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\begin{aligned}
& \text { Life of Fred } \\
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\end{aligned}
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## Ot OVate Before ONe Begin Life of Fred: CHaney

Life gets so busy sometimes.
Wheaties


This was our breakfast table 41 years ago.
$\star$ You know that life is getting to complicated and distracting when you put the Worcestershire on your Wheaties.
场 You know that you may not be gifted with foresight if you give your daughter an open jar of honey to play with.

What's the most important item on the table?


Taking the long view in life is central to your ultimate happiness. Compare:
$\checkmark$ My daughter called me yesterday to share some happy stories.
$\checkmark$ The Worcestershire sauce bottle has never once bothered to call or even send me an email.
$\checkmark$ The Wheaties box has spent the most recent 40 years of its dissolute life in a California landfill.

Kids need two things in order to have a sunshine-filled rest of their lives. First, they need to be soaked in love from their parents and other concerned adults. Second, they need a real education.
real education = broad and deep

Broad: In the government schools they herd 25 students into a room, and someone talks to them about history for 50 minutes. A bell rings and the students head into another room, and someone talks to them about art for 50 minutes. A bell rings and they head into another room, and someone drills them on their math tables.

This is unnatural. There is an essential inner coherence among all the areas of learning. We are supposed to be teaching children-not subjects. In this book, the reader will learn what an apiarist is, what it means to pencil out a proposed business venture, how to make steel, why bees make their honeycombs in the shape of hexagons and not squares or octagons, and how you can tell terbium from copper. All these arise in Fred's everyday life.

And we even do a bit of math!
Deep: It's real simple. I know of no other math curriculum (Saxon, Singapore, Math-U-See, Teaching Textbooks, etc.) that contains more mathematics than the Life of Fred series.

## HOW THIS BOOK IS ORGANIZED

Each chapter is about six pages. Have a paper and pencil handy before you sit down to read so you can do the Your Turn to Play at the end of each chapter.

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

In Chapter 12, the reader will be asked to make Fred's Honey Cards. It will take five sheets of paper, scissors, and a pencil. The total cost will be around 6 .

## CALCULATORS?

Not now. There will be plenty of time later when you hit PreAlgebra. Right now in arithmetic, our job is to learn the addition and multiplication facts by heart. That's where Fred's Honey Cards will come in handy.

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## Chapter One <br> Colors

When something new happens in your life, you often dream about it that night. That happened to Fred.
On Saturday, he got a goldfish and named it Fish. In the evening he watched it swim around in the tank while he talked to it about checkers, bicycles, dancing, fountain pens, and a zillion other topics.

It was now early Sunday morning. Fred was tucked into his sleeping bag under his desk.

He dreamed that Fish was flying around above his tank. Fish seemed to float in the air the way that he had floated in the water.

## 员



Fish seemed very happy. You could tell by the smile on his face. With silent fish-talk, he
asked Fred if he would like to go swimming in the tank. Fred wanted to.

Each plant had six colors on it. All three plants had 18 different colors.

Fred could

breathe underwater as easily as Fish could breathe the air.


In his dream, every box of crayons was different.

One box yellow, orange, red, purple, violet, blue
One box
green, black, magenta, cyan, pink, gray

One box
brown, lavender, maize, silver, copper, gold

Three different boxes of crayons could color all the plants. $3 \times 6=18$.

Fred colored each plant. This doesn't make much sense because every plant was already colored. But in a dream almost
 anything can happen.

Fred had no trouble breathing underwater in his dream, but he was starting to feel cold and wet.

He looked at his skin. It was turning blue. All shades of blue: azure mist, Alice blue, baby blue, periwinkle, powder blue, Cornflower blue, sky blue, aquamarine blue, turquoise blue, Ukrainian Azure, United Nations azure, cerulean, Bondi blue, steel blue, agate blue, indigo, slate blue, Dodger, royal blue, denim, Swedish azure, cobalt blue, Persian blue, lavender, International Klein blue, Ultramarine, navy blue, sapphire, midnight blue, Prussian blue, teal, Palatinate, Federal blue, Phthalo blue, and Air Force blue.

Fred awoke. He turned on the lamp and looked at the clock. It was much too early.


He found out why he felt wet in his dream. He was wet. At first, he thought he had wet his sleeping bag. Then he realized that there was way to much water for that.

Then it hit him.


Oh my! Fred thought to himself. There must be a plumbing leak. Or, maybe, it rained and the roof is leaking.

Fred was wrong. The fish tank had leaked during the night.

He was sitting in five gallons of water. Fish was in zero gallons of water.


5 $-5$

Fred climbed up onto his desk and took out the three plants and put them on his desktop. Those 18 colors would be fun to look at.

It was too early in the morning to call the janitor. Fred didn't have any parents. He had to clean everything up himself.

He took the tank and Fish down the hallway past the nine vending machines (four on the one side and five on the other), down the two flights of stairs, and out into the cold February night.

He said goodbye and put the tank and Fish into the dumpster.

As he climbed the stairs, he counted them:
$\begin{array}{llllllllll}1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\ 11 . \ldots\end{array}$
These are the natural numbers, also known as the counting numbers.

Fred dreamed of the day when he would be tall like Alexander. Alexander is about six feet tall.

Once Fred had seen Alexander go up the stairs three-at-a-time.
369
12
15
18
21
24
27

Please write out your answers. Don't just look at the questions and then look at the answers. Writing helps you to remember.

## Your Turn to Play

1. If a box of crayons contains 8 colors. How many crayons are there in 3 boxes?
2. The commutative law of multiplication says that $3 \times 8$ is the same as $\qquad$ .
3. If a giant box of crayons had 77 colors in it, how many crayons would be in 3 giant boxes?
4. Sets are enclosed in braces. This is the set of whole numbers: $\{0,1,2,3, \ldots\}$.

If you add together two whole numbers, will your answer always be a whole number?

## ANSWERS

1. $3 \times 8=24$
2. In algebra, we say that the commutative law of multiplication is $\mathrm{a} \times \mathrm{b}=\mathrm{b} \times \mathrm{a}$ (where a and b are any numbers).
$3 \times 8=8 \times 3$ by the commutative law of multiplication.
3. $\quad 27$
$\begin{array}{r}\times \quad 3 \\ \hline 231\end{array}$
231

3 times 7 is 21 . Write down the 1 and carry the 2 .
3 times 7 is 21, plus 2, is 23.
4. The whole numbers are closed under addition: If you add two whole numbers, you will always get an answer that is a whole number.

The whole numbers are not closed under subtraction.

If you subtract 5 from 2 , the answer can't be found in the set $\{0,1,2,3,4,5,6,7, \ldots\}$.

$$
\begin{array}{r}
2 \\
-\quad 5 \\
\hline ?
\end{array}
$$

## Sndex

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