Chapters

and

Questions

One Preparing for a Successful Year

1 What’s the best way to get a handle on all the math I need to teach during the year? 1
2 What’s important to know about the national math standards? 2
3 Since my instructional materials give me the direction I need for planning day-to-day lessons, why do I need to give attention to national or state standards? 4
4 What’s important for me to think about when planning instruction? 6
5 How can I be sure that my instruction promotes students’ learning? 7
6 How do I find out if units or specific lessons will be appropriate for my students? 8
7 How should I prepare students for the tests that the district or state requires? 9
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11 What field trips can I plan to help my students see math in action? 15

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13 What kinds of questions best support math learning? 17
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Some students always finish assignments quickly. What should I have them do? 28
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It seems important to be organized and have all the details of a lesson planned beforehand, but I feel that I’m doing too much planning. How can I change this? 30

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Can you really teach number sense? 48

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I know that manipulatives can help my slower learners, but do my better math students really need them? 58

I know that older students benefit from using manipulatives, but I worry they’ll complain that the materials are too babyish. Do you have any hints for this? 59
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**Six**

*Dealing with Calculators*

Should I let my students use calculators? If so, when?

How can I best teach children how to use a calculator?

The students in my class bring their own calculators to school, so they all have different kinds. What should I do about dealing with the differences?

**Seven**

*Incorporating Writing into Math Class*

How can I get my students to explain their work and their answers in writing?

Is it useful for students to keep a math notebook, journal, or log?

Do you have any tips for managing students' math notebooks in the classroom?

I’m interested in examples of how teachers actually use math journals in their classes. Can you give some ideas?

What’s a good system for keeping track of student work?

What about worksheets—when do you use these?

I’ve been pushing my students to write more complete explanations when they’re solving problems. How should I react to their work?

Should I make notes when I read students’ work so that I can remember what’s important?

If I don’t have time to give specific feedback to children’s papers, isn’t it okay, or even better, to indicate “good job” or “nice thinking” or some other general comment than to say nothing?

A friend has her students write letters to explain their reasoning so that they feel their writing in math class has a purpose. What do you think about this idea?

No matter how much practice my students have with writing, they still grumble and resist when I give a writing assignment. How should I respond to their complaints?

On some of the children’s writing assignments in math, the spelling and grammar errors are glaring. Should I have students correct mistakes before I send their papers home?

What’s a portfolio? Should I have my students create math portfolios?

**Eight**

*Linking Math and Literature*

Why is it valuable to spend math instructional time using children’s books?
After I read a book to my class, there are always several children who want to borrow the book and take it home to share. How can I help parents use the book to its mathematical advantage? I can see how children’s books are appropriate for young children, but I teach sixth graders. What sorts of books work for older students?

Nine  
**The First Week of School**

How can I find out how my students feel about math, and why should I? Okay, I have a sense of how my students feel about math. Now what should I communicate to my students about math? How can I find out what my students already understand? What classroom guidelines should I set up at the beginning of the year? Can you recommend favorite lessons for the beginning of the year that help establish and reinforce classroom guidelines? Should I communicate with parents right away? If so, what should I say?

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How should I prepare for back-to-school night? Should I prepare handouts to give parents on back-to-school night? I know some of my student’s parents dislike math. What advice can I give them so they don’t pass their attitude on to their children? Parents want to know how they can help their children, but some are afraid that they won’t know how or will do the wrong thing. How can I address this at back-to-school night? My students’ parents are mostly concerned about the basics. How should I address this concern? What should I tell parents about math homework? A colleague told me that parents sometimes ask about “new math” and the question often brings snickers from others. What do they mean by “new math” and how should I respond to such questions? How much math work should I send home? Parent conferences are coming. What should I have ready? How can I begin a parent conference? Should I ask parents what questions they have? What should I say if parents want to know how they can help their child in math?
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