## **Math Manipulatives for Remote Instruction**



In response to multiple requests from the field, we've asked instructors who have been teaching math remotely to suggest a list of manipulatives that students can use at home. We've included a wide range of options for different learner levels. You will need to decide which ones are appropriate for your students.

#### Items already available at home (check with your students)

- Scissors
- Scotch tape
- Measuring tapes
- Scrap paper
- Items for counting (pennies, buttons)

- Measuring cups and spoons
- Different size "cups"
- Different size containers (pint, quart, half gallon, gallon, liter)
- Rulers (see below for printable rulers)

### To be provided by program

- **String** (enough length to be used for multiple purposes)
- Paper plates (for data activities; see Paper Plate Pie Chart instructions here)
- Graph paper (grid size —for example, 1-cm grid vs. 1/4-inch grid —depends on the task and level of students. See next page for printable templates if not buying in a pad or pack.)



Homemade whiteboards (made of clear plastic sleeves with card stock inside to give rigidity; useful for when students want to write and hold up their work to a computer screen or phone camera)

You can use **inserts** with the whiteboards, depending on your needs, such as plain white paper to give the appearance of a whiteboard, grid paper, fraction strips, or a number line, etc.







Photos: Heather Palmer, Middlesex Community College

**Don't forget** to include **dry erase markers** and **erasers** (pieces of felt work, too) so students can reuse their 'whiteboards'.

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#### **Printable Items**

For items that will be used as manipulatives, we suggest printing on cardstock to improve durability.

- Grid and Dot Paper https://incompetech.com/graphpaper/
- **Rulers** (Be sure to print "Actual Size".) https://printable-ruler.net/all-rulers/
- Pattern Blocks http://www.raebear.net/goodies/patternblocks/printableblocks/
- **Protractor** (Be sure to print "Actual Size".) https://www.inchcalculator.com/printable-protractor-download/
- 1-inch Square Tile Graph Paper (can be cut into 1-inch tiles for making arrays, etc.) https://free-printable-paper.com/1-inch-graph-paper/
- **Dice** (for statistics as well as number sense activities). http://www.clipartbest.com/download?clipart=7TaogbGbc
- Fraction Strips printable template (or create your own using strips of colored paper) https://tinyurl.com/RemoteMathManipulatives
- Algebra Tiles https://tinyurl.com/RemoteMathManipulatives



Photo: Heather Palmer, Middlesex Community College