



Enriching Students' Learning with Work Places

Games provide an environment in which students can create and try strategies, and can also learn strategies from others. As a teacher, you must routinely make decisions about helping your students learn to develop strategies on their own versus having your students learn strategies that have been developed by you and others. You realize, of course, that one size does not fit all, so you try to figure out the individual needs of your students. However, keep in mind that a major goal is to help your students learn about creating and testing strategies, and in using strategic thinking.

» Moursund and Albrecht, 2011

Work Places are a vital part of the Bridges curriculum, but teachers unfamiliar to them may find that Work Places require a new approach to classroom instruction and organization. This article addresses some common questions:

- » What are Work Places, and how do they work?
- » What's the best way to prepare for Work Places in the fall?
- » Sounds like a lot of work! What's to be gained?
- » Can you share some tips for managing the Work Places?
- » What are Work Places, and how do they work?

Work Places are math stations that use games and activities to make learning enjoyable and effective. They're designed for students to use independently whether they work alone, with partners, or in small groups; the teacher's role is to observe, interact, and help as needed. Most Work Places revolve around concrete or visual models. In Work Places, students choose, collaborate, and cooperate with peers. The games and activities capture their enthusiasm and create environments that make concepts and skills tangible and learning memorable and meaningful.

Work Places are introduced throughout the year, usually with each one set up to handle six students. The games and activities are stored in labeled bins, baskets, or boxes within easy reach of students. During Work Place times, students use the materials at tables, clusters of desks, or open floor areas. The Work Place Guide and Work Place Instructions (teacher masters) provide information on setup and use. When the time comes to introduce each new Work Place, directions are also included right in the flow of text in the Teachers Guide.

We recommend that students visit each Work Place at least once. They can complete the games and activities in any order, and once they finish, they can go back to their favorites as many times as they like. Each student uses a Work Place log stapled to the front of a pocket folder to keep track of their progress. Students mark their logs as they complete the activities and store any record sheets, finished or unfinished, in their pocket folders. You can go through the folders often to see which Work Places they've completed and to correct any papers they've done. As the time nears to introduce a new set of Work Places, as a finish-up reminder, circle on the log any games or activities the student hasn't yet completed.

Among the advantages of this system is increased student accountability and sense of ownership. As the year progresses and the Work Place tasks become more complex, you can regularly check folders to identify students who need individualized help. If a paper has a few minor mistakes, you might simply circle them and ask the student to make corrections. A paper filled with mistakes often indicates that a student either doesn't understand the concept or is confused about the recording procedure for a particular activity. In either case, consider meeting that student individually or in a small group during Work Place time the following day. As you finish each set of Work Places, remove the log from the front of student's folders, and correct any papers you haven't yet seen. Many teachers send the pages home in packets to share with parents.

What's the best way to prepare for Work Places in the fall?

There may not be a "best way" to do Work Places, but the suggestions below have worked for many teachers. Ultimately, you'll have to find what functions best for you, given your classroom space, your student population, and your own tolerance for noise and activity.

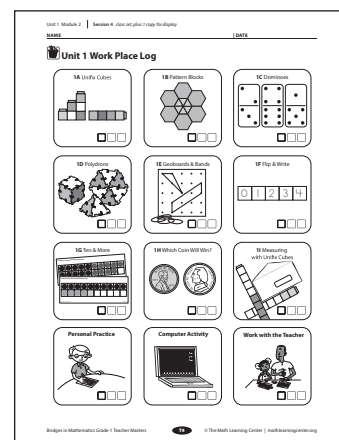
Get six dishpans, baskets, or sturdy cardboard cartons. Make sure they're at least 6" deep, 9" wide, and 12" long. If you use containers smaller than this, your game boards and record sheets are more likely to get crumpled or bent. Label each container at both ends. (Labels vary with grade levels.)

Store containers on a shelf or in another location where students can reach them—they'll need to set them out and put them away each time you do Work Places. If you have the space for a discussion circle—a floor area where students can gather comfortably—consider storing your Work Place containers nearby. That way, you can demonstrate the games and activities as students sit in a circle to watch.

No matter how you set up your room, you'll need to leave space between tables or clusters of desks so that students can move from place to place with relative ease. You'll need six work areas labeled to match the bins. (The "A" basket will always go to the "A" work area, the "B" basket will always go to the "B" work space, and so on.) This makes things a little more predictable for students, even though the materials in the baskets change every few weeks.

Read through the first round of Work Place Guides and Instructions, and set up your Work Place bins accordingly. Read the suggestions for differentiating the activities to meet different students' needs, and decide how you will introduce and manage the suggestions.

Get a pocket folder for each student—the folders with two pockets along the bottom work best. We recommend that you use one color for all folders so they're easily distinguished from those your students might be using for other subjects. Although you'll staple new logs to the fronts of these folders each time you switch to a new round of Work Places, students



The Teacher Masters for each unit include a Work Place Log that students use to track Work Places they've visited.

will use the same folders all year long. Run a class set of the Unit 1 Work Place Log teacher master, and staple them onto the fronts of the pocket folders.

Prepare the game boards, spinners, and cards for the first few sets of Work Places ahead of time. Don't put it off until the last minute. Even with all the game materials prepared, it takes a little while to switch from one round of Work Places to the next. You have to run record sheets for some of the activities, gather the necessary manipulatives, file the old materials, and set up the bins for the new games and activities.

Sounds like a lot of work! What's to be gained?

Work Places can be challenging for teachers to maintain and manage. It takes time to organize the materials. It takes time to keep the bins in good order and make the transition from one round to the next. There are days, especially at the beginning of each new round, when things might not go as smoothly as you'd like.

Although Work Places aren't always easy to manage, we strongly urge you to use them for the value they offer:

- » **STUDENT CHOICE** Within a reasonable framework, students need to be able to make good choices about their own learning. Work Places give students a perfect opportunity to choose the order in which they complete tasks and the frequency with which they return to certain activities. It's also possible to offer students the chance to choose their own partners, and sometimes, the level at which they play a game or do an activity.
- » **IMPORTANT LEARNING OPTIONS** Work Place games and activities help all students come to grips with skills and concepts presented in class, and for some, it's where most of the learning happens. Although the Problems & Investigations lessons and discussions are often quite powerful, every class has students who sometimes manage to get through the lessons by copying others or by letting partners carry them along. When the class gathers to discuss strategies and results, they often tune out. During Work Places, students work in small groups, completing activities on their own or with a partner. Because you're not trying to direct the entire class, you can more easily nestle in with individuals or small groups, providing direction, support, or additional challenge as needed.



- » **ASSESSMENT OPPORTUNITIES** Once a set of Work Places is running smoothly, you have opportunities to observe and assess students. Because Problems & Investigations lessons usually extend a new challenge each session, they require heavy teacher involvement. Work Places offer two to four weeks of predictability—and once enough students understand what to do, they can help one other. This enables you to observe, conduct informal interviews, and work with individuals to get a better sense of what they do and don't understand.
- » **OPPORTUNITIES TO DEVELOP LIFE SKILLS** Work Places help students learn to make good choices, manage time effectively, share with others, play games together, take responsibility for materials, and participate in a community of learners.
- » **FUN AND MOTIVATION** Students often identify Work Places as their favorite part of math time and look forward to them as an opportunity to make choices, interact with classmates, and do things that really interest them. Research indicates that math games create environments favorable to learning and over time enhance students' attitude toward the subject.

Can you share some tips for managing the Work Places?

Here are some things to consider:

- » Do you have enough space for six Work Places? Ideally, you'll have four or five tables or desk surfaces and one or two floor areas. (Students need room to spread out with some of the activities.)
- » How many students do you want at each Work Place? Class size plays a part. It's crucial to have a few extra spots, especially if you allow students to move as they finish each activity. If your class size is around 20, six Work Places set for four students each is fine. If it's closer to 30, you'll either need to provide materials for six students at each Work Place or have more Work Places.
- » How do you want to handle student choice? We recommend letting students choose the order in which they complete the games and activities because we want to develop student autonomy and responsibility, and because it enables us to interact with them more effectively. Work Place folders and logs help students track their own progress through the stations. If they're only midway through an activity at the end of the period, they return to that activity the next day, storing any unfinished papers in their folders. Most of them understand that they are accountable for completing a certain amount of work, although some of them need extra guidance and direction to do so.

Some teachers are more comfortable rotating their students through the Work Places. The advantage is a greater sense of control; the drawback is timing. Some of the activities take longer than others. Students also finish at different rates. It is often harder to focus on student's learning if you're trying to manage logistics.

Another option is to have students remain in their "home spots" and rotate the baskets from table to table, one per day. Again, timing is an issue—what about students who finish early? What about the students who need more time than others to complete an activity?

- » Although you will find specific management tips in Work Place Guides and Work Place Instructions, it is your own teaching style, personal preferences, and students that determine how you use Work Places. In general, the less you have to manage student movement and behavior, the better you'll be able to listen, observe, nestle in, and assist where needed. Establishing routines and expectations clearly during the first few weeks of school pays off in smoother sailing the rest of the year.

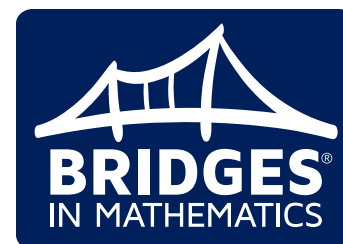


No matter how you choose to operate, it's probably safe to say that things will seem slightly chaotic in the first month or two of school and smooth out as the year progresses.

What about student behavior? Although class chemistry and student behavior vary from year to year, most students love the Work Places and will do what they need to in order to keep their privileges. You will want to establish simple rules for safety, respect, and noise level. In general, try to do what's needed to keep things running smoothly for all the students rather than penalizing the group for the behavior of a few.

How will you handle setup and cleanup? Shifting responsibility to students can promote independence and a sense of ownership. Here's a procedure that has worked well for several teachers: As the Problems & Investigations lesson comes to an end, gather students to your discussion circle. If you've recently introduced new Work Places, you might take a little time to review them. Then have a student helper set out the bins as the rest of the class think about where they want to begin. Early in the school year, send students out to the Work Places one or two at a time rather than in a large group. This cuts down on the flurry of activity as they get started and also helps students keep track of the activities that are filled and the ones that remain open when it's their turn to choose.

Cleanup routines can be simple. If the math period ends with recess or lunch, there's strong motivation to put things away. You might make everyone responsible to work together until the room is clean: materials returned to their bins, bins back on the shelves, chairs pushed in, and students seated in the discussion circle. Assign a helper to do floor inspection and also to dismiss students a few at a time when he or she deems the room clean. Most young students love being boss for a day, and some of them can be pretty demanding. Expect for two things to require regular review: asking permission before cleaning up someone else's work and returning things back into the bins *carefully*.



REFERENCES

- » Moursund, David, and Robert Albrecht. *Using Math Games and Word Problems to Increase the Math Maturity of K-8 Students*. Salem, OR: Math Learning Center, 2011.