

Bobsleigh Math

Introduction:

- ◆ Describe the sport of bobsleigh, explain that it is a very fast sport and that the sleds move at over 80 miles per hour. Show a video if appropriate.
- ◆ Each four-person team is given three chances to go down the course. The times for each run are added up and the total determines the winner. Explain that bobsleds move so fast that the time that separates the gold medalists from the silver medalists is often in the tenths and hundredths of a second.

Through:

- ◆ Calculate each team's total time.
- ◆ Arrange the bobsled race times on the board from fastest to slowest.
- ◆ Calculate the difference between the fastest and the slowest time.
- ◆ Calculate the differences between the fastest time, the second-fastest and the third-fastest times.
- ◆ Determine the mean average time.
- ◆ Determine the Gold, Silver and Bronze medalists.

Beyond: Extensions

- ◆ Watch a bobsleigh event. Snow and ice are only available part of the year. What do the athletes do to train when there isn't any snow and ice?
- ◆ There are two types of racing bobsleds. A four-person sled weighs approximately 275 kilograms and a two-person sled weighs approximately 200 kilograms. How much do the sleds weigh in pounds?
- ◆ Students can simulate the bobsled experience with a wagon, trolley, or cardboard box. Students must push together for a measured distance and then all jump in and sit down.

Curriculum Standards

- ▶ Number Sense– calculate and solve problems involving addition and subtraction
- ▶ Number Sense– understand the place value of whole numbers and decimals
- ▶ Statistics, Data Analysis and probability– organize , represent and interpret numerical and categorical data and clearly communicate the findings

Resources

- Bobsled Time Chart and worksheet
- Gold, silver and bronze medal stickers
- [Http://www.aafra.org](http://www.aafra.org)
- [Http://www.slc2002.org](http://www.slc2002.org)
- [Http://www.olympic.org](http://www.olympic.org)
- Sports magazines and newspapers

Bobsleigh Math Worksheet

Results from the Four-Man Bobsleigh Event at the 1998 Olympic Winter Games

How to read times: **02:54.71** — hundredths of seconds
 Minutes seconds tenths of seconds

COUNTRY	FIRST RUN TIME	SECOND RUN TIME	THIRD RUN TIME	Final Times
Australia	00:54.72	00:54.93	00:55.21	
Austria	00:53.10	00:53.50	00:53.79	
Bosnia- Herzegovina	00:55.26	00:55.11	00:55.30	
Britain	00:52.77	00:53.58	00:53.71	
Canada	00:53.14	00:53.44	00:53.81	
Chinese Taipei	00:55.30	00:55.13	00:55.52	
Czech Republic	00:53.61	00:53.80	00:53.88	
France	00:53.13	00:53.30	00:53.64	
Germany	00:52.70	00:53.50	00:53.70	
Greece	00:55.94	00:56.18	00:56.14	
Hungary	00:55.16	00:54.82	00:54.94	
Ireland	00:55.79	00:55.57	00:55.87	
Italy	00:53.84	00:53.68	00:53.91	
Jamaica	00:54.41	00:54.55	00:54.80	
Japan	00:53.73	00:53.87	00:53.95	
Latvia	00:52.98	00:53.50	00:53.78	
Monaco	00:55.58	00:55.70	00:55.86	
Norway	00:53.96	00:53.78	00:54.33	
Poland	02:24.00	00:54.45	00:54.63	
Puerto Rico	00:56.45	00:55.96	00:57.35	
Romania	00:55.01	00:55.37	00:55.68	
Russia	00:53.72	00:53.95	00:54.71	
Switzerland	00:53.13	00:53.15	00:53.73	
United States	00:52.93	00:53.42	00:53.73	
Virgin Islands	00:55.80	00:55.52	00:55.84	

Bobsleigh Math Answers

COUNTRY	FIRST RUN TIME	SECOND RUN TIME	THIRD RUN TIME	Final Times	Medals
Australia	00:54.72	00:54.93	00:55.21	02:44.86	
Austria	00:53.10	00:53.50	00:53.79	02:40.39	
Bosnia-Herzegovina	00:55.26	00:55.11	00:55.30	02:45.67	
Britain	00:52.77	00:53.58	00:53.71	02:40.06	Bronze
Canada	00:53.14	00:53.44	00:53.81	02:40.39	
Chinese Taipei	00:55.30	00:55.13	00:55.52	02:45.95	
Czech Republic	00:53.61	00:53.80	00:53.88	02:41.29	
France	00:53.13	00:53.30	00:53.64	02:40.07	
Germany	00:52.70	00:53.50	00:53.70	02:39.90	Gold
Greece	00:55.94	00:56.18	00:56.14	02:48.26	
Hungary	00:55.16	00:54.82	00:54.94	02:44.92	
Ireland	00:55.79	00:55.57	00:55.87	02:47.23	
Italy	00:53.84	00:53.68	00:53.91	02:41.43	
Jamaica	00:54.41	00:54.55	00:54.80	02:43.76	
Japan	00:53.73	00:53.87	00:53.95	02:41.55	
Latvia	00:52.98	00:53.50	00:53.78	02:40.26	
Monaco	00:55.58	00:55.70	00:55.86	02:47.14	
Norway	00:53.96	00:53.78	00:54.33	02:42.07	
Poland	02:24.00	00:54.45	00:54.63	04:13.08	
Puerto Rico	00:56.45	00:55.96	00:57.35	02:49.76	
Romania	00:55.01	00:55.37	00:55.68	02:46.06	
Russia	00:53.72	00:53.95	00:54.71	02:42.38	
Switzerland	00:53.13	00:53.15	00:53.73	02:40.01	Silver
United States	00:52.93	00:53.42	00:53.73	02:40.08	
Virgin Islands	00:55.80	00:55.52	00:55.84	02:47.16	