Teen Board, Tens Board

Print the file for the activity you want:
Teen Board **- teenbd.pdf,** Ten Board **- tenbd.pdf.**

Teen Board Presentation:

1. Lay out the cards as shown in Figure 1, either on the child's desk or a mat on the floor. **Use whatever counters you have available. Montessori beads are illustrated.**

2. Have the child name the numbers as you point to them.

3. Ask the child to move the 1 to the 10 to the left of it and to move the unit bead or bar so that it is with the corresponding 10 bead or bar. (See Figure 2.)

4. Say "**10 + 1 = 11**." Allow the child to count to 11 if it is appropriate.

5. Continue until you have completed the numbers from 11 to 19. (See Figure 3.)

6. To reinforce the lesson, ask questions such as:
   "**Which is 12?**"
   "**How much is 12?**"
   "**Which number means the same as 10 + 4?**"

7. Having the child copy the problem will also help reinforce the concepts.

Ten Board Presentation:

1. Lay out the cards as shown for the teen board, either on the child's desk or a mat on the floor, and follow the same procedure, except that the child should be encouraged to make any two digit number that he/she wishes. For instance, he could make

   40 + 3 = 43
   30 + 9 = 39

2. Beads, counters, or stamps from the bank game may be used if needed.

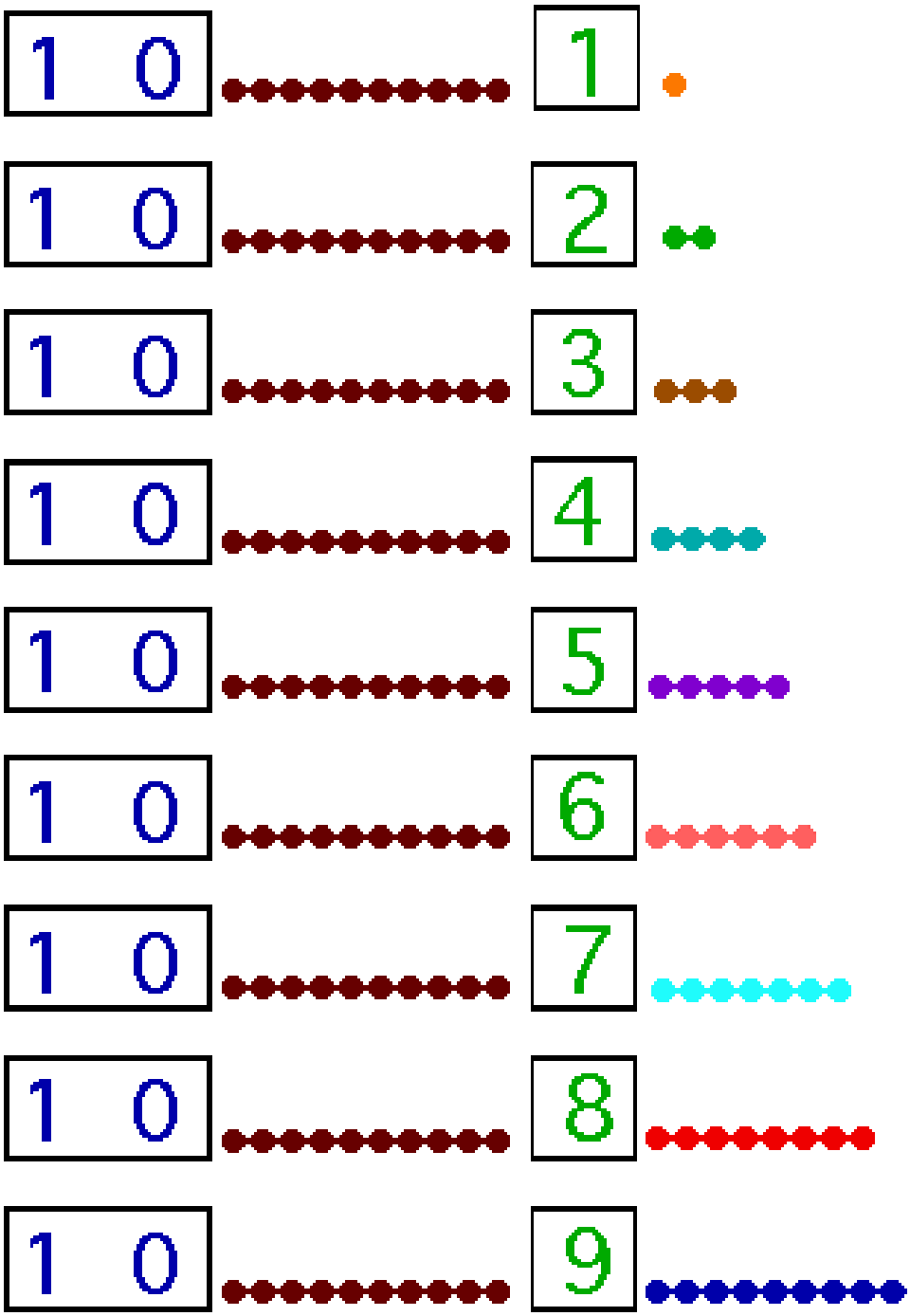

Figure 1

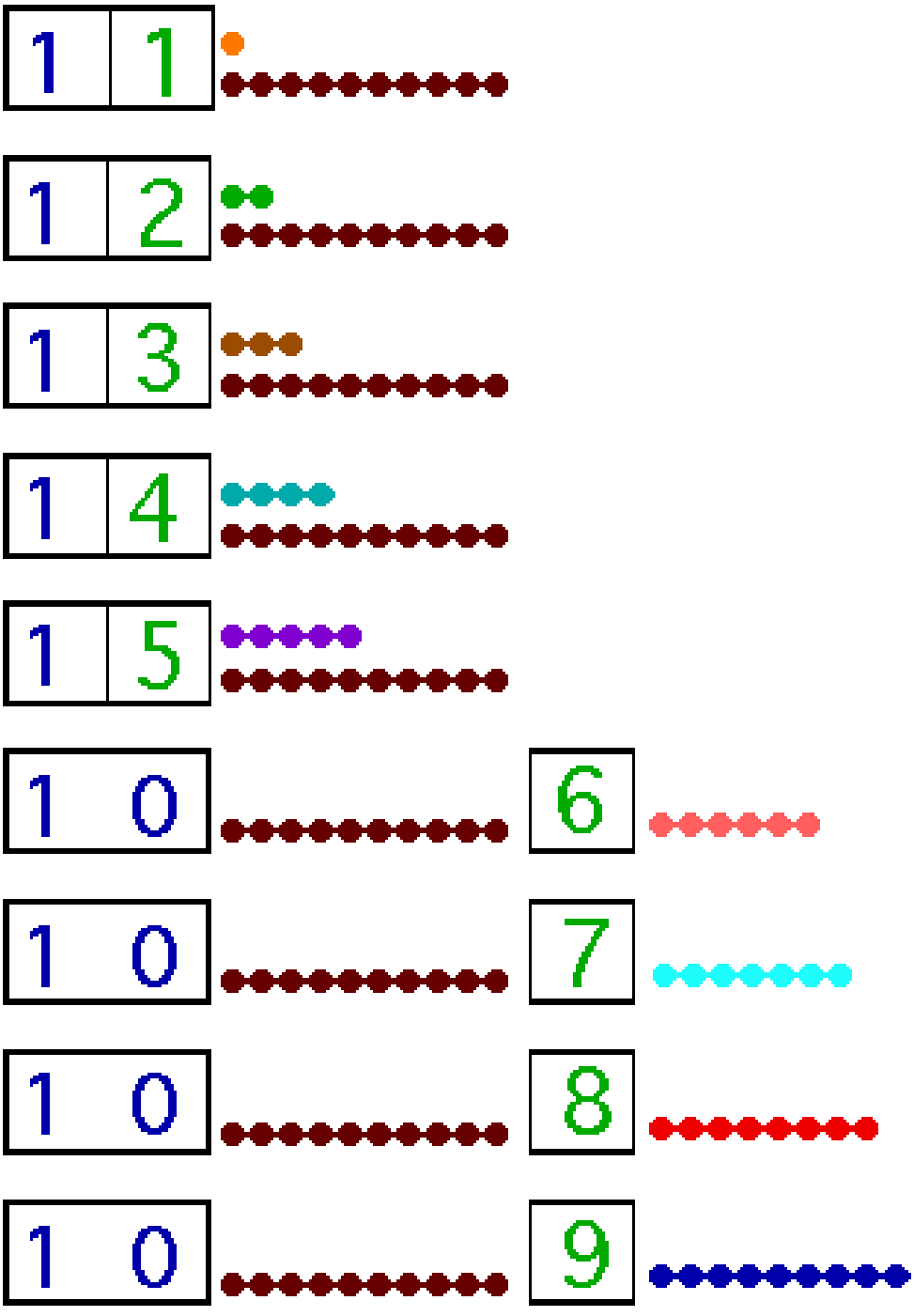

Figure 2

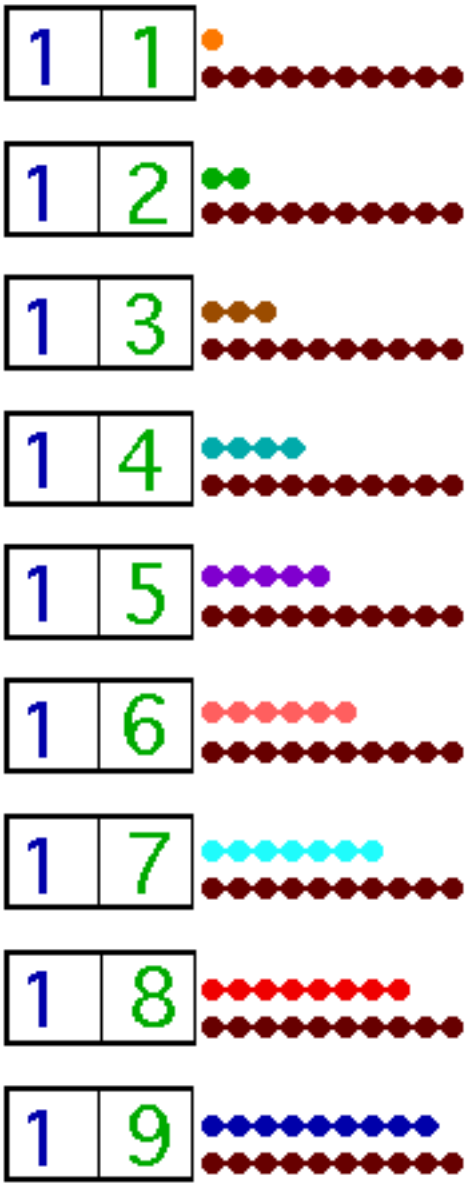

Figure 3

Place Value Cards

Print out these file for the activity:

Place Value Cards - **place_cd.pdf**
Stamp Game - **bankgame.pdf**

Place Value Cards Presentation:

1. Lay out the cards as shown, either on the child's desk or a mat on the floor as shown in Figure 1, using the stamps as counters if the child needs practice in seeing the difference between 1's, 10's, and 100's, etc.

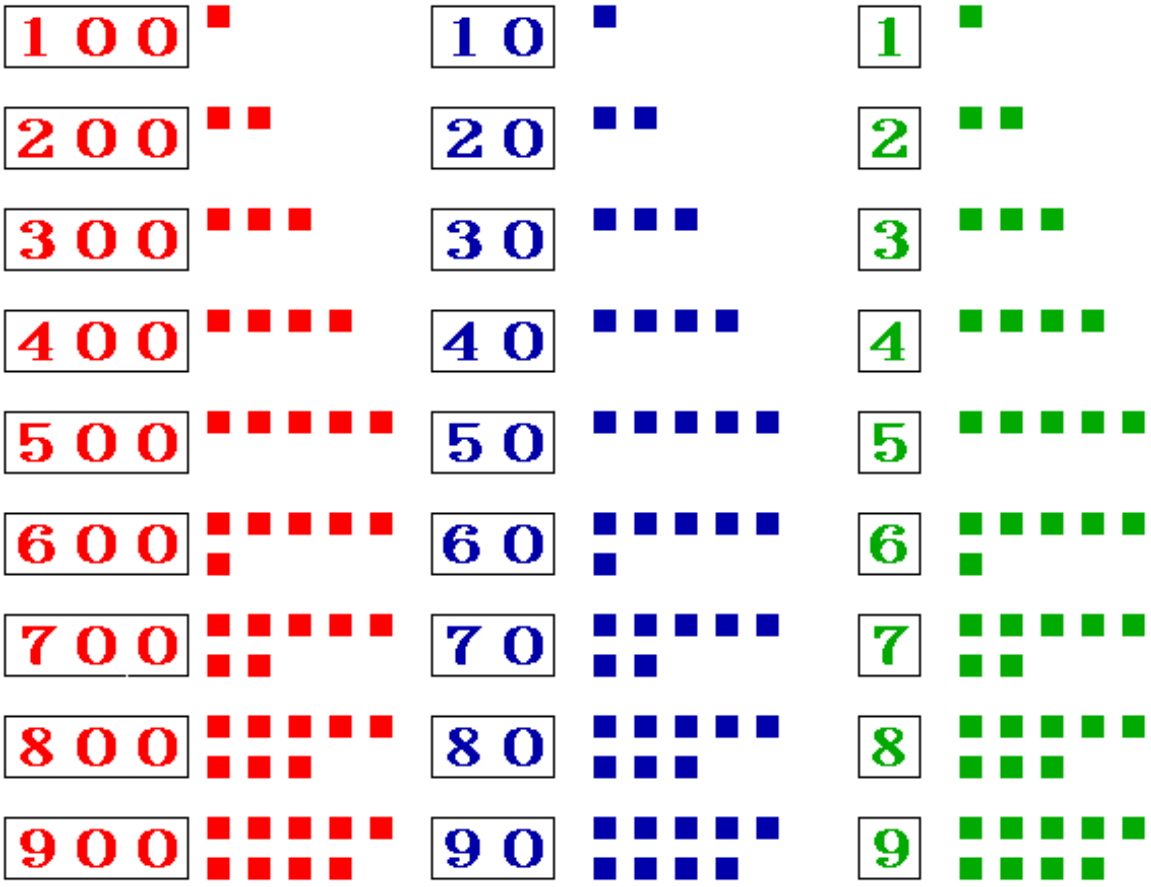

Figure 1

2. Have the child make 9 two-digit numbers, moving the cards and counters as shown in Figure 2. After he makes the number, he should say it out loud. Additional practice would be to have him write the number, and then repeat all the numbers that he has written.

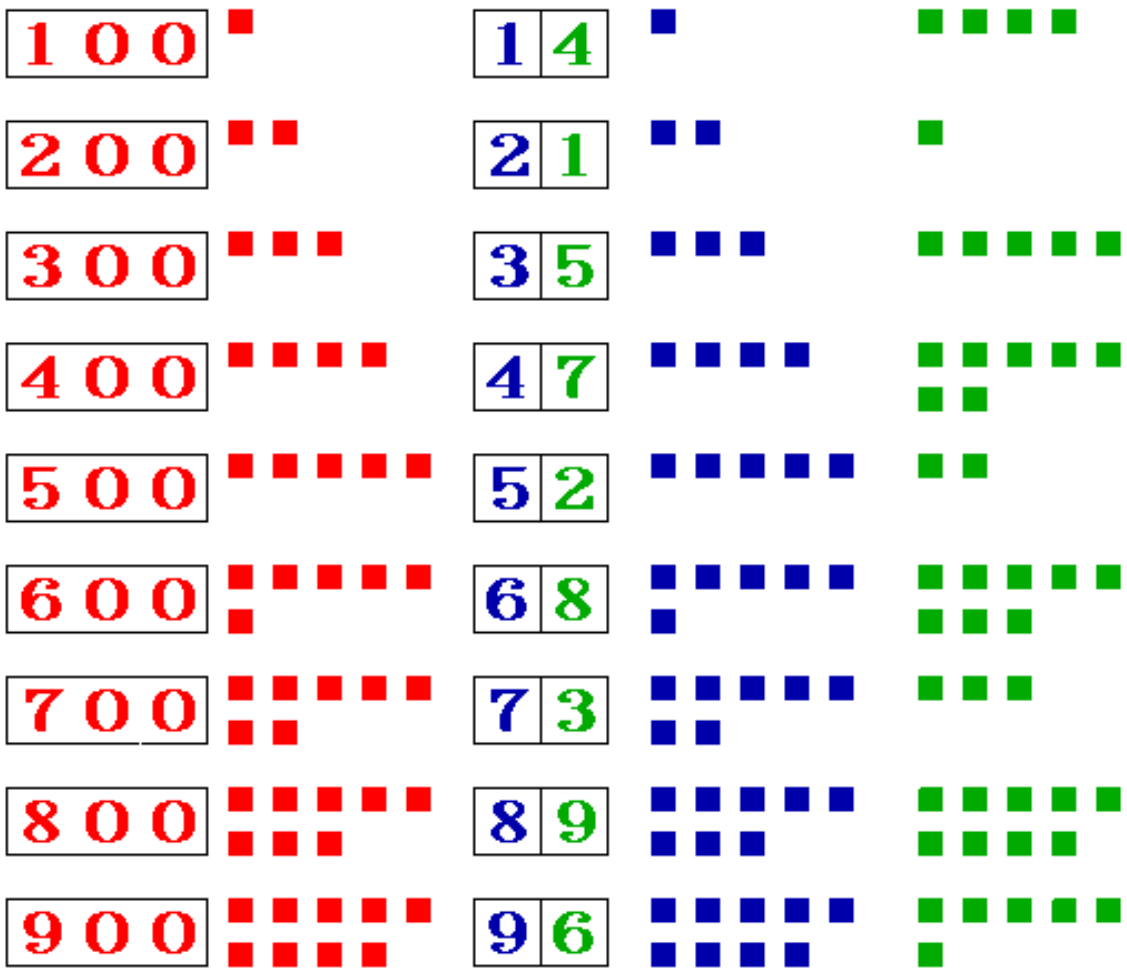

Figure 2

3. Using the same procedure, have the child make 3 digit numbers as shown in Figure 3.

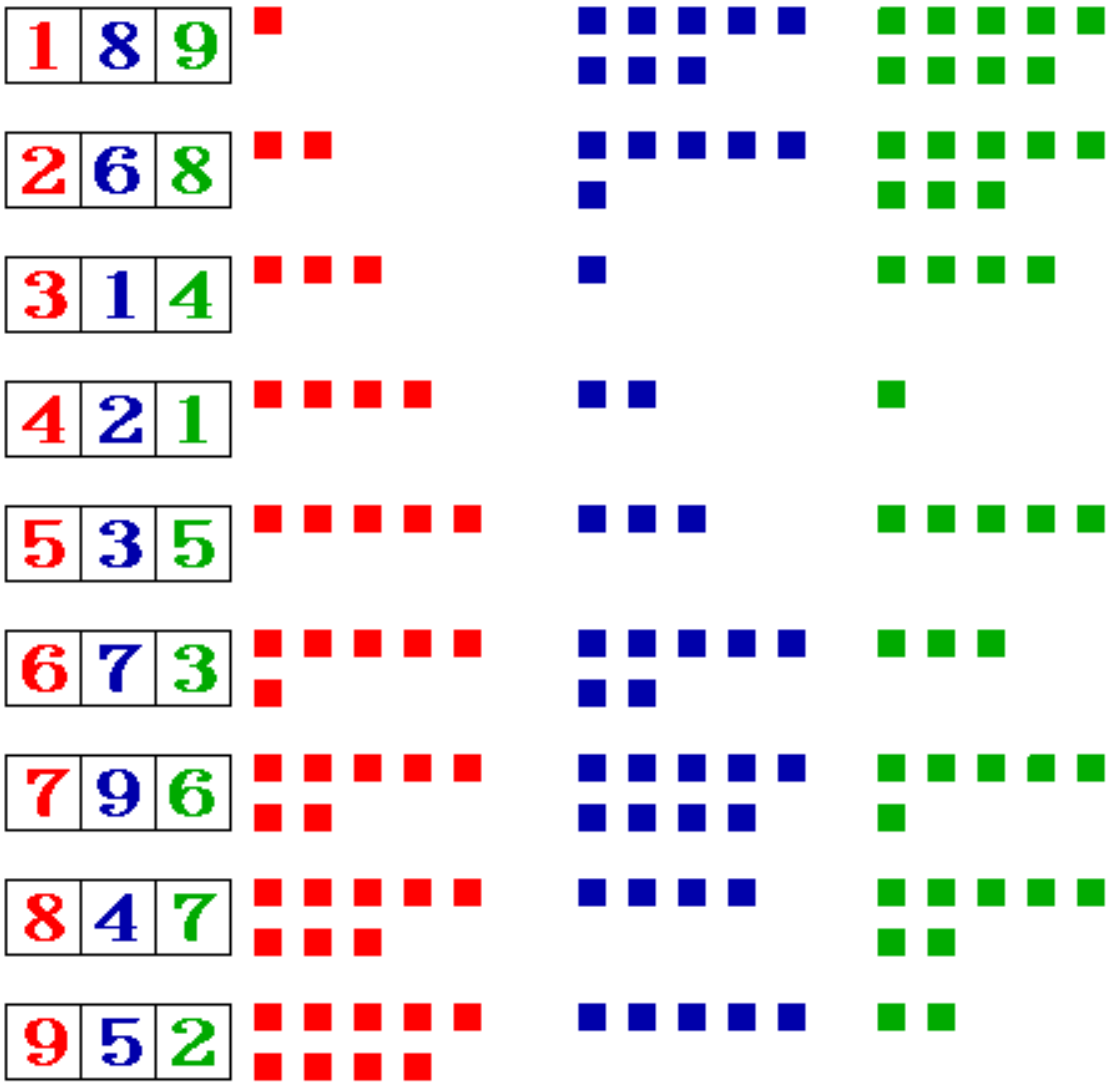

Figure 3

4. Stamps may be eliminated as the child becomes more familiar with the lesson.

Addition and Multiplication Bead Papers

Note: These sheets, while they were designed for use with Montessori beads, may be used with any counting device, or by themselves. Print the file **add_bead.pdf** or **mul_bead.pdf**.

First Presentation:

1. Cut the sheet into 3 portions, so that the child is dealing with only 1 number, such as +1 and -1.
2. Show the child how to say the problem, then set up the beads or counters for that problem.
3. Have the child count the total, or difference, then repeat the problem as he writes his answer on the sheet.

Practice:

1. Have the child use the entire sheet as soon as he is able.
2. Observe the child and when he can do the sheets faster without the counters, suggest that he want to do them without counters.
3. The sheets can be used as "timed tests" to determine mastery.

Addition Chart (and Addition Answer Chart) Multiplication Chart (and Answer Chart)

1. Print the Chart and the Answer Chart **(add_grid.pdf** or **mul_grid.pdf**).
2. Laminate them, or put them in plastic sheet protectors.
3. Have the child write the answers on the Chart using a washable marker.
4. Have the child check his answers with the Answer Chart, circling the incorrect answers with a different colored marker.
5. Erase the chart to get it ready for the next use.
6. You may want to print out copies for the students to write on if you want to keep a permanent record of their progress.

Multiplication Counters

Note: These counters, while they were designed for use with Montessori beads, may be used with any counting device, or by themselves.

1. Print the file (**mul_cnt.pdf**) using a color printer if possible.
2. Laminate the sheet or cover it with clear Contact paper before cutting it into strips.
3. Lay out the activity as shown in the file "**CountAct.pdf**"

Addition Strip Board

Assembling the materials:

1. Print the file **add_bd.pdf** using a color printer if possible.
2. Put the first page (the strip board itself) into a plastic sheet protector, or laminate it. Laminate the pieces on the second page, before cutting them apart.
3. Cut the strips horizontally. Cut each strip so that each one has the number of blocks indicated by the number on the right hand end of the strip.
4. Have a set of purchased flash cards to use with the activity, or make a set yourself.
5. If you want the child to write the problems, have paper and pencil available.

Presentation:

1. Place the strip board in front of the child. Line each set of number strips up in the form of a triangle so that the child can reach them easily.
2. Place a stack of flash cards (and paper and pencil if desired) conveniently within reach.
3. Take one card from the stack. Place it under the strip board. Say the problem, such as "**3 + 1 =".**
4. Take the 3-strip from the first triangle and place it on the first blank row of the board. Then take the 1-strip from the second triangle and place it to the right of the first, on the same row.
5. Point to the 4 above the last strip, and say "**3 + 1 = 4**." Have the child write the problem if you wish.
6. Have the child follow the same procedure for the rest of the flash cards.

Later Presentations:

1. Increase the number of flash cards that the child uses. Notice when he is able to do the problems without using the board.
2. Ask the child to make all the problems that he can with a total of a particular number. For instance, if you use 9, he should get 1+8, 2 + 7, etc. Have him write the problems.
3. Increase the difficulty by asking him to get sums of numbers which equal 12 (for instance) and use more than 2 numbers, i.e., 3 + 4 + 5.

Number Line

1. Print the file **wksheet.pdf**.
2. Use the line for any appropriate activity.

Family of Facts (Addition)
Family of Facts (Multiplication

Preparing the Materials:

1. For Addition, print the file **(fam_add.pdf**) on 8.5x11" (full sheet) adhesive labels.(For multiplication the files are **fam_mul.pdf.)**
2. Cut the pieces apart and put them on small Rolodex cards as follows:
   "3, 1, 4" (Put on the front of the card)
   "3 + 1 = 4
   1 + 3 = 4

   4 - 3 = 1
   4 - 1 = 3" (Put on the back of the card)
3. Cover the cards with clear contact paper, or get plastic Rolodex card covers.
4. Arrange the cards on a small Rolodex, in order.

Presentation:

1. Place the Rolodex and pencil and paper in front of the child.
2. Take the first card (1, 1, 2) and lay it on the table in front of the child.
3. Ask him to write the facts that are made up with these numbers. If necessary help him to write "1+1=2" and "2-1=1."
4. Tell him to turn the card over and check his work.
5. If he/she did not do the problems in order, point it out, and say, "It will be easier to check your work if you always write the problems in the same order." This will encourage the child to be aware of the order and to use it, but will not give him the idea that it is wrong if not done in a particular order.
6. Put the card at the end of the Rolodex file.

Geometry Cards – Grades 1, 2, and 3 (Labels)

The labels in the files **(vocab1.pdf, vocab2.pdf, and vocab3.pdf**) have the names of the shapes required for Grades 1, 2, and 3 respectively. (Consult the curriculum sheet for the required shapes.)

1. Print the sheet and have the child cut the labels apart.
2. Have the child draw each one of the plane (flat) shapes.
3. Have the child find objects that match each shape. Example: circle: cookie.
4. If you wish, add more shapes to the list of labels before you print out the list.

Clock Cards

1. Print the file (**clock.pdf**).
2. Make clock faces for appropriate times.
3. Make labels to match the clock faces if you wish.
4. Use the picture as a worksheet, telling the child what time to make the clock show.

Bank Game

1. Print the file **(bankgame.pdf**) on 8.5x11" colored paper.
2. Use red or pink paper for the hundreds page.
3. Use green for the thousands and units pages.
4. Use blue for the tens page.
5. Laminate the pages.
6. Cut the pages into individual pieces and store in a convenient place, keeping the different kinds of stamps separated from each other. Use the stamps for addition, subtraction, multiplication and division problems.

Hundred Board

1. Print the file **(hun_bd.pdf**).
2. Place the sheet in a plastic sheet protector.
3. To add 28 + 45 using the hundred board, put your finger on the first number, 28.
4. Count down for the number of tens in the second number, (4) and you come to 68.
5. Count to the right for the number of ones in the second number, (5), and you come to 73.
6. Subtraction is just the opposite. Count down for the 10's and left for the 1's.

Calendar Cards

1. Print the file **vocab1.pdf**.
2. Cut the slips apart.
3. Students can match the days of the week to their abbreviations.
4. Have students match the months of the year to their abbreviations.
5. Get a blank calendar and have students use the slips to make a calendar for the current month.

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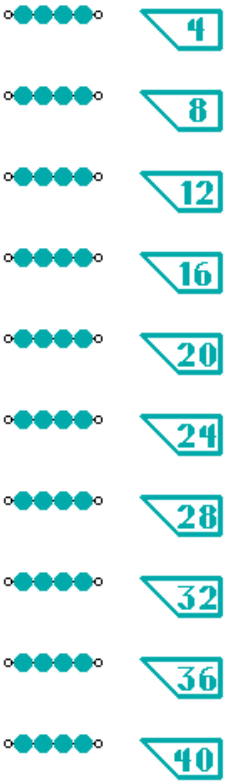

Note: These counters, while they were designed for use with Montessori beads, may be used with any counting device, or by themselves.

1. Print the file (**mul_cnt.pdf**) using a color printer if possible.

2. Laminate the sheet or cover it with clear Contact paper before cutting it into strips.

3. Lay out the activity as shown in the figure to the left.

Ruled Paper

1. Print the file **wksheet.pdf**.
2. Use the paper to help students keep track of the place value of numbers.
3. You may want to make your own ruled paper. We use the following color code for place value throughout all our materials.

   Green = units, thousands, millions, billions
   Blue = tens, ten-thousands, ten millions, ten billions
   Red = hundreds, hundred thousands, hundred millions, hundred billions