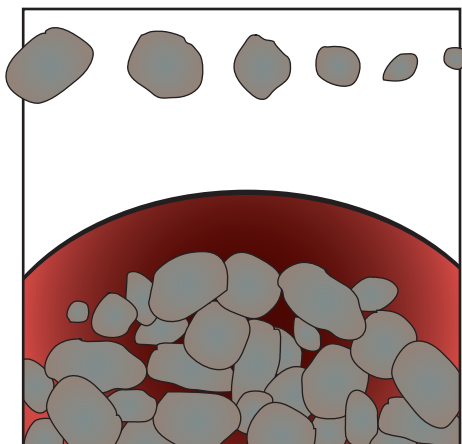


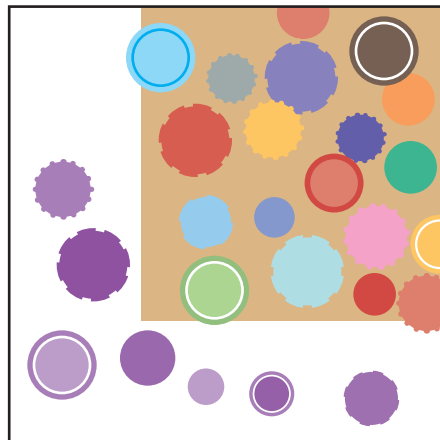
Everyday Math Manipulatives

Manipulatives are small items preschoolers can use to sort, categorize, count, measure, match, and make patterns. They can then show their discoveries in graphs and drawings. Teachers can use manipulatives to create math games that introduce concepts such as one-to-one correspondence—using one counting word for each object. From bear counters to dominoes, there are many manipulatives teachers can buy. But there are also many free or low-cost items that work just as well (be sure they are clean before adding them to the classroom). Here are eight everyday materials that work well as math manipulatives.

1 **Stones.** Collect stones while taking a nature walk with the children. If you are visiting a park, make sure it is okay to remove natural items.



2 **Bottle caps and lids.** Start a new habit—save plastic caps from milk jugs, detergent bottles, single-serve containers, dish-washing soap, and shampoo bottles. Save the lids from food containers like yogurt cups, apple sauce jars, and cream cheese tubs.



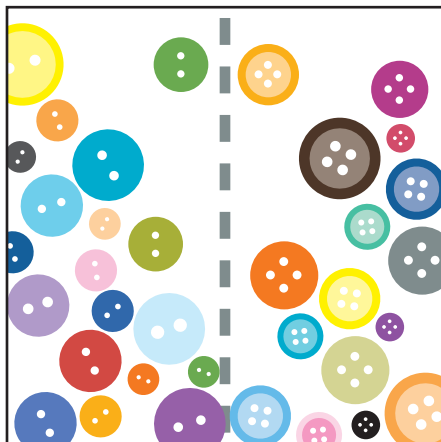
3 **Shells.** Many families collect shells on a trip to the beach. Check them for sharp edges. You can also look online for companies that sell inexpensive bags of shells.



When visiting arts and crafts or dollar stores, keep an eye out for items that could be used as manipulatives.

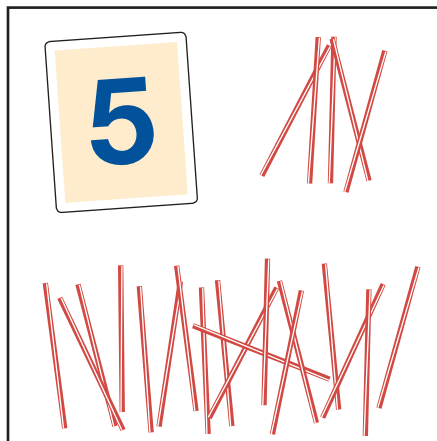
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Buttons. Buttons come in many shapes, sizes, and colors. Children can also sort them by number of holes.



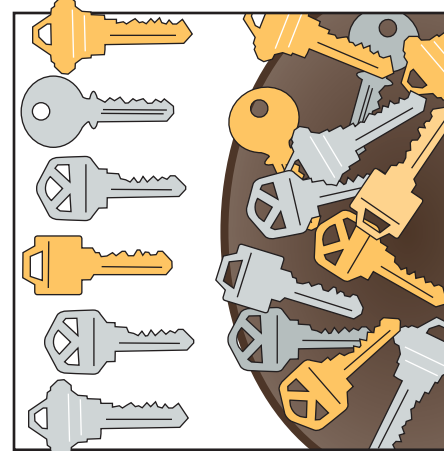
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Coffee stirrers. Wood and plastic coffee stirrers come in different lengths and colors. Cut them to make shorter lengths. Purchase them or collect donations from gas stations, coffee shops, or other local businesses.



6

Keys. Invite families to provide unused keys for your collection. For more variety, ask a local locksmith or hardware store if they have extra keys to give to your class.

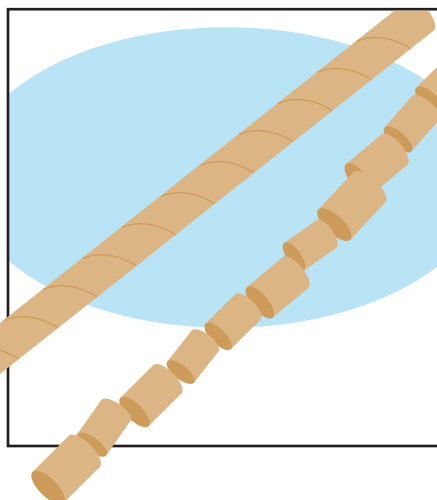


Tips for using math manipulatives

- Organize the objects in clearly labeled tubs, plastic zipper bags, baskets, boxes, or plastic containers.
- Provide ice cube trays, egg cartons, and muffin tins for sorting activities.
- Introduce math vocabulary that children can use to talk about what they are doing (*circle, rectangle, longer than, shorter than, pattern, estimate, size, measure, texture, analyze, graph*).

7

Cardboard tubes. Save the tubes from paper towel, plastic wrap, and wrapping paper rolls and cut into smaller pieces. Recycle larger cardboard tubes used to mail posters, or purchase at office supply stores.



8

Balls. Collect balls in different sizes, materials, and colors. Look for bouncy rubber balls, golf balls, tennis balls, stress balls, racquetballs, foam balls, pom-poms, or other small round items.

