

SEVERN PROJECT

Creating bar graphs from Severn Bore data

1) Bore watching

Below is some data listing the number of people who watched the Severn Bore at Over Bridge during 2006 and 2008. You need to form two bar graphs and then compare the data and answer the questions.

2006 attendance:

4th Jan	29th Jan	8th Feb	28th Feb	1st Mar	18th Mar	5th Apr	19th Apr	7th May	24th May	10th Jun
6	15	48	155	169	185	205	123	77	49	15
20th Jul	3rd Aug	26th Aug	11th Sept	26th Sept	9th Oct	24th Oct	9th Nov	28th Nov	8th Dec	24th Dec
3	40	118	230	270	230	376	49	23	2	8

2008 attendance:

6th Jan	19th Jan	2nd Feb	20th Feb	3rd Mar	26th Mar	1st Apr	12th Apr	4th May	18th May	3rd Jun
14	25	148	125	134	160	250	165	37	90	5
25th Jul	1st Aug	28th Aug	12th Sept	30th Sept	13th Oct	27th Oct	8th Nov	24th Nov	12th Dec	22nd Dec
12	27	141	299	326	301	237	89	52	12	38

SEVERN PROJECT

Creating bar graphs from attendance data

Now that you have plotted your two graphs for the years 2006 and the 2008, you need to look at the data and answer the questions below to compare the data.

Before answering the questions make sure you have given the graphs titles, labelled the two sides of the graph with 'Date' and 'Bore watchers' and then coloured in each of the bars for each bore.

1. Which year on average had the highest attendances? ($2006 = 2386/22 = 108.45$, $2008 = 2687/22 = 122.13$)
2. What was the highest and what was the lowest attendance at Over Bridge between the two years? ($376/2$)
3. What was the difference between the highest and lowest number of bore watchers? ($376 - 2 = 374$)
4. How many more people attended on 5th April than 9th Nov in 2006? ($205 - 49 = 156$)
5. How many more people attended on 2nd Feb than 3rd June in 2008? ($148 - 5 = 143$)
6. What possible reasons could there be for the biggest attendance of 376 on October 24th 2006?
7. What possible reasons could there be for the number of bore watchers being higher during 2008 when compared to 2006?

Name:

Class:

Date

SEVERN PROJECT

Creating bar graphs from Severn Bore height data

2) Bore height

Below is some data listing the maximum wave height recorded for the Severn Bore in 2006 and 2008. You need to look at the data and answer the questions below to compare the data.

2006 Bore heights:

4th Jan	29th Jan	8th Feb	28th Feb	1st Mar	18th Mar	5th Apr	19th Apr	7th May	24th May	10th Jun
1.6m	2.4m	2.8m	3m	2.9m	2.8m	2.8m	2.5m	1.4m	1.2m	1.5m
20th Jul	3rd Aug	26h Aug	11th Sept	26h Sept	9th Oct	24th Oct	9th Nov	28th Nov	8th Dec	24th Dec
0.6m	1.8m	2.1m	3.1m	2.8m	2.7m	2.4m	1.5m	1.2m	1.1m	1.5m

2008 Bore heights:

6th Jan	19th Jan	2nd Feb	20th Feb	3rd Mar	26th Mar	1st Apr	12th Apr	4th May	18th May	3rd Jun
1.4m	1.2m	3.2m	2.5m	2.5m	2.4	2.5m	2.9m	2.2m	0.9m	0.5m
25th Jul	1st Aug	28th Aug	12th Sept	30th Sept	13th Oct	27th Oct	8th Nov	24th Nov	12th Dec	22nd Dec
1.2m	2.0m	2.1m	2.9m	3.1m	1.5m	2.7m	0.89m	1.5m	1.2m	1.8m

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Creating bar graphs from Severn Bore height data

Now that you have plotted your two graphs for the years 2006 and the 2008, you need to look at the data and answer the questions below to compare the data.

Before answering the questions make sure you have given the graphs titles, labelled the two sides of the graph with 'Date' and 'Height of Bore' and then coloured in each of the bars for each bore.

1. Which year on average had the largest bores? (2006 = $48.4/22 = 2.2$, 2008 = $43.09/22 = 1.95$)
2. What was the largest and what was the smallest bore between the two years? (3.2/0.5)
3. What was the difference between the largest and smallest bores? ($3.2 - 0.5 = 2.7$)
4. What was the difference in size between the bores on 5th April and 9th Nov in 2006? ($2.8 - 1.5 = 1.3$)
5. What was the difference in size between the bores on 2nd Feb and 3rd June in 2008? ($3.2 - 0.5 = 2.7$)
6. What do you think is the best months to see a large bore? (Feb and Sep)
7. What do you think is the worst time of year to see a bore? (Summer)

Name:

Class:

Date

SEVERN PROJECT

Creating bar graphs from the number of Severn Bore surfers data

3) Number of Severn Bore surfers

Below is some data listing the numbers of surfers and other wave riders seen surfing the Severn Bore at Minsterworth in 2006 and 2008. You need to look at the data and answer the questions below to compare the data.

2006 Bore surfers:

4th Jan	29th Jan	8th Feb	28th Feb	1st Mar	18th Mar	5th Apr	19th Apr	7th May	24th May	10th Jun
10	6	26	48	50	70	145	160	56	29	19
20th Jul	3rd Aug	26h Aug	11th Sept	26h Sept	9th Oct	24th Oct	9th Nov	28th Nov	8th Dec	24th Dec
20	15	20	98	125	75	80	23	34	16	49

2008 Bore surfers:

6th Jan	19th Jan	2nd Feb	20th Feb	3rd Mar	26th Mar	1st Apr	12th Apr	4th May	18th May	3rd Jun
25	5	23	76	60	120	189	175	98	39	32
25th Jul	1st Aug	28th Aug	12th Sept	30th Sept	13th Oct	27th Oct	8th Nov	24th Nov	12th Dec	22nd Dec
39	20	29	112	135	90	85	38	29	28	57

SEVERN PROJECT

Creating bar graphs from the number of Severn Bore surfers data

Now that you have plotted your two graphs for the years 2006 and the 2008, you need to look at the data and answer the questions below to compare the data.

Before answering the questions make sure you have given the graphs titles, labelled the two sides of the graph with 'Date' and 'Number of surfers' and then coloured in each of the bars.

1. Which year on average had the highest number of surfers? (2006 = $1174/22 = 53.36$, 2008 = $1504/22 = 68.36$)
2. What was the highest and lowest number of surfers between the two years? (189/5)
3. What was the difference between the highest and lowest number of surfers between the two years? ($189 - 5 = 184$)
4. What was the difference between the number of surfers on 5th April and 9th Nov in 2006? ($145 - 45 = 122$)
5. What was the difference between the number of surfers on 2nd Feb and 3rd June in 2008? ($32 - 23 = 9$)
6. Which month usually sees the highest number of surfers? (April)
7. From your bar graphs do you think there are more surfers in winter (Jan, Feb, Mar, Oct, Nov, Dec) or summer? (Apr, May, June, July, Aug, Sep)? (Summer, 1555 v winter 1113)

Name:

Class:

Date