

THE Subtraction STATION

a **SELF-PACED, STRATEGIC, STUDENT-CENTERED** program for mental math subtraction strategies and facts



BY SHELLEY GRAY

Subtraction is TOUGH. For many students, it is one of the hardest concepts to master, and we as teachers just do not spend enough time teaching the basic facts. But how can we? Curriculums are jam-packed with so many expectations and there are sometimes just not enough hours in the day to really focus on the basics the way that we need to. After communicating with hundreds of teachers, I've heard a few of the same major concerns over and over and over again. I bet that you can relate to at least one of these:

"I have trouble teaching to all the different levels in my classroom. I have students at all different ability levels and I just can't find an efficient way to teach to all of them."

"I can't seem to find the time to keep practicing basic facts throughout the year. Once we move on to other areas of the curriculum (time, measurement, money, etc.), basic facts seem to get left behind. There is just SO much to cover in our curriculum."

"My students are struggling with moving from concrete representations to mental computation. Some students are still finger counting! How can I move them past this?!"

"By the time students get to my class, I expect them to know their basic facts. But they don't! How can I help them with these basics so that we can get on to other concepts that rely on basic fact knowledge?"

I can help you.

In 2012 I released the popular [Multiplication Station](#), something that I had developed and used since my very first year teaching. After its release, I had literally hundreds of requests for a Subtraction version that implemented the same engaging, student-centered approach.

I am very excited to introduce you to The Subtraction Station.

The Subtraction Station integrates simple principles of *student engagement* including power, fun and choice. These basic principles will *engage*, *motivate*, and *ensure success* for all learners in your classroom.

Do you want to implement more mental math strategies into your classroom, but don't know where to start? Do you already teach mental math, but want to work more strategically to target your students more effectively? This is going to be the solution that you have been looking for.

So, how does it work?

Well, it's really quite simple. Students work through a series of subtraction activities for each level. They complete the activities, self-check using the prepared answer keys, and keep track of their progress using their personal tracker. At the end of each level, the student asks the teacher for a quick, informal, oral quiz. If he knows his facts/strategies, he moves to the next level. If not, he simply practices a bit more until he feels ready. There are no negative consequences.

This process is entirely student-run. It is a beautiful thing to sit back and watch your students *"running the show."* After the first week of this program, you will notice your role switching from that of teacher to that of facilitator.

Why do students love this approach so much? It's easy: they have *power!* They have *freedom!* They are truly *in control* of their own learning. And THAT results in highly motivated students who love to learn.

Add to that an effective order of teaching the strategies that really makes practical sense, and you will have students who feel *smart, successful* and *engaged*. It's just that simple. Your students are going to love this.



You are going to be noticing some pretty big changes within your math instruction once you start using this resource:

- ✓ Your teaching will become more effective, as you teach in a practical order where the easiest facts and strategies are learned first.
- ✓ Your teaching will become strategic. Finally! An organized, effective way to focus on mental math strategies. The work is done for you.
- ✓ The amount of marking that you have to do will decrease, as students are responsible for their own assessment. (Of course you'll be doing observational assessment throughout, but you will be doing NO marking.)
- ✓ Once you prepare the Subtraction Station, it can be used for at least a couple of months – that's one less center that you need to worry about!
- ✓ Your students will become reflective as they develop metacognition.
- ✓ Your students will become motivated mathematicians. Finally, they can all work to a level that is appropriate for themselves.
- ✓ Your students will experience success on a regular basis, as a result of working to a level that is appropriate. This is a big confidence boost!
- ✓ Your math class will become student-centered. Your students are truly in control of their own learning.

This resource includes:

- ✓ **strategic, progressive**, subtraction activities for each set of facts; each strategy is first isolated and then integrated with previous strategies to result in maximum understanding and mastery
- ✓ easy-to-understand instruction for each subtraction strategy
- ✓ answer keys
- ✓ an accompanying video to help you prepare and understand your Subtraction Station (I want to support you the best I can!)
- ✓ clear set-up instructions
- ✓ parent resources and home practice charts
- ✓ classroom posters
- ✓ student and teacher assessment trackers
- ✓ Subtraction Passports

Even if you don't want to do this self-paced program as it is presented, these resources will be invaluable to your math instruction.

What are other people saying about my self-paced Math Stations? Here are just a few of my favorite comments:

"Thrilled with this resource! I've been desperately looking for a way to teach mental math strategies and basic facts that is motivating to the kids, but is more than just memorizing facts. I love how it is student led."

-Catherine

"I am SO excited for this. I teach a combined Gr 1/2 class and last year was my first year. I used the textbook and materials that came with it and did NOT like the way my year went in Math. I see this as a great way to differentiate and allow my students some independence as I work with small groups."

-Teresa

"I teach 3rd and purchased the other stations this summer to use. I was a little apprehensive about my kids using them independently but we started this week and the kids love it. They're constantly asking to use them whenever they finish other things. Love it!"

-Shandrea

"I just started using these this year. The students love the independence, charting their progress and I love watching them develop confidence and a sense of self-efficacy! Thanks Shelley!!!"

-Liana

"WOW!!! One of the best purchases I've made on TeachersPayTeachers. I have never seen my kiddos so engaged. They ask to do {it} all the time. We've only been using it for a couple of weeks now, but even my most distracted, least motivated kids are LOVING this!! I have one really distracted boy that can turn anything into a toy come up today and ask to do it when he finished his spelling paper. I was shocked!!"

-Taylor

"I am so excited about the Subtraction Station. I own all of the other stations, and they are amazing."

-Tracy

"Last year I struggled with what to do with {students} to help them work on math facts, especially with everyone working on different facts at their own pace! With this program everyone is getting valuable practice while I pull kids to play with JUST THE FACTS they are working on! I am in love with this program!"

-T.

Below is a small sample of the types of activities that are included (please note that there may be small differences based on the grade level of Subtraction Station that you purchase). With this download you will also receive a wide variety of other activities, including parent support resources, assessment trackers, and center/station activities.

Teacher support is very important to me and I do everything possible to guide you through the process of creating your own Subtraction Station. Within the document you will find checklists, set-up guides, as well as a support video to guide you through the set-up process.

Subtraction Action! (17-D) Includes problems like $25-4$, $32-4$, $159-100$, $20-40$, $35-4$, $48-4$, $344-30$, $360-70$, $04-7$, $85-4$, $544-0$, $465-50$, $180-100$, $80-40$, $60-50$, $400-100$, $346-3$, $400-200$, $35-8$, $345-5$.

Solve the Problems (17-C) Includes a word problem: "It costs \$500 to buy a new video game system. Marty has saved up \$200. How much more money does he need to save?"

EXPANDED THE SUBTRAHER (16-B) **SUBTRACT THE TENS, THEN THE ONES**. Includes a number line for $36-2$ and steps: Step 1: $36-10=26$, Step 2: $26-2=24$.

SUBTRACT 100 (15-C) **Subtract 100 FROM 4-DIGIT NUMBERS**. Includes a table for decomposing 100 into tens and ones.

Field Day Subtraction Math Center (17-D) Includes a subtraction wheel and a math center sign for $800-100$ and 700 .

PUTTING IT ALL TOGETHER WITH Part-Part-Whole (12-J) Includes a part-part-whole diagram for $12 = 6 + 6$ and $125 = 100 + 25$.

SUBTRACTING TEN On a Hundred Chart (11-C) Includes a hundred chart and instructions to subtract 10 by moving one row up.

Let's Keep Decomposing! (10-D) Includes an example: $13-5 = 13-3 = 10$, then $10-2 = 8$.

Spin a Doubles EQUATION (7-E) Includes a spin wheel and instructions to write a "using doubles" equation.

More NUMBER BONDS (6-C) Includes number bond diagrams for addition and subtraction.

COUNTING UP ON A Number Line (5-B) Includes a number line from 102 to 110 and instructions to count up.

MORE, LESS, SAME (4-D) Includes a comparison table: $500 > 200$, $400 < 100$, $759 < 3$, $750 = 1$, $80 < 40$, $70 > 20$, $200 < 100$, $700 > 200$, $300 > 300$, $4 = 4$, $30 > 20$, $50 < 40$, $432 < 2$, $433 < 3$, $69 < 65$, $10 < 10$, $600 < 100$, $800 > 100$.

PUTTING IT ALL TOGETHER Graph It! (3-F) Includes a graph and instructions to find the difference for each equation.

Subtract Ten ON A PLACE VALUE CHART (11-D) Includes a place value chart for $37-10$.

TWO LESS (3-B) Includes a table for subtracting 2 less from various numbers.

Subtraction Frenzy! (16-C) Includes a subtraction wheel and instructions to complete subtraction wheels.



Comparisons

If you would like to purchase The Subtraction Station, but are unsure which version would best suit your classroom, please use the chart below to see what each version includes.

Strategies that are included:	3 rd Grade Subtraction Station	4 th Grade Subtraction Station	Grades 3-4 Combo Pack (includes both the 3 rd and 4 th Grade versions) *BEST VALUE*
Properties of 0	✓ (numbers to 999)	✓ (numbers to 9999)	✓
One Less	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Two Less	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Counting Back	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Counting Up	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Thinking Addition	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Using Doubles	✓ (to 24-12) and extended to 10's and 100's (6-3, 60-30, 600-300)	✓ (to 24-12) and extended to 10's, 100's, and 1000's (6-3, 60-30, 600-300, 6000-3000)	✓
Using Near Doubles	✓ and extended to 10's and 100's (7-3, 70-30, 700-300)	✓ and extended to 10's, 100's, and 1000's (7-3, 70-30, 700-300, 7000-3000)	✓
Using Combinations of 10	✓	✓	✓
Using Combinations of Multiples of 10	✓ includes only multiples of 20	✓ Includes multiples of 20, 30, 40, 50, 60, 70, 80, 90, and 100	✓
Using Combinations of 100 and 1000		✓	✓

Strategies that are included:	3 rd Grade Subtraction Station	4 th Grade Subtraction Station	Grades 3-4 Combo Pack (includes both the 3 rd and 4 th Grade versions) *BEST VALUE*
Back to a Friendly Number	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Up to a Friendly Number		✓ (numbers to 9999)	✓
Subtract 10	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Subtract Multiples of 10	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Subtract Multiples of 100		✓ (numbers to 9999)	✓
Subtract 8 and 9	✓ (numbers to 99)	✓ (numbers to 9999)	✓
Subtract 7		✓ (numbers to 9999)	✓
Subtract Multiples of 10	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Subtract 100	✓ (numbers to 999)	✓ (numbers to 9999)	✓
Compensation		✓ (numbers to 9999)	✓
Expanding the Subtrahend	✓ (numbers to 999)	✓ (numbers to 9999)	✓

Looking for Math Stations for other operations or other grades? See all of Shelley Gray's math stations here:

<https://www.teacherspayteachers.com/Store/Shelley-Gray/Category/-MATH-STATIONS>