We always bring a PicoCricket, motor board, and this motor cable connector to test salvaged electronic parts at our local surplus store. This homemade connector will let you connect salvaged actuators (output devices) such as relays, lights, motors, and other electronic parts that can be powered by 4 to 6 volts.

**TRY IT!** Collect these things:

- LEGO motor cable
- alligator clip wire connector
- scissors
- wire stripper
- electrical tape

PicoCricket
motor controller, cables and switch
www.picocricket.com
GETTING STARTED

Cut a LEGO motor cable in half.
Cut the alligator clip wire connector in half.
Strip all the ends.

Twist (or solder) the ends of the alligator clip wire connector to the ends of one half of the LEGO motor cable. (You can use the other half of the LEGO motor cable at another time.) Tape each twisted pair of wires.
TEST IT OUT
Connect your motor cable connector to a PicoCricket motor board and to a motor or other electronic device that can be powered by 4 to 6 volts.

Tip: Some small motors and other electronic devices may require more electricity than the Cricket can provide. If this happens, the Cricket will stop running its program. Restart the PicoCricket and try another electronic part if this happens.

Tip: You can connect your motor cable connector to a relay if you want to use an electronic device that requires more than 6 volts.

TAKING IT FURTHER
Go get stuff to test! Take apart an old electronic toy, search an online electronics store, or visit a surplus store to find electronic components such as lights, relays, and motors that will work with the PicoCricket. Try visiting http://www.electronix.com
WHY IS THIS A PLAYFUL AND INVENTIVE EXPLORATION

New use for the everyday object
This is an inventive way to reuse components from discarded toys and electronic devices.

Extending the PicoCricket kit
The motor connector cable extends the PicoCricket kit, allowing the use of a wide variety of salvaged output devices.

Learning a new skill
This activity is a good way to learn how to solder.

RELATED IDEAS

Cell phones and pagers use offset motors when they vibrate. You can harvest a motor from a discarded phone or pager, then connect it to the PicoCricket to see how it runs.

Many of the PIE activities utilize salvaged electronic parts for use as inputs and outputs with the PicoCricket.