

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.

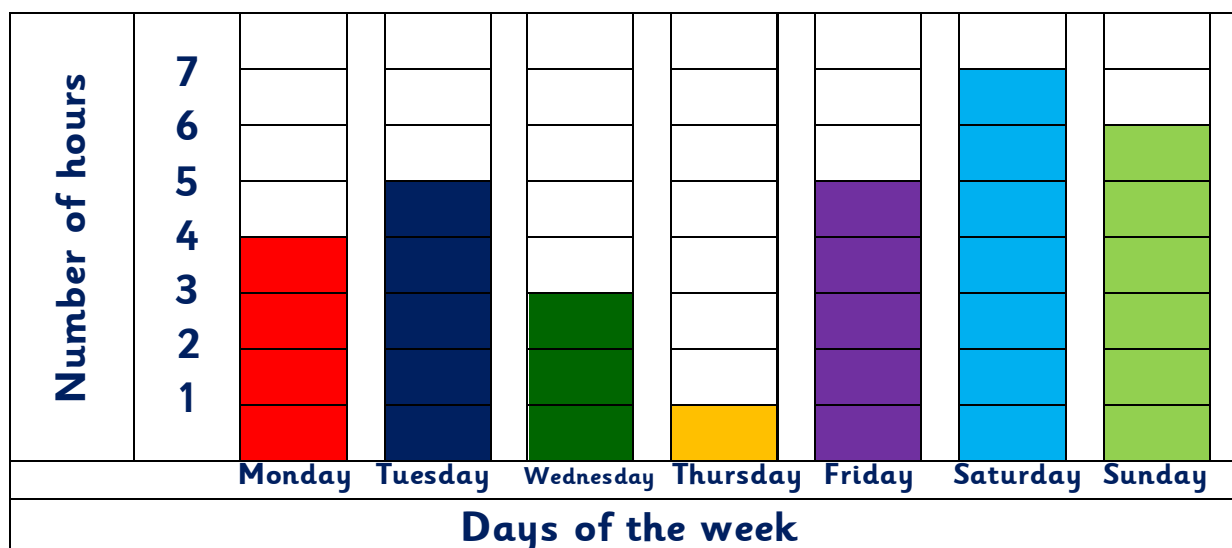
A bar chart has “bars” – in the examples below vertical columns, to show information gathered. The width of the bars has to be the same but the height changes with the amount they are showing.

A bar chart needs a title and labels 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:

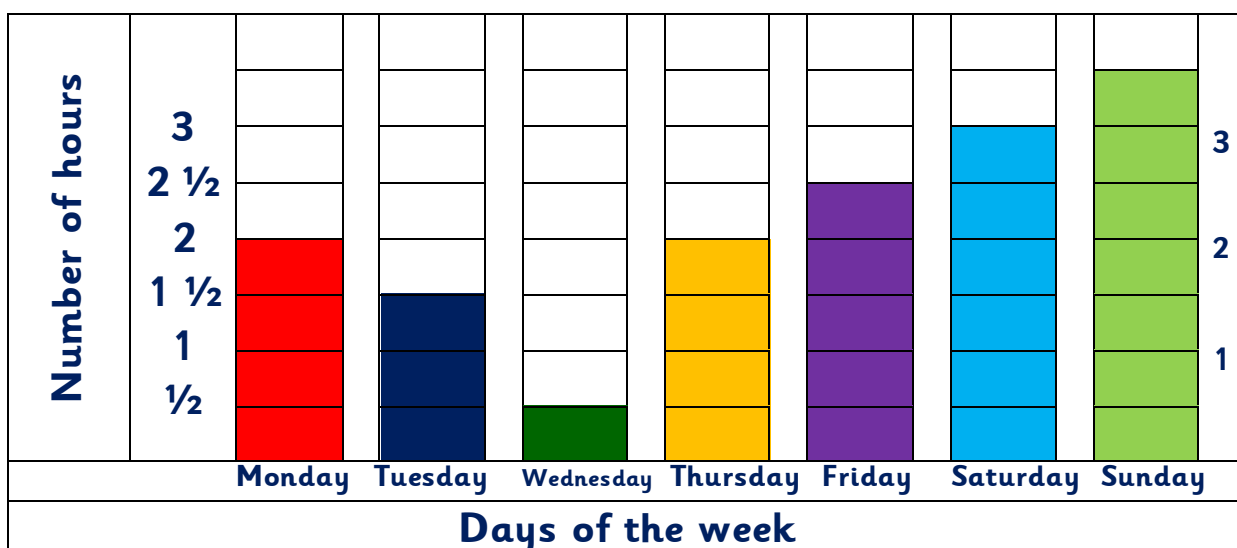
1. What day did children spend the most time outdoors? **Saturday**
Why do you think this might have been? **It could be because it is**

the weekend, no school work and maybe they are visiting family outdoors or for a walk outdoors.

2. How many hours did the children spend outdoors on the Wednesday? **3**
3. What day did they spend least time outdoors? **Thursday** Why do you think this might have been? **It might have been raining heavily, so people did not want to stay outside for long.**
4. What is the total number of hours spent outdoors over the weekend? **Saturday + Sunday: 7 + 6 = 13 hours**
5. How many more days were spent outdoors on Tuesday than Thursday? **5 - 1 = 4 hours**
6. How many fewer hours were spent outdoors on Wednesday than Monday? **4 - 3 = 1 hour**
7. How many hours were spent outdoors on average for the whole week? **4 + 5 + 3 + 1 + 5 + 7 + 6 = 31 hours**
(You would have needed a lot of fingers to add those numbers! How did you do it? Did you look for number bonds to 10 e.g. 4 + 6 / 3 + 7 / 5 + 5 or did you do it another way?)

Challenge: if you want to challenge yourself

Average hours spent outdoors by pupils



The bar chart above shows the same labels but the scale 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 Monday? **2 hours**
2. Which day do the pupils spend the most time outdoors? **Sunday**
How long do they spend outdoors that day? **$3 \frac{1}{2}$ hours**
3. Which day do they spend $1 \frac{1}{2}$ hours outdoors? **Tuesday**
4. How many hours do they spend outdoors on Monday and Saturday altogether? **$2 + 3 = 5$ hours**
5. Which day do they spend the least time outdoors? **Wednesday**
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.) **$2 + 1 \frac{1}{2} + \frac{1}{2} + 2 + 2 \frac{1}{2} + 3 + 3 \frac{1}{2} = 15$ hours (How did you do it? Did you add the $\frac{1}{2}$ hours together first then the whole hours?)**

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.