

# Math with Real Statistics



Earth Day: Every Day for Everybody

*Below is a table of statistics documenting changes in the number of endangered species by taxonomic group between 1980 and 2000. The numbers are a result of an accurate, professional study. Look at the table and try to answer the questions at the bottom.*

Endangered animal species by taxonomic group												
Year	Mammals	Birds	Reptiles	Amphibians	Fish	Crustaceans	Snails	Insects	Arachnids	Clams	Plants	TOTAL
1980	32	58	13	5	33	1	2	7	0	23	50	223
1981	32	58	13	5	33	1	3	7	0	23	51	225
1982	32	58	14	5	35	2	3	7	0	23	57	235
1983	35	53	14	5	34	3	3	7	0	23	58	234
1984	37	66	14	5	33	3	3	8	0	22	71	261
1985	43	68	14	5	40	3	3	8	0	23	93	299
1986	43	71	14	5	42	4	3	8	0	23	114	326
1987	46	73	15	5	42	5	3	8	0	28	139	362
1988	50	72	15	5	46	8	3	11	4	31	153	397
1989	51	72	15	6	50	8	3	12	4	34	166	420
1990	53	72	15	6	53	8	3	12	4	37	179	441
1991	56	72	15	6	54	8	7	14	4	40	238	513
1992	56	72	15	6	55	9	11	16	4	40	295	578



1993	56	72	14	6	61	11	12	17	4	50	323	626
1994	57	74	14	7	66	14	15	19	4	51	420	741
1995	57	75	14	7	66	14	15	20	5	51	432	756
1996	57	74	14	7	67	14	15	20	5	51	513	837
1997	58	75	14	9	67	16	15	28	5	56	553	896
1998	59	75	14	9	69	17	18	28	5	61	567	922
1998	61	76	14	9	69	17	18	28	5	61	581	939
2000	63	75	14	10	69	18	20	30	6	61	593	960

\*These statistics are from the Department of Energy, [www.doe.gov](http://www.doe.gov)

### Suggested Math Problems:

1. What is your favorite animal? Find the taxonomic group for your favorite animal. By how much did the number of endangered species in that group increase between 1980 and 2000? What is that number expressed as a percentage?
2. By how much did the total number of endangered species increase between 1980 and 2000? What percentage increase is that?
3. Which group had the most endangered species in 1980? 2000? What percentage are these numbers of the total amount for that year?
4. Which animal group had the largest percentage increase in the number of species considered endangered in one year, and what year was it? Is the group with the highest percentage increase the same as the group that had the highest increase in number over one year?
5. Is the increase in the numbers of endangered species in the United States slowing down or speeding up?

