth girls, their sheiks, the other Gilbreth children, and the parents.
2. Build a model of the Gilbreth's Pierce Arrow or Joe Scales's Model T or other cars of those times.

### Health

1. Research and report on the symptoms, causes, and treatment (today and in the past) of whooping cough, measles, and/or heart disease.
2. Research and report on the development of various forms of anesthesia for surgery. Why do patients who are to undergo anesthesia for surgery have to abstain from eating or drinking anything starting with the night before the operation?
3. Tonsillectomies used to be almost universal for children; now they are not. Why is this so?

### History and Social Studies

1. Create a classroom display that traces the development of roadside accommodations, including dining (outdoor and indoor) and overnight facilities, as the automobile culture was born, grew, and flourished.
2. Research and report on the early fight about allowing cars on Nantucket Island.
3. Trace changing trends in childbirth procedures, from the home, to standardized hospital delivery, followed by recent consumer-driven changes.
4. In the Gilbreth children's schools, students recited the Lord's Prayer at the beginning of the school day. Use a time line to trace the court decisions about religion and schools over time during the 20th century.
5. The authors describe the Gilbreths' home in Montclair, NJ, as a "Taj Mahal" of a house. What is the Taj Mahal? Create a class display showing the architectural features of this world wonder.
6. Dad Gilbreth often uses corporal punishment to discipline his children. Track the ways in which attitudes and

uses of corporal punishment have changed from the early to the late 20th century.

7. Create a multimedia presentation about the fads and fashions and slang embraced by the flappers and sheiks of the Roaring Twenties.
8. Make a list of at least ten details that set this book in its time period of the early 20th century. Then compare lists with classmates and make up a master list of such details.

### Language Arts

1. Read Clarence Day's *Life with Father* and compare it with *Cheaper by the Dozen*.
2. Read some of Robert Browning's poems and explain why you think they would have appealed to Mother Gilbreth.
3. Try listening to some foreign-language tapes during your moments of "unavoidable delay." After a few weeks, are you able to speak a little bit of the language?

### Mathematics

1. On a map, trace the cross-country train trip made by Mother Gilbreth and the children from New York City to Oakland, California. How many miles did they travel? Given the speed of trains of that day, how many days did they use to make the trip, and what was their average speed per mile?
2. Suppose you wanted to make a transcontinental trip today. How many hours and dollars would you spend to make that trip by train, by bus, by car, and by plane?

### Music

1. Play early recordings of Jazz-Age music for classmates.
2. Develop class choral performances of popular early 20th-century songs like the ones the Gilbreth family members sing together on their car outings.
3. Play recordings of or put on class performances of traditional sea shanties like the ones the Gilbreths sing while sailing the *Rena*.

### Science

1. Study and chart an ant colony and the roles of its various workers. Or use a kit to set up an ant colony and display it in class, explaining its various components and workers.
2. Create a project that demonstrates Archimedes' principle.
3. Create a display of the night sky and the various stars, constellations, planets, and other heavenly bodies for a particular month in your locale. Be sure to show the constellation Orion, and tell the legend behind each constellation.
4. Explain how the X and Y chromosomes of mother and father determine the gender of a baby.
5. Explain the scientific principles and methods used in photography, and create a poster or other visual display that traces the evolution of photography from early days to the present.

## STUDENT INVOLVEMENT ACTIVITIES

1. Do a time-motion study of some activity your family members or friends engage in most days. Can you find ways to make performing this activity more efficient?
2. Put on a class fashion show in which you and some of your classmates dress in styles of the early 20th century,



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including business attire Dad Gilbreth and Mother Gilbreth would have worn, the various bathing suits of the era, and the startling new Roaring Twenties fashions favored by young people.

3. Demonstrate use of the Morse code for classmates. Then, devise a secret code yourself and challenge classmates to figure it out.
4. What do your parents do that embarrasses you? Share stories with classmates. Are any of the stories similar to things that embarrassed the Gilbreth children?
5. Gilbreth children who get poor grades have to study afternoons and get tutoring from their older siblings and parents, but they do not get scolded. Do you think this is an effective way to deal with poor grades? What other approaches would you suggest?
6. Create a classroom display of changing automobile styles for each decade of the 20th century.
7. With classmates, act out some favorite scenes from the book—for example, a family outing in the Pierce Arrow, or a family dinner with a guest present.
8. Demonstrate the dances Anne and her sheik would have done at their 1920s prom.
9. Invite an experienced windsurfer to class to demonstrate how to use the wind to propel this type of craft. As part of this demonstration, explain yourself the various sailing terms used in Chap. 12 of the book.

### ALTERNATE ASSESSMENT

1. Reorder the events and incidents described in the book into chronological order, also noting in what town and state each occurs.
2. Create a Gilbreth-Moller family tree.
3. Describe the ways in which Dad Gilbreth sets his household up to run according to scientific management principles.
4. Draw up a chart listing the many educational and informational things the children learn from their father rather than at school.

### OTHER BOOKS BY THESE AUTHORS

#### Books by Ernestine Gilbreth Carey and Frank B. Gilbreth, Jr.

*Belles on Their Toes* (1951)

#### Books by Ernestine Gilbreth Carey

*Jumping Jupiter* (1952)

*Rings Around Us* (1956)

*Giddy Moment* (1958)

#### Books by Frank B. Gilbreth, Jr.

*I'm a Lucky Guy* (1951)

*Held's Angels* (1952)

*Inside Nantucket* (1954)

*Of Whales and Women* (1956)

*How to Be a Father* (1958)

*Loblolly* (1960)

*He's My Boy* (1962)

*Time Out for Happiness* (1971)

*Ancestors of the Dozen* (1994)

### RELATED READING

Louisa May Alcott, *Little Women*

Tom Braden, *Eight is Enough*

Robert Burch, *Ida Early Comes Over the Mountain*

Olive Ann Burns, *Cold Sassy Tree*

Betsy Byars, the Blossom Family series

Clarence Day, *Life with Father* and *Life with Mother*

Eleanor Estes, the Moffat family stories

Kathryn Forbes, *Mama's Bank Account*

Joanne Greenburg, *Simple Gifts*

Ann M. Martin, *Ten Kids, No Pets*

Lucy Maud Montgomery, *Anne of Green Gables*

N.A. Perez, *One Special Year*

Margaret Sidney, *The Five Little Peppers and How They Grew*

Betty Smith, *A Tree Grows in Brooklyn*

Mildred D. Taylor, *Roll of Thunder, Hear My Cry* and *Let the Circle Be Unbroken*

John Rowe Townsend, *Noah's Castle*

Cynthia Voigt, *Homecoming*

Kate Douglas Wiggin, *Rebecca of Sunnybrook Farm*

Laura Ingalls Wilder, the Little House series

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*Time*, June 13, 1949, pp. 108, 110.

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CHEAPER BY THE DOZEN

VOCABULARY TEST

Match each underlined word with its meaning listed below. Write the letter of the meaning in the space next to the sentence number.

- |                     |             |            |               |
|---------------------|-------------|------------|---------------|
| a. stopped short    | f. honored  | k. yielded | p. disastrous |
| b. smiling smugly   | g. doubts   | l. secret  | q. agonizing  |
| c. regaining health | h. dejected | m. crazed  | r. lifeless   |
| d. hut, shack       | i. boosted  | n. untidy  | s. delicious  |
| e. praiseworthy     | j. granted  | o. began   | t. be enough  |

- \_\_\_ 1. We thought this was another one of his surprises, but Dad finally convinced us that the new house was a hovel.
- \_\_\_ 2. The other safety measures, which we soon inaugurated as a matter of self-preservation, were our own.
- \_\_\_ 3. One day, while we were returning from a particularly trying picnic, the engine balked, coughed, spat, and stopped.
- \_\_\_ 4. Dad was a perpetual optimist, confident that brains someday would triumph over inanimate steel.
- \_\_\_ 5. Dad was bolstered in the belief that he entered the fray with clean hands and a pure heart.
- \_\_\_ 6. When he ate an apple, Dad consumed skin, core and seeds, which he alleged were the most healthful and delectable portions of the fruit.
- \_\_\_ 7. Mom and Dad never elaborated about just what diseases the public toilets contained, but they made it plain that the ailments were both contagious and dire.
- \_\_\_ 8. "QWERTYUIOP. Get to know them in your sleep. That's the first step." We looked crestfallen.
- \_\_\_ 9. The explanation of how the math tricks worked is too complicated to explain in detail here, and two fairly elementary examples should suffice.
- \_\_\_ 10. As for report cards, members of the family who brought home good grades were feted and rewarded.
- \_\_\_ 11. "Besides," said Dad, "most priests whom I have known don't appear to be surreptitious pinchers."
- \_\_\_ 12. "She's kept her youth well," Mother conceded.
- \_\_\_ 13. Our grandparents became worried by our exemplary behavior. It made them nervous the way we tiptoed and whispered.
- \_\_\_ 14. Mother said Dad probably would not feel like driving home after Dr. Burton took his tonsils out, but Dad laughed at her qualms.
- \_\_\_ 15. While we were recuperating from the tonsillectomies, Dad spent considerable time with us.
- \_\_\_ 16. When Dad was caught and his elbow thumped on the table, he grimaced as if in excruciating pain.
- \_\_\_ 17. "Aw, come on," Dad begged. "Don't be spoil sports. Let's see it again." We filed smirking back to our seats.
- \_\_\_ 18. Anne appeared at dessert time, red-eyed and disheveled.
- \_\_\_ 19. Having capitulated on the hair question, Dad put up an even sterner resistance against any future changes in dress.
- \_\_\_ 20. "It's impossible to entertain at home with that troop of four berserk little boys."

## CHEAPER BY THE DOZEN

### COMPREHENSION TEST A

#### Part II: Short Answer (30 points)

Briefly describe each of these incidents from the book.

1. having tonsils taken out
2. teaching typing
3. foreign language lessons
4. a woman from national headquarters in New York visits with Mother
5. taking family photographs
6. learning Morse code
7. Anne's first date
8. the visit to Oakland
9. sailing in Nantucket
10. intelligence testing

#### Part II: Fill-In (20 points)

Write one or two words in each blank to make each statement true.

1. Dad's nickname for the family car, the Pierce Arrow, is \_\_\_\_\_.
2. Dad considers time spent eating and in the bathroom as "unavoidable \_\_\_\_\_."
3. The family spends many summers at their cottage on the island of \_\_\_\_\_.
4. During one summer vacation, Dad teaches the children how to decipher secret messages written in \_\_\_\_\_.
5. There are \_\_\_\_\_ boys and \_\_\_\_\_ girls in the Gilbreth family, for a total of twelve.
6. Dad calls each new baby the Latest \_\_\_\_\_.
7. At dinner, everyone in the family tries to remember not to put their \_\_\_\_\_ on the table.
8. The Gilbreth family lives for many years in Montclair in the state of \_\_\_\_\_.
9. Anne buys teddies to wear instead of \_\_\_\_\_.
10. Dad takes movies of people performing tasks like dishwashing so he can identify and eliminate wasted \_\_\_\_\_.

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### Part III: Multiple Choice (20 points)

Underline the choice that correctly completes each of these sentences.

1. On car outings, Mother and Dad refer to going to the bathroom in the woods as "visiting (Aunt Anne, Oakland, Mrs. Murphy, the outhouse)."
2. Mrs. Cunningham is the family's (nurse, maid, grandmother, cook).
3. A flapper's boyfriend or date is called a (flipper, cowboy, sheik, cootie).
4. The children trap a Peeping Tom admirer of Ernestine's (on his motorcycle, up in a tree, in a closet, on the porch).
5. The family's "Foolish" Pierce Arrow is a (car, buggy, sailboat, motorcycle).
6. Mother's term for anything off-color or racy is (Murphy, Maud, By jingo, Eskimo).
7. The Shoe is the family's (sailboat, car, autobiography, summer cottage).
8. Of the twelve Gilbreth children, only (Ernestine, Anne, Mary, Martha) dies while she is a little girl.
9. (Frank, Jack, Fred, Bill) is named after his father.
10. The children all come down with (measles, whooping cough, chicken pox, scarlet fever) on the way back from their trip to California.

### Part IV: Essay (30 points)

Choose two and answer in complete sentences.

1. Write a physical and character description of Dad Gilbreth.
2. Describe the business that Dad and Mother run, and how they apply their business activities to their household.
3. What are the results of Dad's unusual approach to education?
4. Why do Mother and Dad have twelve children? Are there really twelve children in the family after Jane, the last one, is born?

**CHEAPER BY THE DOZEN**

**COMPREHENSION TEST B**

**Part II: Short Answer (30 points)**

Briefly describe each of these characters.

1. Dr. Buron
2. Chew Wong
3. Grosie
4. Uncle Fred
5. Mrs. Mebane
6. Aunt Anne
7. Bill
8. Dan
9. Papa
10. Grandma Gilbreth

**Part I: Fill-In (20 points)**

Write a one- or two-word answer to each of the following questions.

1. When Dad wants the children all to assemble quickly, what call or sound does he make?  
\_\_\_\_\_
2. In which state of the U.S. is Oakland located, where Mother brings the children to visit with her family?  
\_\_\_\_\_
3. What kills Dad? \_\_\_\_\_
4. Which of the Gilbreth children are the authors of this book? \_\_\_\_\_
5. What new hair style do the girls want for themselves? \_\_\_\_\_
6. What color hair do all the Gilbreth children have? \_\_\_\_\_
7. What contagious disease do all the children come down with all at once? \_\_\_\_\_
8. What do the Gilbreths call family meetings, when everyone votes on how to run the household?  
\_\_\_\_\_
9. What hobby does Dad use a lot of flash powder for? \_\_\_\_\_
10. Where does Mother have her first eleven babies? \_\_\_\_\_

## CHEAPER BY THE DOZEN

### Part III: Multiple Choice (20 points)

Underline the choice that correctly completes each of these sentences.

1. The children try to trick a woman who is testing their (reflexes, intelligence, emotions, immune systems).
2. Tom Grieves is the Gilbreth family's (cook, handyman, chauffeur, butler).
3. The *Rena* is the family (sailboat, car, summer cottage, dog).
4. Dad and Mother run a scientific (laboratory, mining, management, machine-making) business.
5. *Moby Dick* is a white (kitten, typewriter, victrola, code machine) that Dad brings home to teach his touch system with.
6. Mother and children travel across the country to and from Oakland by (car, plane, bus, train).
7. Five of the Gilbreth children have surgery at the same time to remove their (tonsils, gall bladders, appendixes, warts).
8. Dad makes the children listen to (jazz, audio books, music theory, French and German language) records in the bathrooms.
9. Baby Jane, the last of the Gilbreth children, is born (at home, on the ferry boat, at a hospital, in Oakland).
10. (Anne, Ernestine, Lill, Mary) is the oldest of the Gilbreth children.

### Part IV: Essay (30 points)

Choose two and answer in complete sentences.

1. Write a character description of Mother. In what ways is she unusual for her times?
2. What is an "inevitable delay"? What does Dad do when "inevitable delays" happen?
3. Why does Dad set up the household in such a regimented way?
4. Describe characteristics that are common to most of the Gilbreth children.

## ANSWER KEY

### VOCABULARY TEST

- |       |       |
|-------|-------|
| 1. d  | 11. l |
| 2. o  | 12. j |
| 3. a  | 13. e |
| 4. r  | 14. g |
| 5. i  | 15. c |
| 6. s  | 16. q |
| 7. p  | 17. b |
| 8. h  | 18. n |
| 9. t  | 19. k |
| 10. f | 20. m |

### COMPREHENSION TEST A

#### Part I: Short Answer (30 points)

Answers will vary.

#### Part II: Fill-In (20 points)

- |                     |                   |
|---------------------|-------------------|
| 1. Foolish Carriage | 6. Model          |
| 2. delay            | 7. elbows         |
| 3. Nantucket        | 8. New Jersey     |
| 4. Morse code       | 9. long underwear |
| 5. six, six         | 10. motion        |

#### Part III: Multiple Choice (20 points)

- |                 |                    |
|-----------------|--------------------|
| 1. Mrs. Murphy  | 6. Eskimo          |
| 2. cook         | 7. summer cottage  |
| 3. sheik        | 8. Mary            |
| 4. up in a tree | 9. Frank           |
| 5. car          | 10. whooping cough |

#### Part IV: Essay (30 points)

Answers will vary.

### COMPREHENSION TEST B

#### Part I: Short Answer (30 points)

Answers will vary.

#### Part II: Fill-In (20 points)

- |                     |                              |
|---------------------|------------------------------|
| 1. whistle          | 6. red or blonde             |
| 2. California       | 7. measles or whooping cough |
| 3. bad heart        | 8. Family Council            |
| 4. Frank, Ernestine | 9. photography               |
| 5. bob (bed)        | 10. at home                  |

#### Part III: Multiple Choice (20 points)

- |                 |                               |
|-----------------|-------------------------------|
| 1. intelligence | 6. train                      |
| 2. handyman     | 7. tonsils                    |
| 3. sailboat     | 8. French and German language |
| 4. management   | 9. at a hospital              |
| 5. typewriter   | 10. Anne                      |

#### Part IV: Essay (30 points)

Answers will vary.



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