

## Objectives

- ▶ To categorize data.
- ▶ To organize data on a bar graph.
- ▶ To draw conclusions and report.

## Olympic Charts & Data

Remind the students that Olympic athletes today compete for three categories of medals: Gold, Silver, and Bronze. Medals are awarded by the number of points earned in some events (e.g., gymnastics), as individuals and by teams, or by being faster in track races, stronger in weight-lifting, or in leaping higher, as in the high jump. Ask the students to discuss sports with which they are familiar. What are the usual prizes? (ribbons, medals, trophies, certificates, etc.) Ask the students who or what the Olympic athletes represent when they compete at the Games (their countries or themselves).

Pass out the "Total USA Medals" sheet to the students.

- ◆ What are the differences between the Winter and Summer Games data? (Winter Games began in 1924.)
- ◆ What happened in 1980? (USA did not participate in the Summer Games as a protest of Soviet policies in Afghanistan.)
- ◆ Why are the medal totals greater for the Summer Games? (Participation for USA began in 1896; there are more events).
- ◆ Students may work together in pairs to design the first bar graph that reflects the Olympic Winter Games data. The graph must include the year, type of medal, a legend, a title, amount each square stands for (e.g., =1 or 5, etc.) the totals. Now (in color, if possible) fill in the data from the "Total USA Medals" sheet.
- ◆ Some questions that may be asked are: Which years were best for each medal category? (gold, silver, bronze) Picking specific years, did Americans improve or not improve from one Olympic Games to the other? Which medal have American athletes won the most? (silver)

Categorize and graph the Summer Olympic Games. After this graph is finished, make the second classroom chart graphing the medals won in specific sports. Compare the two charts; decide which years each category (gold, silver, bronze) were most successful.

Pass out the "Total USA Medals by Sport" data sheet. Go over the event names for vocabulary practice/review. In which sports did the USA win a total of more than 50 medals? In which sports have USA athletes won fewer than five medals? Leave the two charts up for further discussion and sharing. Ask the students if showing the data in graphs is easier to see at-a-glance, or if organizing in another type of graph is better. Try another type. Make a classroom bar graph of the "Total USA Medals by Sport." Will it be large or small? Will the graphing squares represent 1, 5, 10, etc.?

## Materials

- Chart paper for classroom graphs.
- Graphing paper for each student.
- Colored marking pens or crayons.
- "Total USA Medals by Sport." data sheet
- Sample Graph

## Optional

- ◆ Create a new activity that might be considered as an Olympic event. Describe and illustrate it.
- ◆ What criteria must a sport meet to become part of Olympic Games program? (Must be a sport practiced by men in at least 75 countries and three continents. Must be a sport practiced by women in 40 countries and three continents.)

▶ Name



## Sample USA Medal Bar Graph

1924	GOLD	█								1
	SILVER	█	█							2
	BRONZE	█								1
1928	GOLD	█	█							2
	SILVER	█	█							2
	BRONZE	█	█							2
1936	GOLD	█	█	█	█	█	█			6
	SILVER	█	█	█	█					4
	BRONZE	█	█							2
1948	GOLD	█								1
	SILVER									0
	BRONZE	█	█	█						3

▶ Name



## USA Olympic Medal Data by Sport

SPORT	Gold	Silver	Bronze	TOTAL
Archery	14	8	7	29
Athletics	289	209	171	669
Basketball	14	2	2	18
Bobsled	5	4	5	14
Boxing	47	22	34	103
Canoe/Kayak	5	4	6	15
Cycling	4	5	8	17
Equestrian	8	19	13	40
Fencing	1	6	11	18
Field Hockey	0	0	2	2
Figure Skating	11	12	15	38
Football (Soccer)	1	1	1	3
Gymnastics	25	24	27	76
Ice Hockey	2	6	1	9
Judo	0	3	5	8
Modern Pentathlon	0	5	3	8
Rowing	29	29	19	77
Rugby	2	0	0	2
Shooting	45	26	20	91
Skiing	10	15	6	31
Swimming	227	173	135	535
Volleyball	3	3	2	8
Wrestling	45	37	25	107

1918



## Total USA Summer Olympic Medal Data

YEAR	GOLD	SILVER	BRONZE	TOTAL
1896	11	6	2	19
1900	20	14	19	53
1904	80	86	72	238
1908	23	12	12	47
1912	23	19	19	61
1920	41	27	28	96
1924	45	27	27	99
1928	22	18	16	56
1932	41	32	31	104
1936	24	20	12	56
1948	38	27	19	84
1952	40	19	17	76
1956	32	25	17	74
1960	34	21	16	71
1964	36	26	28	90
1968	45	28	34	107
1972	33	31	30	94
1976	34	35	25	94
1980	The U.S.A. did not participate.			
1984	83	61	30	174
1988	36	31	27	94
1992	37	34	37	108
1996	44	32	25	101
Total	822	631	543	1996

▶ Name



### Total USA Winter Olympic Medal Data

YEAR	GOLD	SILVER	BRONZE	TOTAL
1924	1	2	1	4
1928	2	2	2	6
1932	6	4	2	12
1936	1	0	3	4
1948	3	4	2	9
1952	4	6	1	11
1956	2	3	2	7
1960	3	4	3	10
1964	1	2	3	6
1968	1	5	1	7
1972	3	2	3	8
1976	3	3	4	10
1980	6	4	2	12
1984	4	4	0	8
1988	2	1	3	6
Total	42	46	32	120