Age:

5-13

# **Participants:**

Group, Family, Pair

# **Supplies**

- 2 of each of the following: paper towel, rubber band, paper clip, toothpick, paper cup, or other household items
- medium size cardboard box
- scissors
- paper
- pencils or pens

# **Details**

## Why

To communicate using clear, precise language or pictures that represent objects.

## What

Computer programming requires detailed language because computers perform detailed jobs. The speed, scale and precision of a computer exceeds what people can do, but the program that directs the computer's work is written by people.

In this activity, you'll use detailed language to communicate to another person about what you want to happen. The communication skills used are the same ones useful in recording observations, applying science terms, or interpreting technical language.

## How

In this activity, use words or pictures to guide your partner to assemble objects in a particular way.

- Working with a partner, collect 2 of a number of identical objects.
- Divide the objects into 2 identical sets. Each person gets a set. Instead of household items, you can use natural items like twigs, pinecones, stones, leaves, shells, seed pods, flowers, feathers or nuts.
- Remove the lid of the cardboard box so that there are just 4 sides and a bottom on the box. With partners sitting facing each other, stand the box up between the two partners with the open side facing one partner.
- The partner with the open box side facing them will be the "communicator." He/she arranges the objects in their set inside of the box so that the other partner, the "listener," cannot see the arrangement.
- When finished arranging, the communicator draws pictures or uses words to describe the arrangement of objects to the listener.

- Without peeking, the listener follows the communicator's directions to repeat the arrangement, pattern, or construction using their own, second set of objects. The communicator can use only words or pictures and may not use hand gestures.
- When finished, turn the box to reveal the hidden arrangement. Do they match?
- Try it again with partners switching roles.

#### **Next**

- For a challenge, increase the number of objects or limit the time or number of words used to describe object arrangements.
- Choose one of the objects to describe from a different viewpoint. For example, describe it from a magnified, reversed, distant, top or underside view. Your partner tries to determine which object you are describing and/or which viewpoint you are using.

