

## Math Predictions

### OBJECTIVE

The student will calculate various statistics about endangered species and populations.

### MATERIALS

- writing surface or chalkboard
- four markers or chalk pieces
- paper
- pencils
- four calculators
- watch or clock with second hand



### ACTION

*Read before beginning play.*

1. Divide students into four groups. Have each group select a scorekeeper. The scorekeeper stands at the board, writes answers given from the group, and keeps score for the group.
2. With scorekeepers ready, ask groups the following questions.
  - ❶ There are 632 endangered species in the United States. Of these, 203 are found in Hawaii. What percentage of U.S. endangered species are found in Hawaii? (*32%*)
  - ❷ Scientists have identified more than 1.5 million kinds of plants and animals (with more counted daily). If current extinction rates continue, as much as 20 percent of the world's species could be gone in the next 30 years. How many plants and animals is that? (*300,000 plants and animals*)
  - ❸ Of the 20,000 known plant species, some scientists estimate one out of five are endangered. How many is that? (*4,000 species*)
  - ❹ Of the 9,600 known species of bird, about 11.5% are threatened with extinction. How many is that? (*1,104 birds*)
  - ❺ Of the 4,300 known species of mammals, 60 have become extinct during the last 200 years. What percentage is that? (*1.4%*)
  - ❻ The Florida manatee population is about 3,000 (in 2001). About 10% of the population dies each year. If about 150 calves are born each year, will the population increase or decrease? (*decrease*)
  - ❼ The 2003 world population growth rate estimate is about 1.31% per year. Given the current human population estimate of 6.3 billion, that means about 226,109 babies are born each day, and 9,421 each hour. About how many babies are born each minute? (*157 babies*)
3. Groups have one minute to give their answers to scorekeepers. Correct each question before continuing. If no group answers correctly, the closest answer wins. Groups use paper and pencils to compute math problems, ready to show their methods.
4. After all questions are answered, scorekeepers tally points. Winners can create more questions to stump the other teams.