Creating Patterns

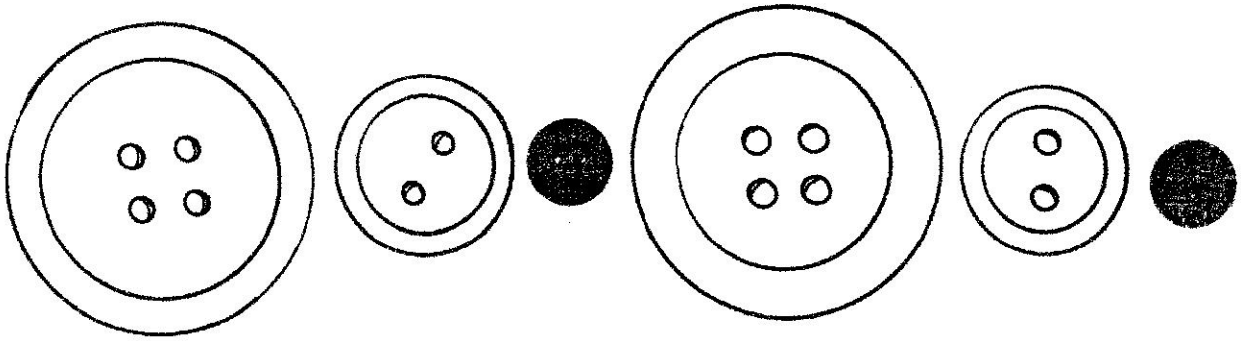
Home Link 22

Family Note

Together with your child, collect different kinds and sizes of objects, such as lids from juice bottles, soda bottles, and buttons.

Your child can use these objects to make patterns on a large piece of paper or on a table top. Ask your child to describe the pattern. For example, a pattern might be button-button-soda cap-button-button-soda cap or blue-yellow-blue-yellow.

Help your child look for other objects around the house that could be arranged in patterns.



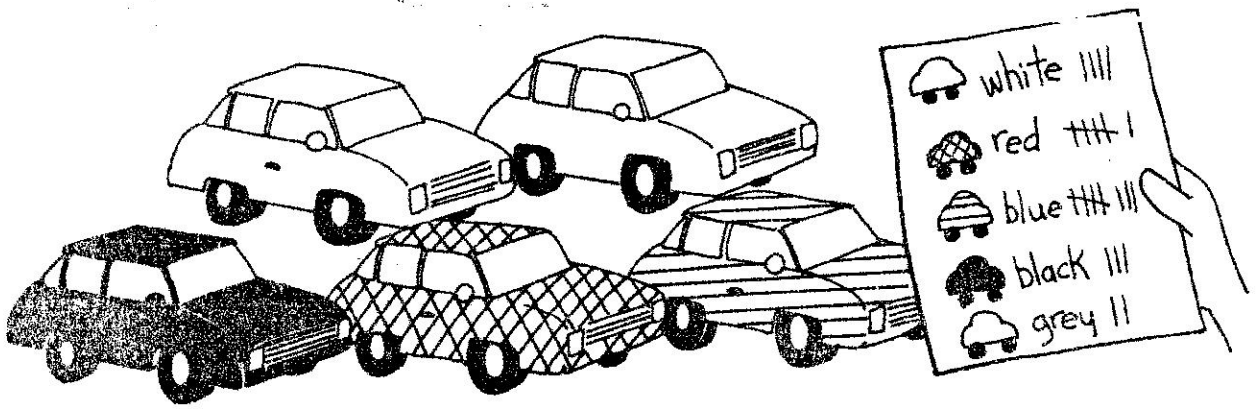
Collecting Data

Home Link 21

Family Note

Collecting data helps children sort, record, count, compare, and visualize complex information.

Help your child collect data about something that is easily observable, such as the color of cars parked in a parking lot or on your street. Ask your child to guess what the most popular car color is. Together, count the cars of each color that you see. Which was the most popular color? The least popular?



Shape and Color Patterns

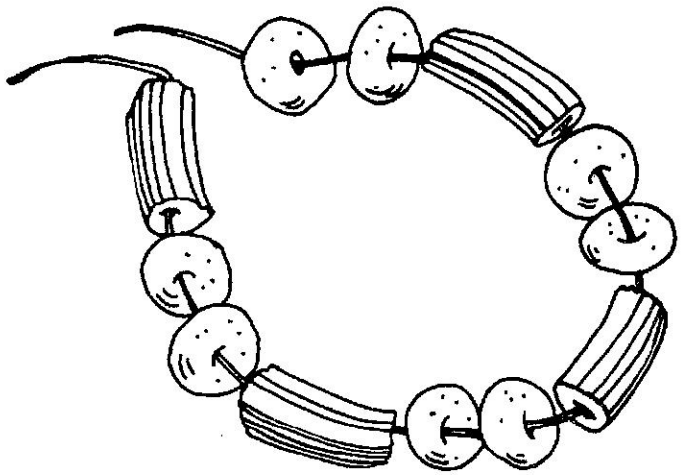
Home Link 20

Family Note

The concept of predictable patterns is an important part of mathematics. A pattern is a simple arrangement of objects, such that one can tell what will come next if the arrangement is continued.

Together with your child, make different patterns with food. Prepare a snack using crackers that are different shapes. Your child can arrange the crackers into a pattern on a plate.

You and your child also can make pattern necklaces using colored cereal with holes or different kinds of tube-shaped pasta. Children can string a cereal or pasta pattern on yarn to make a necklace or bracelet.

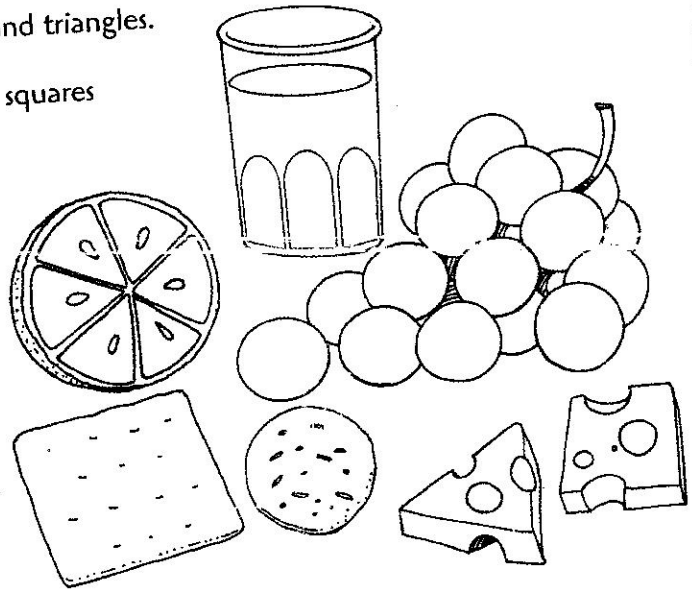


Shape Snack

Family Note

With your child, prepare a snack that is made up of several differently shaped foods. For example:

- ▷ Cut cheese into squares and triangles.
- ▷ Choose crackers that are squares and circles.
- ▷ Grapes are spheres.
- ▷ Slice oranges into circles.
- ▷ For a cylinder, try a glass of milk.



As you share the shape snack, talk about shapes. For example, you might ask questions such as "How many points does a triangle have?" or "What other things can you think of that are circles?" Informal conversations like this help children recognize the similarities and differences among geometric shapes.

Setting the Table

Home Link 24

Family Note

Setting the table provides an excellent opportunity for children to practice one-to-one correspondence. Figuring out how many napkins, plates, forks, knives, spoons, and cups are needed can help children develop the concept that each person gets one of each item.

Before dinner, ask your child to help you set the table.

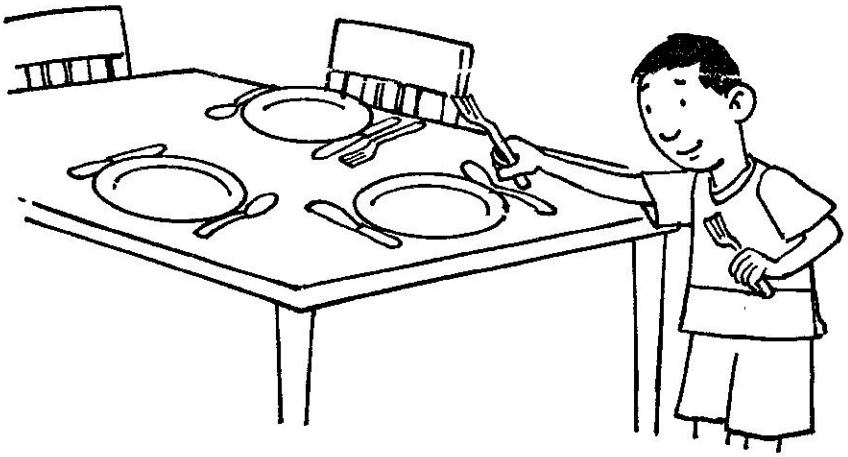
Together, count how many people will be eating. Then, ask your child to count out the correct number of napkins, plates, cups, forks, knives, and spoons that will be needed.

This activity can become an opportunity for problem solving as well. Help your child figure out what utensils will be needed for the foods that will be served. For example:

"Should we eat the soup with a fork or a spoon?"

"What should we use to put the butter on the bread?"

"What can we use to serve the salad?"



Cleaning Up Toys

Family Note

Children are naturally interested in sorting things into groups of similar objects. You can label baskets or boxes with the name or picture of a type of toy (such as "Cars" or "Doll Clothes"). Cleaning up toys becomes a fun and challenging task when children match the toy with the basket in which it belongs.

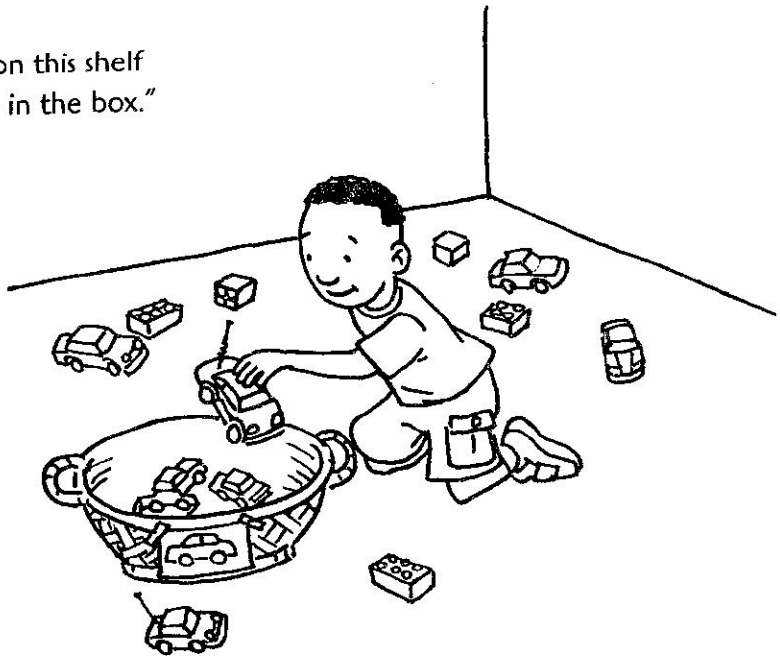
When it is time to clean up toys, encourage your child to sort the toys into groups, based on the type of toy or its physical characteristics. For example:

"Let's put all of the cars in this basket and all of the dolls in that basket."

"Pick up all of the red blocks first. What color blocks do you want to pick up next?"

"All of the books go on this shelf and all of the toys go in the box."

"Put all of the small blocks in the red crate and all of the big blocks in the blue crate."



Big and Small Books

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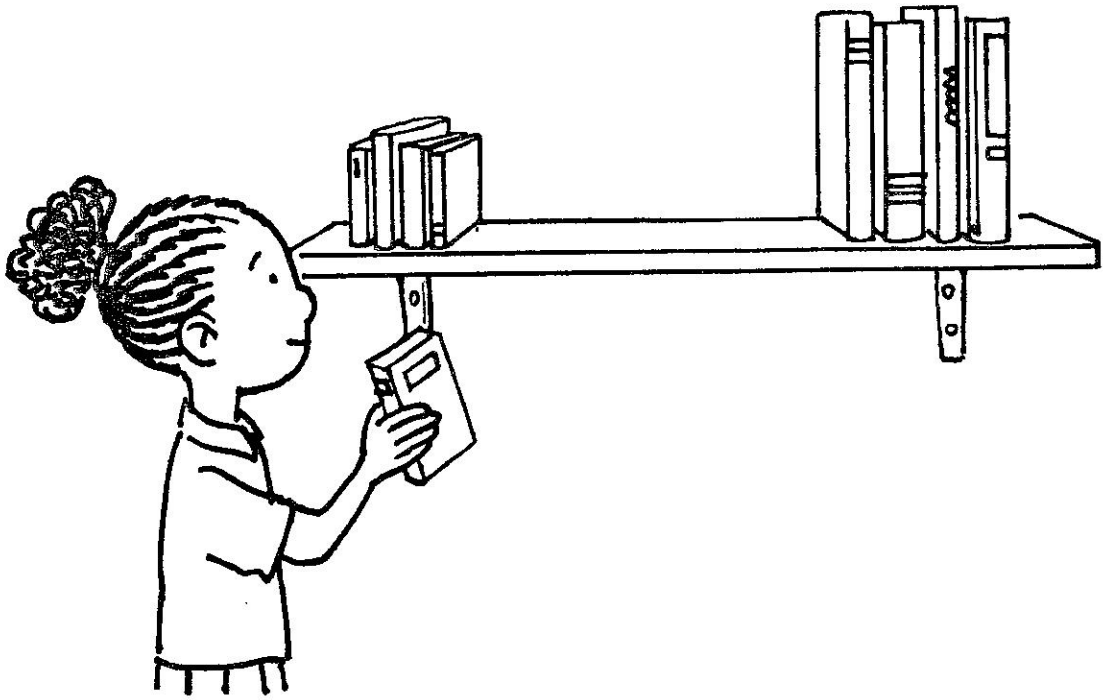
Family Note

Books come in all shapes, sizes, colors, and thicknesses. At the library or bookstore, look with your child to find unusual looking books. Are all books rectangles, or can you find other shapes? (Hint: Look in the Baby or Board Book section.) Are all the books the same size? Encourage your child to use the terms *big, bigger,* and *biggest* and *small, smaller,* and *smallest* when comparing the sizes of books.

At home, help your child arrange books on a shelf into two groups: big books and little books. Some books may be hard to group, such as a tall book that is very thin. Encourage your child to find different ways to sort the books into groups.



Candy Estimation

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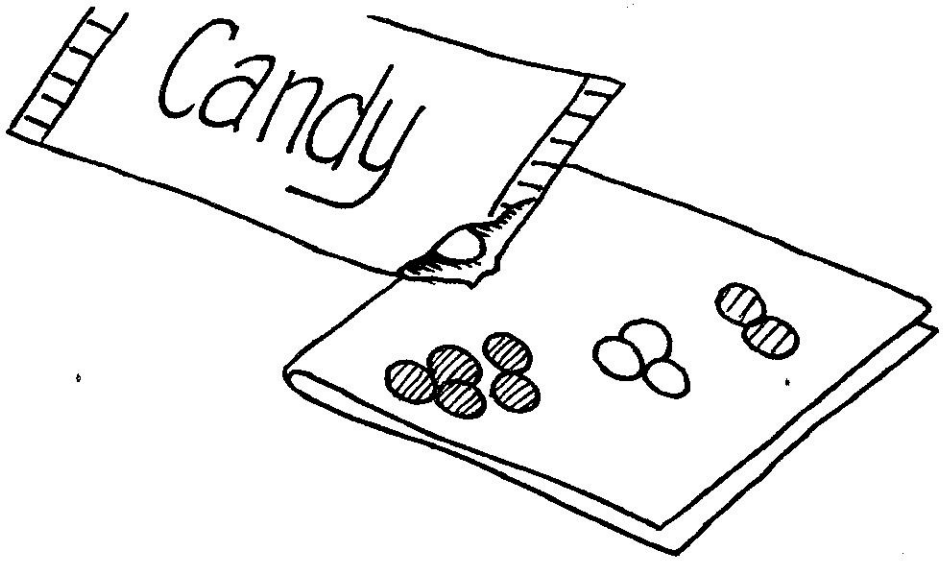
Family Note

Children enjoy making guesses about all sorts of things. Ask questions that encourage making guesses about numbers in different situations. For example, "How many cars will go by before the light turns red?" or "How many dogs will be at the park?"

For a special treat, share a bag of candy or other food that has assorted colors. Before opening the bag, ask your child to guess how many of a certain color will be in the bag or which color will be the most common. Then pour all the candy onto a napkin, and help your child count the pieces to find out. If you eat this food frequently, help your child keep track of the most common color. Is it the same each time?



Measuring Volume

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Family Note

Bath time provides an excellent opportunity to experiment and play with containers. The process of filling containers and comparing how much each can hold gives children the opportunity to experiment with the measurement of volume without worrying about exact answers. For this activity, make sure that the containers are nonbreakable.

Together with your child, collect some containers that are different shapes and sizes, such as margarine cartons, plastic bottles, and juice containers. Let your child use the containers to pour water back and forth in the sink or bathtub. Ask which container holds the most, which holds the least, and which containers hold about the same amount. Ask your child to predict whether an empty container can hold all of the water in a full container and then let him pour the water into the empty container to see if the prediction was correct.