

# WRITER'S TUTORIAL

## GRAPHICS HELP READERS UNDERSTAND AND USE INFORMATION

### SHOW YOUR READERS HOW SOMETHING LOOKS

NASA uses this drawing to show the public the appearance of a space probe sent to Saturn.

NASA artists chose to draw the probe from an angle of view that displays its key parts.

By including images of Saturn in the background, NASA helps readers imagine the satellite performing its mission.

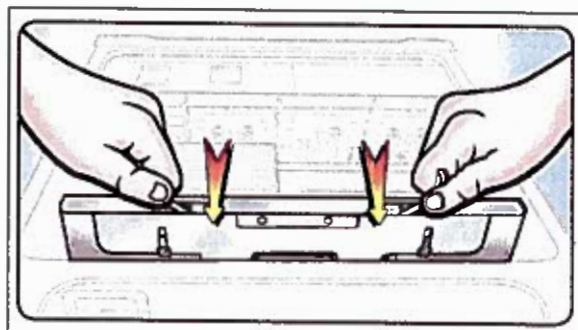


Courtesy of NASA

### SHOW YOUR READERS HOW TO DO SOMETHING

Graphics can explain operations that would be difficult to describe—and understand—in prose. Writers used this drawing to help readers learn how to perform one step when replacing a computer's memory.

By showing the action from the same angle of view that a person performing this task would have, the writers prepared an easy-to-follow, reader-centered drawing.



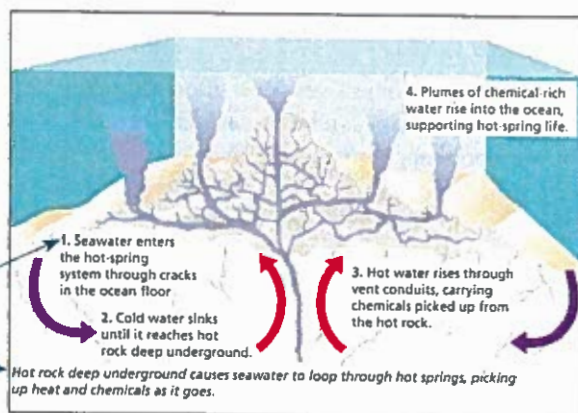
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### EXPLAIN A PROCESS

To help readers understand how seawater picks up chemicals as it flows through hot-spring systems, a writer used this drawing.

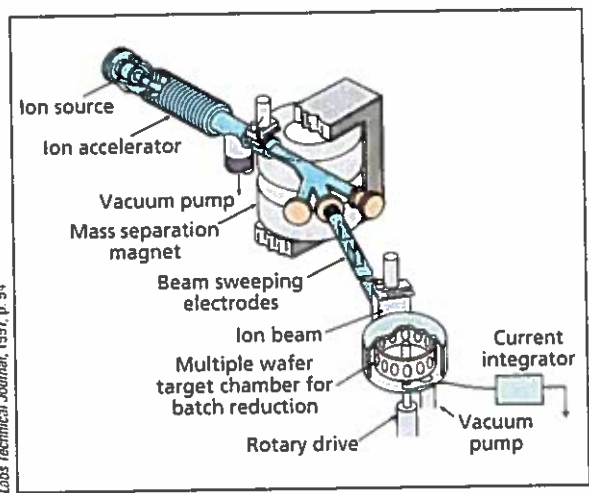
This drawing illustrates one way to integrate graphics with text to clarify meaning for readers.

- The text incorporated into the drawing explains the four major steps in the process.
- The caption below the figure describes the overall process.



From "Life's Undersea Beginnings," by J. Cone, from *Earth*, 3, 38.

\*Silicon Microelectronics Technology,\* Bell Labs Technical Journal, 2, 91, Autumn, 1997. Reprinted by permission of Lucent Technologies, from Bell Labs Technical Journal, 1997, p. 94



## SHOW HOW SOMETHING IS CONSTRUCTED

Using this drawing, writers described the construction of lasers used to make computer chips.

By coloring the relevant parts blue, the writers highlighted the path of the laser beams.

To help readers identify the parts of the system, the writers not only placed each label close to the part it names but also drew arrows from each label to its part.

## DISPLAY INFORMATION IN A USEFUL WAY

Kodak uses this table to help professional and amateur photographers find the optimum temperature and time for developing film.

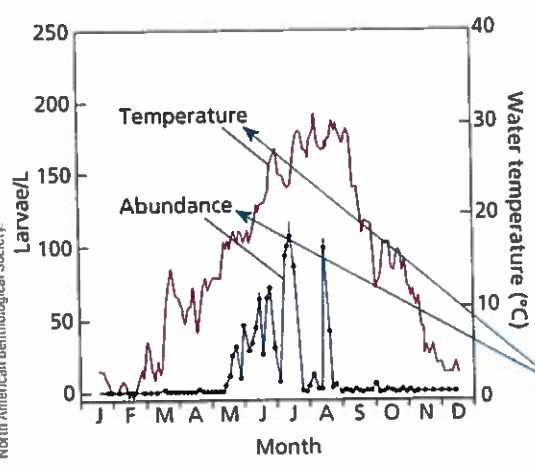
By clearly distinguishing information for small and large tanks, Kodak has helped its readers focus on the part of the table that applies to the size of development tank they are using.

Kodak uses bold to highlight the columns for the temperature it recommends.

Kodak Developer	Developing Time (in Minutes)									
	SMALL TANK (Agitation at 30-Second Intervals)					LARGE TANK (Agitation at 1-Minute Intervals)				
	65°F (18° C)	68°F (20° C)	70°F (21° C)	72°F (22° C)	75°F (24° C)	65°F (18° C)	68°F (20° C)	70°F (21° C)	72°F (22° C)	75°F (24° C)
	8 1/2	7 1/2	6 1/2	6	5	9 1/2	8 1/2	8	7 1/2	7
HC-110 (Dil B)	9	8	7 1/2	6 1/2	5 1/2	10	9	8	7	10
D-76	11	10	9 1/2	9	8	13	12	11	10	11
D-76 (1:1)	11	10	9 1/2	9	8	13	12	11	10	11
MICRODOL-X	—	—	15	14	13	—	—	17	16	—
MICRODOL-X (1:3)*	—	—	15	14	13	—	—	17	16	—
DK-50 (1:1)	7	6	5 1/2	5	4 1/2	7 1/2	6 1/2	6	5 1/2	5
HC-110 (Dil A)	4 1/2†	3 1/2†	3 1/2†	3†	2 1/2†	4 1/2†	4 1/2†	4†	3 1/2†	3†

\* Gives greater sharpness than other developers shown in table.  
† Avoid development times of less than 5 minutes if possible, because poor uniformity may result.  
Note: Do not use developers containing silver halide solvents.

\*Developing Time in Minutes\* KODAK film. Reprinted courtesy of Eastman Kodak Company



## SHOW TRENDS OR OTHER NUMERICAL RELATIONSHIPS

A team of biological researchers used this graph to help readers see the relationship between the temperature of river water and the abundance of shellfish in the river.

This sophisticated graph has two X-axes, one for shellfish larvae (left side) and one for water temperature (right side).

To help their readers see which graphed line is for shellfish and which for water temperature, the researchers provided a label for each line.

from J.A. Struettel, D.W. Schneider, L.A. Soeken, K.D. Hodge, and R.E. Sparks, "Larval Dynamics of a Riverine Metapopulation: Implications for Zebra Mussel Recruitment, Dispersal, and Control in a Large River System," *Journal of the North American Benthological Society*, 16(1997): 591. Reprinted by permission of the Journal of the North American Benthological Society.