

How to Write a Technical Description

Two Types of Technical Description

1. Product description—a thing (for example, a bottle rocket)
2. Process description—the steps or stages in a complex event (for example, how to install a garage door opener)

General Outline for Writing Technical Descriptions

- 1. Overview of Item**
 - a. Definition of the object—identification and function
 - b. Identification of major parts
- 2. Description and Function of Parts (repeated as necessary for multiple parts)**
 - a. Definition—identification and function
 - b. Composition—shape, dimensions, and materials
 - c. Subparts
 - d. Relationship to and method of attachment to adjacent parts
- 3. Operation of Item**
 - a. Summary of parts if necessary
 - b. Explanation of one “cycle of operation”

Elements of a Usable Description

1. Clear and Limiting Title
2. Appropriate Level of Detail and Technicality—identify audience/purpose
3. Objectivity—impartial; focus on observable details
4. Visuals—use generously
5. Clearest Descriptive Sequence (choice based on purpose)
 - a. *Spatial Sequence*—when describing a static item or mechanism at rest (e.g., a house, a computer keyboard, a chainsaw)
 - b. *Functional Sequence*—when describing a mechanism in action (e.g., a camera, a motor, an elevator)
 - c. *Chronological Sequence*—when item is best visualized in terms of its order of assembly (e.g., a couch, a pre-hung window, a blueprint)

Techniques of Technical Description

- **Clear identification of item and function**

Bad example: Water-powered rocket

Good example:

- **Appropriate level of technicality**

Bad example: Silver-colored polyethylene-coated cloth, 0.23 mm thick, with rubber adhesive and tensile strength of 25 lbs/in

Good example:

- **Objective focus on observable details without interpretation or judgment**

Bad example: Unique fin design

Good example:

- **Concrete, specific, material details**

Bad example: Plastic soda bottle

Good example:

- **Precise technical language to express attributes and relationships**

Bad example: Fins placed evenly around the bottle

Good example:

- **Use of measurements and dimensions**

Bad example: Near the opening of the bottle

Good example:

- **Use of visuals to show item and focus on attributes or parts**