15.06.20 P2 Data Handling - BAR CHARTS (revision)

WALT use a simple bar chart to answer questions. (MNU 1-20a)

Last week we revised what we know about Bar Charts.

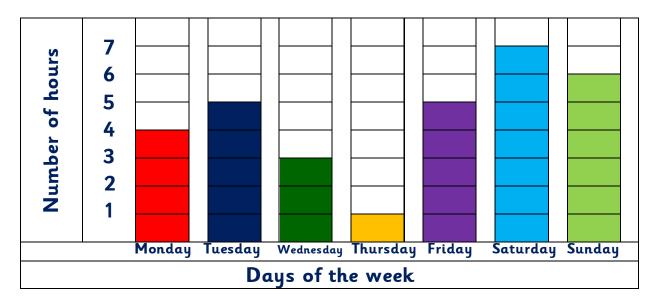
A bar chart has "bars" — in the examples below vertical columns, to show information gathered. The width of the bars has to be the same but the height changes with the amount they are showing.

A bar chart needs <u>a title</u> <u>and labels</u> telling the reader what the numbers mean and what the bars are showing. Let's share our understanding and knowledge about bar charts again this week.

Below, the title is: Average hours spent outdoors by pupils and the labels are Number of hours (for the numbers) and Days of the week (for the bars).

A Head teacher wanted to know how many hours on average pupils were spending outdoors working and playing in a week. The results are shown in the bar chart below.

Average hours spent outdoors by pupils



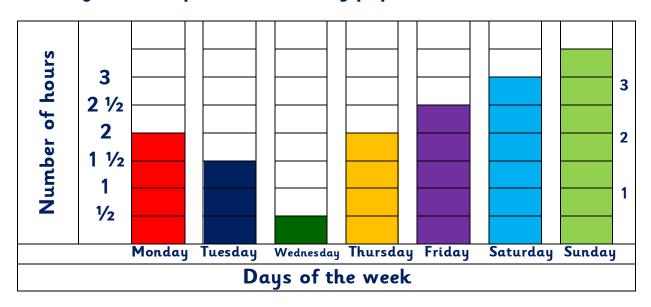
Questions:

1. What day did children spend the most time outdoors? Why do you think this might have been?

- **2.** How many hours did the children spend outdoors on the Wednesday?
- **3.** What day did they spend least time outdoors? Why do you think this might have been?
- **4.** What is the total number of hours spent outdoors over the weekend?
- **5.** How many more days were spent outdoors on Tuesday than Thursday?
- **6.** How many fewer hours were spent outdoors on Wednesday than Monday?
- 7. How many hours were spent outdoors on average for the whole week?

Challenge: if you want to challenge yourself

Average hours spent outdoors by pupils



The bar chart above shows the same labels but the <u>scale</u> has changed. Instead of each box showing 1 hour, it now shows just half ($\frac{1}{2}$) an hour i.e. 2 boxes = 1 hour. Take care when answering the questions.

Questions:

- 1. How many hours are spent outdoors on a Monday?
- **2.** Which day do the pupils spend the most time outdoors? How long do they spend outdoors that day?
- 3. Which day do they spend 1 ½ hours outdoors?
- **4.** How many hours do they spend outdoors on Monday and Saturday altogether?
- 5. Which day do they spend the least time outdoors?
- **6.** Tricky question: How long do they spend outdoors in total for the week? (We have not looked at $\frac{1}{2}$ s this year, so a tip is $\frac{1}{2}$ and $\frac{1}{2}$ = 1 OR half + half = one.)

Real life connections: Schools, Councils and the Government often use Bar Charts to show information about schools such as the number of days pupils are at school; exam results; money spent by each school; books bought each year; school lunches eaten each day. This information helps them plan for the next term/year.