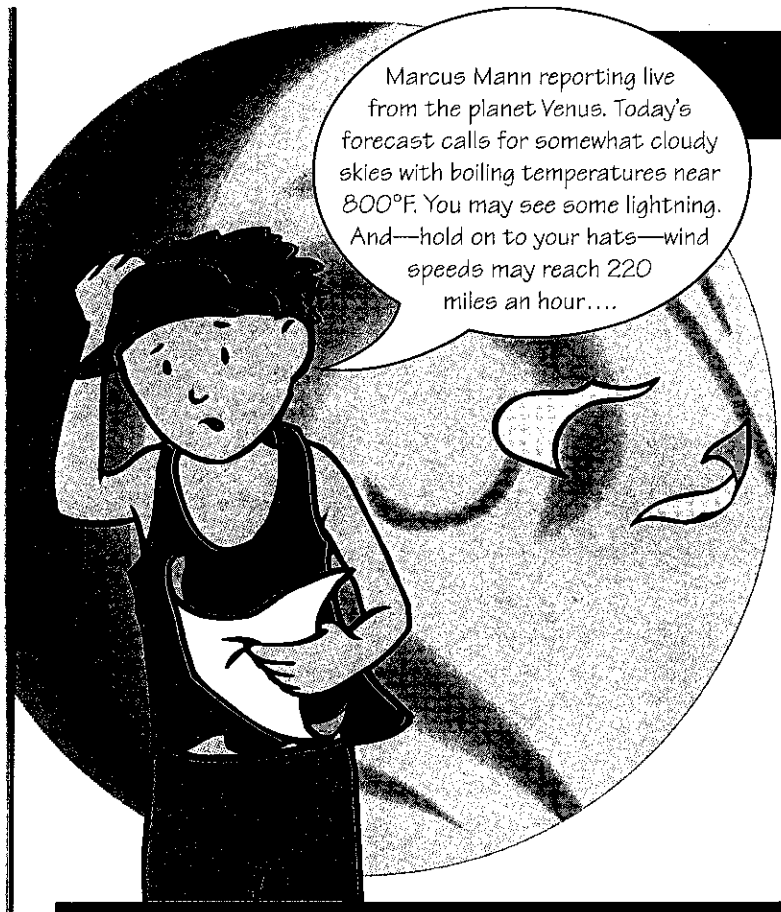


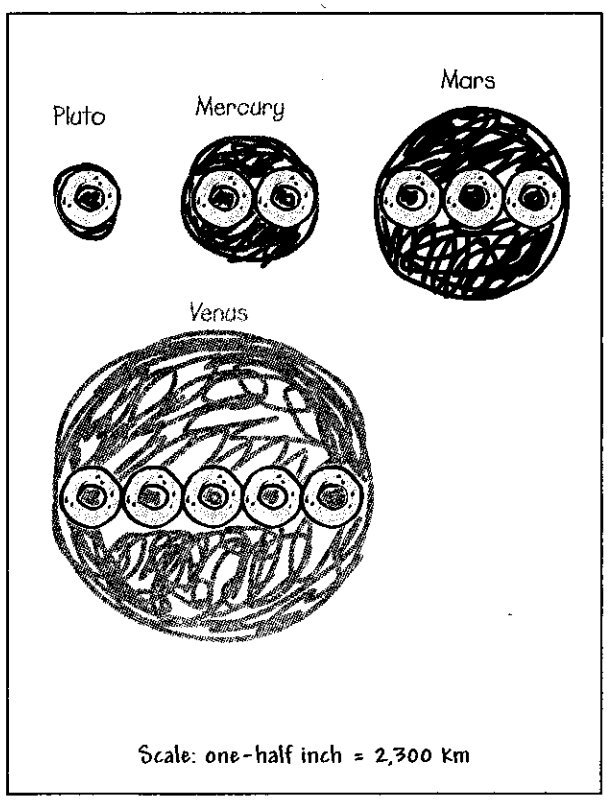
Wacky Weather Reports
(Writing, Role-Playing)

If someone told you temperatures were –261°F and wind speeds were 1,500 miles per hour, you would probably answer, "On what planet?" Spotlight wacky planetary weather with this role-playing activity. Begin by asking students to share the types of information presented in a weather report, such as temperatures, cloud cover, precipitation levels, and wind speeds. Then have students imagine how a weather report for another planet would be different than one for Earth. Next, divide students into eight groups and assign each group a different planet (other than Earth). Challenge each group to research weather facts for its assigned planet and then prepare a TV weather report. After completing its research and report, instruct each group to choose one member as its reporter and then videotape him. (If desired, have each group create a colorful poster of its planet to use as a backdrop for its report.) Encourage lifelike reports by inviting each reporter to use props such as seasonal clothing or weather gear. After taping is complete, share the reports and then discuss the similarities and differences between each planet's weather.

Relatively Speaking...
(Math)

Help students gain perspective about the relative size of each planet with this hands-on scale activity. Remind students that *scale* is the ratio between measurements on a map or model and the actual measurements (as in a scale of one inch equals one kilometer). Display the chart below on a sheet of chart paper or a transparency. Point out to students the diameter of Pluto. *(2,300 km)* Then show students one piece of Cheerios® cereal. Use a ruler to show students that one piece of cereal measures about one-half inch in diameter. Ask students, "If the cereal represents one kilometer, how many pieces would be needed to represent the diameter of Pluto?" *(2,300)* "What would the scale be?" *(one-half inch equals one kilometer)* Next, point out the diameter of Earth on the chart. Ask the group, "If one piece of cereal represented the total diameter of Pluto, about how many pieces would be needed to represent the diameter of Earth?" *(about 5½)* "What would the scale be?" *(one-half inch equals 2,300 kilometers)*

Divide students into groups of four. Provide each group with a ruler, a plastic bag filled with Cheerios cereal, glue, a six-foot sheet of white bulletin board paper, and markers or crayons. Direct each group to use the chart and provided materials to create models of the diameter of each planet using the scale of one-half inch (one piece of cereal) equals 2,300 kilometers. Direct the group to arrange each model in order from the smallest planet, Pluto, to the largest, Jupiter.



Planet	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto
Diameter (km)	4,900	12,100	12,756	6,800	142,800	120,660	52,400	49,500	2,300