



## The Author



Elise Russo, Ed.D.

Elise is the Executive Director for Secondary Education at Three Village Central School District in Stony Brook, NY. She is the author or editor of several science books from elementary through high school level. As an Associate in Science Education for the NYS Education Department, Elise was responsible for curriculum and state science assessments K-12. She is the recipient of several science education leadership awards and has served on national science education committees including the National Assessment of Educational Progress (NAEP Science)

## The Literacy Author



Carol J. Manocchi-Verrino

Carol is a sixth grade science teacher in Yorktown Heights, New York. Having been in the elementary and middle school classroom for 15 years, she has earned a place in the 2000 edition of Who's Who Among American Teachers and The Challenger Center for Space Science Education Teacher of the Year Award in 2004. Carol is currently working toward a Ph.D. at Fordham University in the division of Curriculum and Teaching in the area of literacy, learning, and language with an emphasis on science education. She serves on the Board of Directors for the Challenger Learning Center in Suffern, New York.



The Editor  
Maz Wright

Production Director  
Ian Wright



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Steve Donoghue

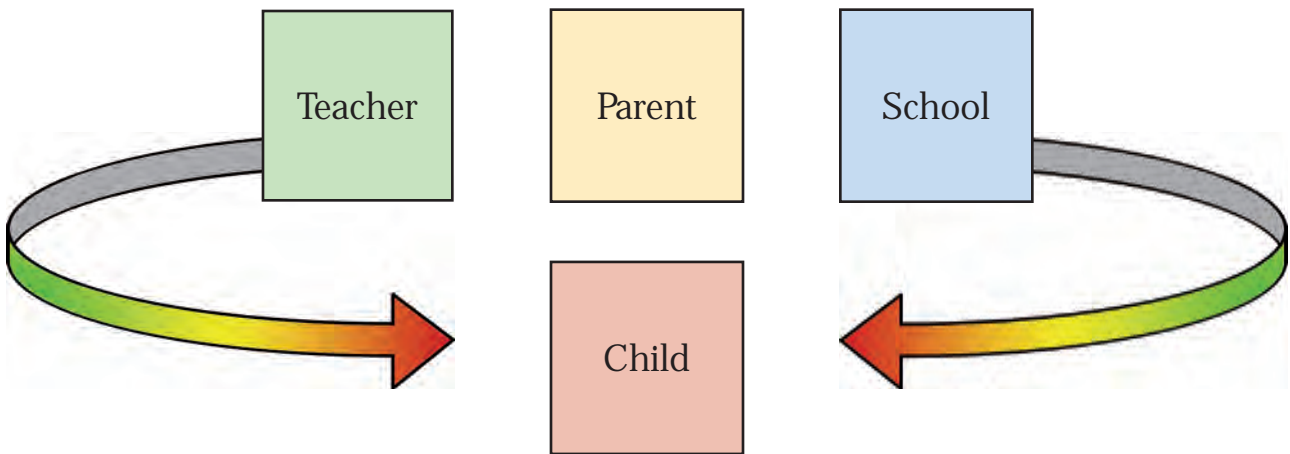
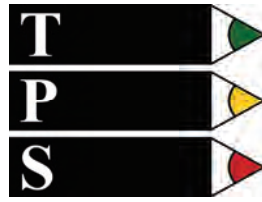
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*Bringing our Children into the Twenty-First Century*

## ***Two Sculptors***

*I dreamed I stood in a studio  
And watched two sculptors there.  
The clay they used was a young child's mind  
And they fashioned it with care.*

*One was a teacher; the tools she used  
Were books, music and art.  
The other, a parent with guiding hand  
And a gentle, loving heart.*

*Day after day the teacher toiled  
With a touch that was deft and sure.  
While the parent labored by her side  
And polished and worked it over.*

*And when at last their task was done  
They were proud of what they had wrought.  
For the things they had molded into the child  
Could never be sold or bought.*

*They both agreed they would have failed  
If they had worked alone.  
The parent and the school  
The teacher and the home.*

*Author Unknown*

The Author  
123 Helping Way  
Caresville  
New Hope  
CA 67895



Dear Parents

Welcome to 4th Grade Science!

I wonder how many of you are a little worried about how you can help your child study science this year? I hope this letter and the introduction will help all parents.

We all lead busy lives, and some of us have more time to spare than others. Some of us find science easy, and many of us struggle with science ourselves.

How can we help our children? I suggest 3 steps can lead to his or her best performance.

**Step 1 is to understand what will be expected from your child this year.**

You will see I have given you some ideas, and the best start point is to look at your child's new books with him.

**Step 2 is to keep in touch with the teacher.**

Parents and teachers are true partners, with one common goal, the education and well being of the child. Communication between you and the teacher is very important.

**Step 3 is to help your child, when you can, and in a way that suits you.**

Children know when their parents are stressed, so there is no point trying to do what another parent may be doing, if it does not suit you. Your child needs focused time, not rushed time, with you. He needs to know that you are happy in the way you are helping him.

So stop worrying about it!

I have written this book to help you help your child.

Relax and enjoy!

The Author



## Introduction

I have tried to help all parents in this book.

In this first section I have written information for those of you who have little time to spare, and or, who find science a little difficult yourself. Please read through these pages and work with your child using the information; it will help your child.

Please remember that the main thing in helping your child, is provide him with a good home environment in which he/she can be happy.

A routine that suits you, your home and your lifestyle will really help your child.

Let us take the first 3 steps and explain them in a little more detail.

### Step 1 — Understanding what is expected from your child in G4 Science.

In California you are lucky as you have, for each grade in Science, a list of things your child must study. They are on the state education website and we have them listed in detail on pages 15 - 16.

In summary, they cover:

- Electricity and Magnetism.
- Energy and Matter.
- Living and nonliving things.
- Rocks and Minerals.
- Erosion and Weathering.



## Step 2 — Keeping in contact with the teacher.

Some people like to chat, others to write, and sometimes putting things in a visual format aids others. You need to find a way to suit your lifestyle to keep in contact with your child's teachers.

You can arrange a visit with them.

You can telephone them.

You can email them if you have a computer.

You can write a letter to them.

You can attend the school meetings.



If you struggle with English you can take your child or perhaps an older brother or sister, or a friend to help you say what you want to the teacher.

**Communication with the teacher is very important.**

The teacher will keep in contact with you using report cards, or by setting some work for your child to do at home and show to you.

## Step 3 — Help your child in a way that suits your lifestyle.

Here are some key things you can do:

Try to introduce a regular time you can work with your child on science.

Make sure your child knows that he or she is responsible for his or her own learning.

Make sure your child tries his or her best. Having a good work ethic will really help your child.

Let your child know it is better to take his or her time and get things right, rather than to rush things.

Let your child know you are proud of his or her effort. Make sure he or she is proud of it too!

Don't be frightened if you don't understand everything or you find reading or writing hard. Science is all around us. You can go to museums and see many of the things your child will study. Often they have staff who will explain things to your child.

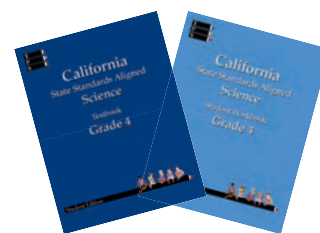
You can listen to your child read to you. Then, ask him or her questions about what you have heard.

Try to do some of the suggested experiments in his or her books with your child at home. We have made the equipment very low in cost and the activities are not time consuming.

Time at the library can be fun for all of you. Libraries usually have computers and a lot of good information can be found on the Internet. You can search together.

A key review to help you help your child is to spend an hour looking at the books your child is using this year.

You should see a Student Textbook.  
You should see a Student Workbook.



Using the following chart you will be able to find the major part of each chapter of each of these books. You will see that each page clearly illustrates the relevant science standard. You can then work with your child on that information.

California Content Standards — Grade 4

Standard Set 1. Physical Sciences

1. Electricity and magnetism are related effects that have many useful applications in everyday life.  
1.a. Students know how to design and build simple series and parallel circuits by using components such as wires, batteries, and bulbs.



1. The Story



8. Don't get Confused



2. Key Words  
(student version)



9. Learn by Heart



3. Word Definitions



10. Investigation



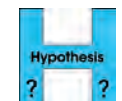
4. Memory Jiggler



11. Extra Information



5. Future Memory Jiggler



12. Hypothesis



6. Focus Question



13. Test Practice Questions



7. Don't be Tricked



14. Miscellaneous

If you have time, go to page 20 and you can see a more detailed description.

