

Life of Fred
Goldfish

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A Note Before We Begin

Life of Fred: Goldfish

HOW MANY TIMES DO YOU READ THIS BOOK?

Once? A child reading the nineteen chapters and doing all the exercises will learn about a third of what is in this book.

They “get it” and then they “forget it.” That’s just the way human beings are. We are not cameras or tape recorders.

Do kids ever watch the same movie more than once? Of course. You might hear one child tell another, “*The Pirates of Kansas* is my favorite movie. I have seen it five times.”

They start to memorize every scene. They learn all the dialog.

How do teachers know the material much better than their students? They have gone over the same material many times.

In Chapter 18, we will read that 10 centimeters of dental floss is about four inches. How many readers, when they get to Chapter 19, will remember that? Not that many.

It is only when you play with an idea that it begins to “stick.” And there are many ways to play with an idea.

WAYS TO PLAY

1. Take it into the rest of your life. The back of an adult hand—is that four inches? It’s 10 cm.

2. Teach it. I, your author, have taught this material many times and know it deeply. Many parents have reported to me that their children talk about Fred at the dinner table. What are they doing? They are *teaching* it. And the result is that they learn it.

3. Your older child can read *Fred* to a younger sibling.

4. One calculus teacher wrote to me recently. She has her students rewrite parts of the *Life of Fred: Calculus* story with new adventures for

Fred that teach the same calculus. She included a large collection of their stories for me to read. The students were evidently having a lot of fun—and in the process, learning a lot of calculus.

There is a dirty word for all these Ways to Play. It is . . .

PRACTICE



The path to real learning

I have tried to make learning as much fun as possible. Enjoyment really helps learning. But one essential element of learning is repetition. That's a part of practice.

Do you remember potty training? How many kids are perfect after the first lesson?

Pistol Pete Maravich—one of the greats in basketball—would head off to the gym on Saturday mornings. He would pick at particular spot on the court and shoot baskets from that one spot . . . until the gym closed at night. The next Saturday he would pick a different spot on the court.

Most people would rather spend their Saturdays doing fun stuff, and most people can't play basketball like Pistol Pete.

THIS BOOK

One question I've often received from moms is, "If my child already knows the addition tables, where do I start in the Life of Fred Elementary Series?"

Each of the books in this series contains much more than just the addition and multiplication facts.*

For example, *Life of Fred: Cats* includes discussions of Ursa Major (Big Bear), Commutative, Asterism, Vowels, Cardinality of a Set, Loud Talkers, Hiring Freeze, One Quarter, Numerals vs. Numbers, Counting by Threes, Hoodwinked, Finding Patterns, Sheet Music for "Happy", Four Basic Emotions, Right Angles, Quarter and Half Notes, Obligate Carnivores, Adjectives and Verbs, Carbohydrates, a Quarter to Three, the Mariana Trench, 5280 Feet in a Mile, Ferdinand Magellan's Trip, What *Pacific* Means, Bacteria, Rabies in 300 B.C., Treating Cat Scratches, Capital Letters Start Sentences, Five Vowel Words: May, Me, Might, Mow, Mut, Twenty-Two English Words That Don't Contain a Vowel: *By, Cry, . . . , Tryst, and Why*, Numbers Expressed as Hundreds, Tens and Ones, Sexagesimal and Decimal Systems, Numbers that Add to 13, Morse Code, Four Major Oceans of the World, Centuries, Centenarians, and Centurions, Homonyms, Square Feet, Prepositional Phrases, 71 English Prepositions, Volume, One Meter, the Three Countries of the World that Don't Primarily Use the Metric System. What Mathematicians Do, Prime Numbers, and Less Than (<), among other things.

I urge those moms to start with *Life of Fred: Apples*. Besides learning a lot of material on a wide variety of subjects, this will give the child a pleasant way to practice—the path to real learning.

HOW THIS BOOK IS ORGANIZED

Just like the previous books in the series: Each chapter is about six pages. At the end of each chapter is a Your Turn to Play.

Have a paper and pencil handy before you sit down to read.

Each Your Turn to Play consists of about three or four questions. Have your child write out the answers—not just mentally answer them.

After all the questions are answered, then take a peek at my answers that are given on the next page. At this point your child has *earned* the right to go on to the next chapter.

Don't just read the questions and look at the answers. Your child won't learn as much taking that shortcut.

* If you just wanted to learn that, a couple packs of flash cards would do the trick.

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Chapter One

Which Pet?

A little noontime nap is rare for Fred. During the week he is teaching at KITTENS from 8 to 5. His weekends are usually so filled that taking a little snooze is impossible.

Today Fred discovered that a little nap can feel very good.

He slept for 40 minutes.

If his life included music or poetry, a nap could be considered the perfect caesura.*



12:40

His doll, Kingie, had been quietly painting while Fred slept. When Fred awoke, Kingie said, “I’ve been thinking. You got me from King of French Fries when you were only about four days old. We’ve been together a little over five years now.”

“That’s true,” Fred said. “This is now my fifth February at KITTENS. The time has passed so quickly.”

* seh-ZOO-rah A caesura is a pause—such as a break in a musical phrase, or in poetry in the middle of a line.

“What I was thinking,” Kingie said, “was that during most of our time, we have not had any pets.

When you were one, we didn’t have pets.

When you were two, we didn’t have pets.

When you were three, we didn’t have pets.

When you were four, we didn’t have pets.

Now that you’ve turned five, you have turned **pet crazy**.”

Fred shrugged his shoulders. “Maybe it is just a stage that five-year-olds go through. It’s the I-need-a-pet stage.”

Kingie asked, “Did you just make that up?”

Fred grinned. “I did. I’ve never read that in any book, but it sounds true. Don’t kids sometimes go through an I-need-a-pet stage?”

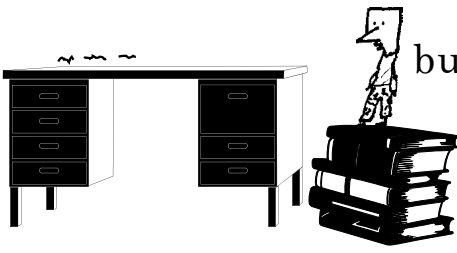
“I wouldn’t know,” said Kingie. “I’ve never had kids.”

Kingie went back to painting for a moment.

Fred got up and was putting away his sleeping bag.

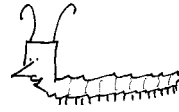
Kingie began again, “The reason I brought up this pet business is because we have never had a happy time with pets.”

“Didn’t you like the butterflies?” Fred asked. They were quiet and pretty.”



“Ha! Those stupid butterflies left those bugs on your desk. They were horrible,” Kingie almost shouted.

“I thought they were cute” Fred said. “And besides, the butterflies didn’t leave bugs. They left their eggs, which turned into friendly little caterpillars.”



Kingie continued, “And then, after you had those bugs, you brought home a tiger!”



“It was just a little kitty,” Fred said.

“Kitty!” Kingie yelled. “I saw the picture of its mother in the newspaper. That’s why I built my fort. I needed to protect myself from your pet. And then you had 30 dogs! That was nuts. The only good pet we have had around here is that lovely mouse that you brought home from Edgewood.”



Mama missing one of her cubs


“What mouse!” Now it was Fred’s turn to shout. “I’m terrified of mice!”

Kingie explained to Fred that it had been in Fred’s backpack. The mouse had explored

Kingie's fort while Fred slept. And then it got eaten by the obligate carnivore in the hallway.

So now they were caterpillarless, catless, dogless, and mouseless.*

The pets that Fred liked—butterflies, cats, dogs—were the ones that Kingie didn't like.

And the pet that Kingie liked—mouse—was the one that Fred didn't like. 

Fred suggested, "We really need to find a pet that both of us like."

Kingie said, "Okay. But, first, let's list the pets that we don't want."

Kingie began the list. This is Kingie's handwriting.

Pets We Don't Want

1. *No bugs*

2. *No cats*

3. *No dogs*

Fred added in his handwriting . . .

4. **No mice**

5. **Nothing that looks like a mouse. No rats. No gophers. No rodents. No moles. No hamsters.**

* There really is no word like *caterpillarless*, etc. There are words like *homeless*, which Fred wasn't. He had a nice office to live in.

And there is *penniless*, which Fred currently is—or at least until his next paycheck, which will come at beginning of March.

Kingie added . . .

6. *No spiders*

7. *No moths*

8. *Nothing that crawls around on the ground. No bugs. No snakes. No worms. No beetles. No lizards.*

Fred added . . .

9. **Nothing from a zoo. No hippos. No lions. No gorillas. No elephants.**

Your Turn to Play

1. At the university, Fred teaches from 8 a.m. to 5 p.m. How many hours is that?
2. This is his fifth year at KITTENS. Is *fifth* a cardinal or an ordinal number?
3. Kingie told Fred, “When you were four, we didn’t have pets.” Is *four* a cardinal number or an ordinal number?
4. When Kingie and Fred were making their list of pets that they didn’t want, Fred wrote **No elephants**. Why do you imagine he didn’t want an elephant as a pet?
5. $\{\text{bug, cat, dog}\} \cup \{\text{bug, dog}\}$
6. Find a value for x that makes this true: $x + 3 = 12$.
7. Find a value for y that makes this true: $2y = 10$.
 - $2y$ means the same as 2 times y .
 - $2y$ means the same as $2 \times y$.
 - $2y$ means the same as $y + y$.

..... **ANSWERS**

1. The elapsed time between 8 in the morning and 5 in the afternoon can be figured out in several different ways. My favorite way is:

first, from 8 to noon is $12 - 8 = 4$ hours,

second, from noon to 5 is 5 hours.

He teaches 4 hours in the morning and 5 hours in the afternoon. Each day he teaches for 9 hours.

2. *Fifth* is an ordinal number. The ordinal numbers are first, second, third, fourth, fifth, sixth, etc.

3. *Four* is a cardinal number. The cardinal numbers are used for counting the number of members of sets. The smallest cardinal number is zero.

The cardinality of $\{ \}$ is 0.

The cardinality of $\{8, 44, \mathbf{C}\}$ is 3.

4. There are many possible reasons. Here are some that I could think of:

- ✓ An elephant wouldn't fit very easily into Fred's office.
- ✓ It would cost a lot of money to feed an elephant.
- ✓ Fred didn't want to clean up after an elephant.
- ✓ It would be tough to get an elephant up the two flights of stairs to Fred's office.

5. $\{\text{bug, cat, dog}\} \cup \{\text{bug, dog}\} = \{\text{bug, cat, dog}\}$

(Remember the spelling rule for sets: *Don't list a member more than once.* $\{\text{bug, cat, dog, bug, dog}\}$ is not nice.)

6. $x + 3 = 12$ is true when x is 9.

7. $2y = 10$ is true when y is equal to 5.

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If you would like to
learn more about
books written about
Fred . . .

FredGauss.com

After you have finished the *Life of Fred Elementary Series*, there are 14 hardback *Life of Fred* books that will take you all the way up into your third year of college. (for details, see the next page)

You are not done then!

It won't be long after that before you are opening up the first book in the series, *Life of Fred: Apples*, again. This time to read it to your kids.

Celebrate that good news!

