COLLECTING OBJECTS TO BUILD WITH

So far, we have discussed collecting objects that may help you generate ideas. However, you should also collect objects that can help you construct ideas. The world is far richer than a pencil. A few examples are below.

1 **Collect your favorite kindergarten supplies.** You've spent years learning how to use them. You may as well exploit that.

2 **Collect office supplies. Browse office supply stores and catalogues.** There is a whole industry devoted to constructing things out of paper, sticky notes, transparencies, glue, pens of different thicknesses, and so on. We will show you how to use this in Chapter 3.7: Sketching with Office Supplies.

3 **Collect tools and materials for making physical things.** Keep tools and materials for building your own physical mockups. This may include clay, wood, or foam core (which we show you how to use in Chapter 3.11).

4 **Collect electronic components for making computer-controllable hardware.** Up until a few years ago, prototyping with electronic hardware was limited to electrical engineers and hobbyists. The last decade has changed this considerably.

Lego Mindstorms, for example, is a robot creation environment targeted for children aged 7–16. It provides a variety of sensors and motors that can be attached together and programmed to create robotic toys. We once used it to prototype jewelery worn by distant lovers to caress each other: if one person touched her jewelery, the other (distant) partner would feel it move and could respond accordingly.

For programmers, hardware toolkits such as Phidgets and Arduino let people assemble and construct electronic prototypes in high-level programming languages. Phidgets work as a black box, where a person just plugs in sensors, actuators and switches; no knowledge of electronics is required. While Arduino does require a rudimentary knowledge of electronics (easily acquired by many tutorials found online), it is somewhat more flexible.