

## Chapter 1

# APPETIZERS

The worst thing about empty packages and containers is also the best thing: they are everywhere. Discarded packages can be fascinating and instructive, and are often full of mysteries. To start exploring packaging, just look around for some. Look in the garbage, the basement, the street, the park, and the cafeteria. Search for interesting jars, jugs, bottles, bags, and boxes. If computer shipments or other large deliveries have been made recently, find out where the boxes are. Look for cushioning materials as well as cartons.

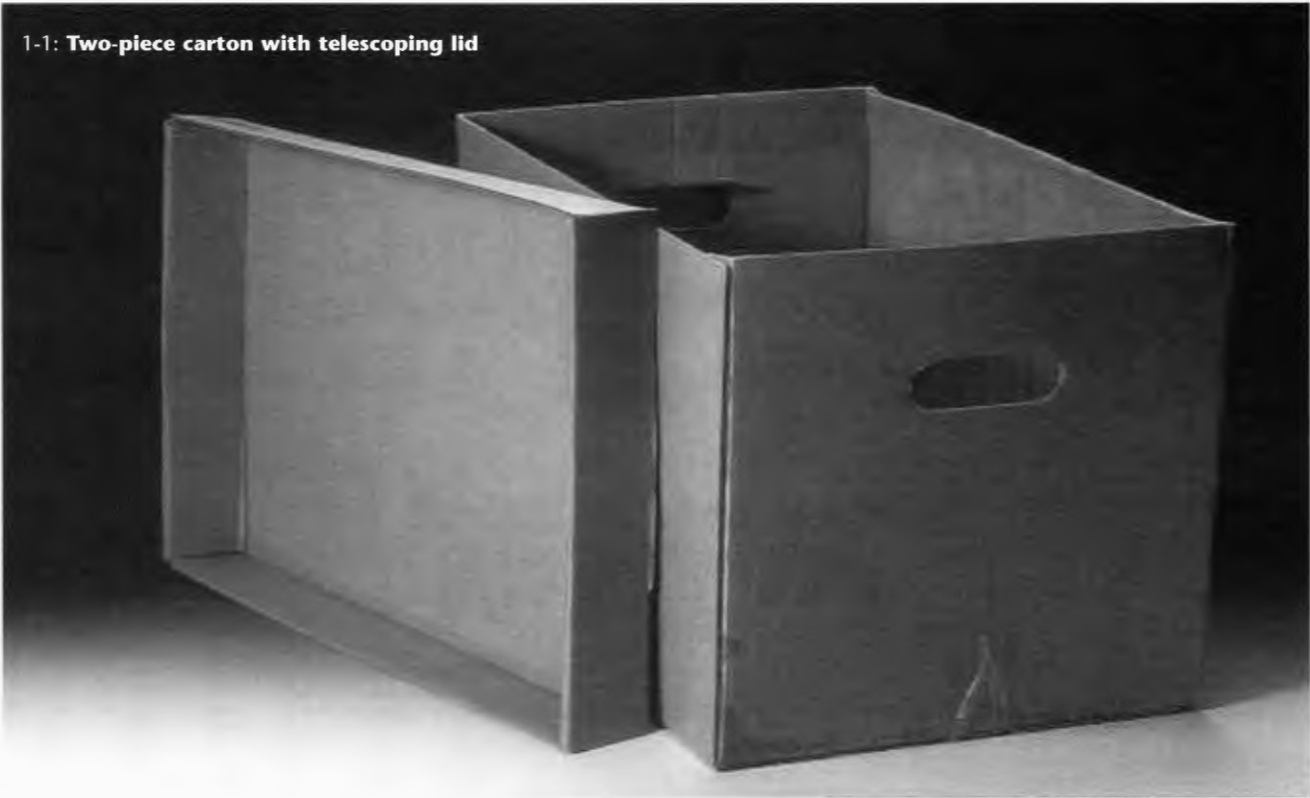
## Scavenger Hunt 1: Package Designs

Let's begin with this scavenger hunt challenge: How many different package designs can you find in each of these categories?

### Cardboard Boxes and Cartons

- Two-piece cartons with telescoping lids—lids that are slightly larger than the boxes (Figure 1-1)
- Folding boxes, which are held together by mechanical tabs and slots, and can be unfolded completely (Figure 1-2)
- “Gabletop” containers, commonly used for milk and juice, that open and reseal (Figure 1-3)
- Boxes that incorporate dispensers, such as Kleenex boxes (Figure 1-4)
- Boxes of unusual geometry, such as cylindrical, heart-shaped, triangular, trapezoidal, hexagonal, and octagonal boxes (Figure 1-5)
- Boxes that both contain and display the product (Figure 1-6)
- Boxes that include a pour spout (Figure 1-7)
- Pizza boxes of various designs

1-1: Two-piece carton with telescoping lid



1-2: Folded box that unfolds completely



1-3: "Gabletop" carton with built-in pour spout



1-4: Box for garbage bags, with its own dispenser



1-5: Pyramid-shaped box



1-7: Box that incorporates hinged pour spout

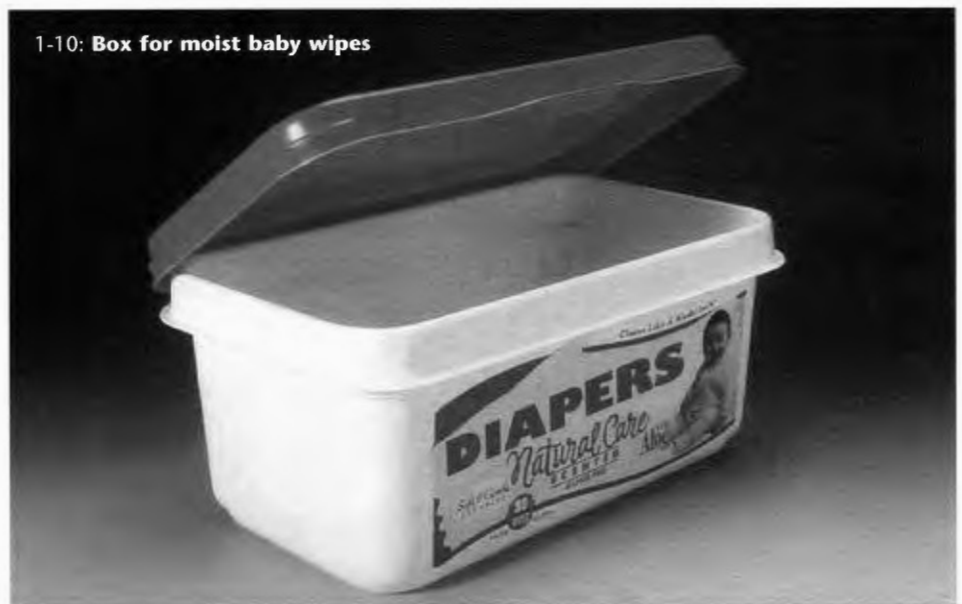


1-6: Box for expensive perfume designed to display both bottle and sprayer



## Plastic Containers

- Card-mounted “blister packs” that use both cardboard and plastic (Figure 1-8)
- Take-out food containers (Figure 1-9)
- Plastic boxes that keep the product wet or dry (Figure 1-10)



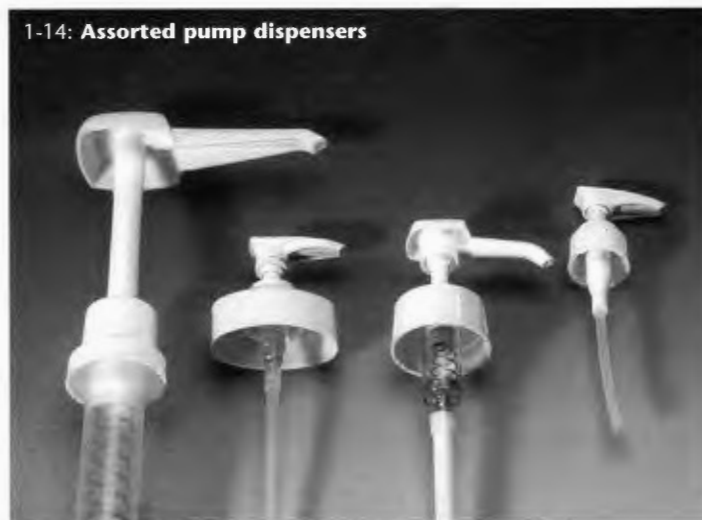
## Packaging Material Found Inside Boxes

- Materials used to make compartments, such as slotted cardboard partitions, plastic cookie trays, cardboard spacers, etc. (Figure 1-9)
- Materials used for cushioning, such as bubble wrap, peanuts, Styrofoam inserts, foam rubber, crepe paper, etc. (Figure 1-11)



## Bottles and Their Lids

- Different methods of child-proofing pharmaceutical items, including “push-then turn,” “squeeze-then-turn,” and “line-up-the-arrows” (Figure 1-12)
- Decorative glass and plastic bottles for perfumes and cosmetic items
- Plastic bottles for cleaning fluids, with molded built-in handles
- Shampoo containers of different types
- Squeeze bottles with different closure methods, such as dishwashing soap “push-pull” tops, hinged tops, and “flip spouts” (Figure 1-13)
- Pump dispensers (Figure 1-14)
- Spray dispensers (Figure 1-15)
- Dispensing methods other than squeeze, pump, and spray, such as roll-ons, “stick” dispensers, eyedroppers, brushes, daubers, etc.



## Bags and Envelopes

- Shopping bags with the handles attached in different ways, such as cutouts, glued handles, glued patches holding handles, slots for string handles, etc. (Figure 1-16)
- Envelopes made in different ways
- Multi-layer bags, such as cellophane snack food bags with metallized layers
- Reclosable food bags with different closure methods, such as tab-in-pocket, zippers, and metal ties



## Examining Your Collection

As you look carefully at interesting examples of packaging, you will probably begin asking yourself questions like these:

- What type of cushioning is most effective for a particular product?
- Which pump or spray dispenser works best?
- What type of shopping bag or grocery bag is really the strongest?

These are all questions you can answer for yourself, as we shall see. There are a host of other questions that can help you organize and build your packaging collection:

- What set of problems was this package designed to solve?
- How was this package made?
- Why was one material used and not another?
- How well does it work for its purpose, compared with other designs?
- What else could this package or container be used for?
- How do the properties of the package match up with the properties of the product?

This last question is a subtle one. For example, spray dispensers and roll-ons

are suited for thin, watery liquids; pump dispensers, for thick, viscous liquids; and stick dispensers, for waxy solids. What other kinds of correspondence can you find? At the end of the next chapter, we will help you with some of these issues by providing some of the technical background on packaging materials. In the meantime, we hope you will consider some of these issues for yourself. Above all, we urge you to look carefully at all of the packaging you come across.



# Scavenger Hunt 2: Everyday Packaging Problems

Once you start, you will quickly accumulate a substantial collection of packages. You may also run out of space. Don't worry. This second scavenger hunt requires no space at all, except for a piece of paper. Use it to make a list of "everyday packaging problems"—the kind that crop up as nuisances in daily life. Here are some examples:

- How can I send these fragile objects through the mail?
  - Which shopping bag should I use to take out the garbage?
  - How am I going to get these heavy books to school? What if it starts raining on the way?
  - How can I transport the food I just cooked without getting burned or without it leaking?
  - This broken box is the only one I have left. How can I repair it?
  - Is double bagging really necessary?
- Some questions will be easy to answer just by looking at the packages in your collection. Others will require further investigation. Keep your list handy for future use. It can be a starting point for your work on packaging with children.

## Packaging Mystery Challenges

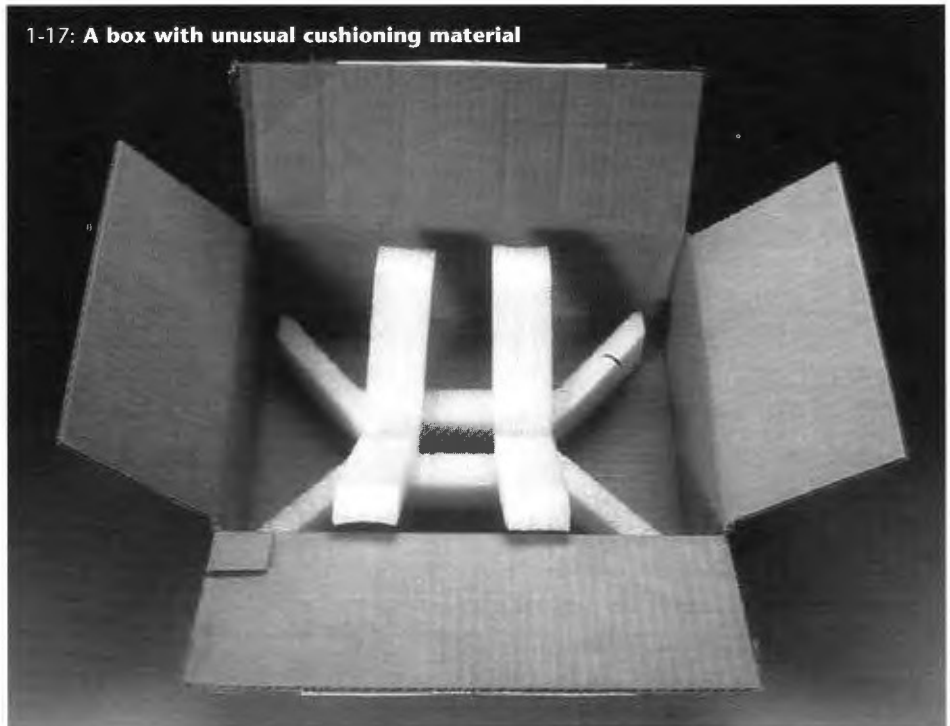
Here are some "packaging puzzles" for you to solve. Some of them require that you work with a partner.

### 1. What was in this box?

Separately, you and your partner should each assemble a collection of interesting boxes of roughly equal size along with their contents. Remove all the contents and put the contents in one area and the packages in another. If the packages have identifying information, cover it over with dark paper or tape. The other person tries to match the contents with the package.

### 2. How was the cushioning material arranged?

Find a box with interesting cushioning material, such as the one in Figure 1-17. Remove the contents of the box and spread



1-17: A box with unusual cushioning material

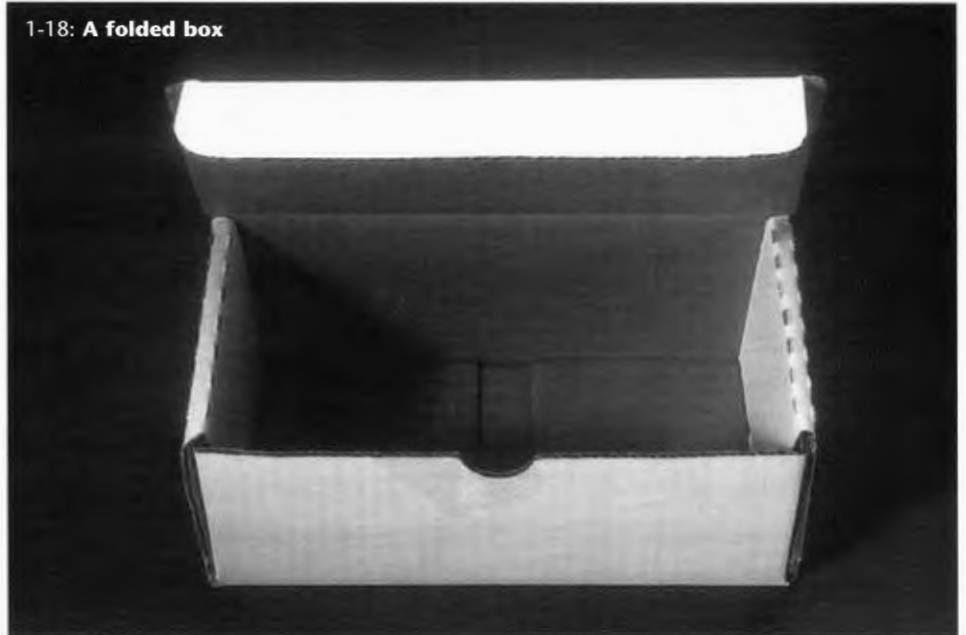
the cushioning material out on a table. Your partner has to figure out how the cushioning material was arranged in the box.



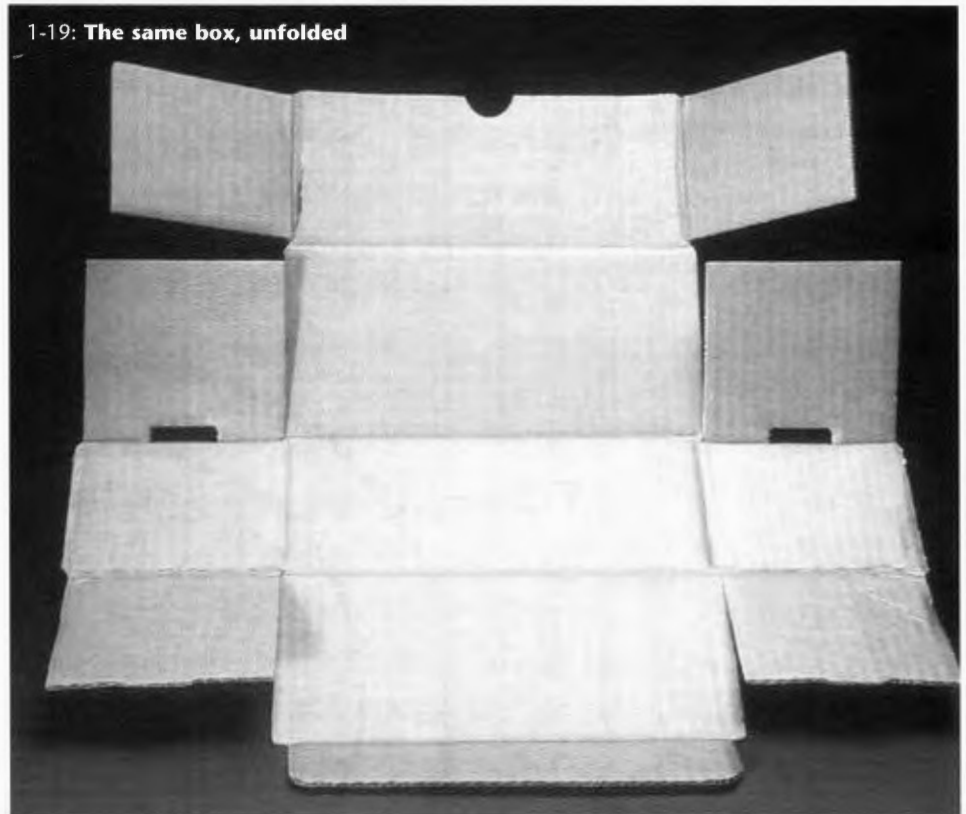
### 3. What would this closed box look like open?

From your collection, select a cardboard box that is folded into shape and held together without glue or tape, such as the one shown in Figure 1-18. Sketch what you think it would look like completely unfolded and laid out flat. (The answer for the box in Figure 1-18 is shown in Figure 1-19.) You can also play this game in reverse. Starting with an unfolded box, try to predict what the box would look like folded into shape.

1-18: A folded box



1-19: The same box, unfolded



**4. What does the information in the “box certificate” mean?**

Most cartons made of corrugated cardboard have a little certificate printed somewhere on them. An example is shown in Figure 1-20. Do all of these certificates carry the same kind of information? What in the world does this information mean?

**5. What do the recycling numbers mean?**

Except for some soda bottles, nearly all plastic containers have a recycling number on them. The number is impressed inside a little triangle, usually on the bottom of the container. How many different numbers are used? What does each number mean? Why don't soda bottles usually have them?

**6. Why are aluminum soda cans shaped like that?**

Why do they have that dome on the bottom, and why does the circumference get smaller at the top, compared with the rest of the can?

**7. Can you think of a better way to package compact discs (CDs)?**

If you've bought one recently and had difficulty opening it or if you've ever had one of the hinges snap on you, it should be pretty easy to come up with a better design.

Questions 4, 5, and 6 are dealt with in detail in Appendix A. But first try to figure them out for yourself!

1-20: A box certificate from a cardboard carton

