Statistics

Selected National curriculum Programme of Study Statements

Pupils should be taught to:

- interpret and present data using bar charts, pictograms and tables
- solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms, and tables

The Big Ideas

Data needs to be collected with a question or purpose in mind.

Tally charts are used to collect data over time (cars passing the school, birds on the bird table). They can also be used to keep track of counting.

Mastery Check

Please note that the following columns provide indicative examples of the sorts of tasks and questions that provide evidence for mastery and mastery with greater depth of the selected programme of study statements. Pupils may be able to carry out certain procedures and answer questions like the ones outlined but the teacher will need to check that pupils really understand the idea by asking questions such as 'Why?', 'What happens if …?', and checking that pupils can use the procedures or skills to solve a variety of problems.

Mastery	Mastery with Greater Depth

Mastery

Class	Weekly awards for a tidy classroom
	= 3 awards
Reception	(4 symbols)
Year 1	(3 symbols) +1
Year 2	(2 symbols)
Year 3	(2 symbols) +2
Year 4	(1 symbol)
Year 5	(1 symbol)
Year 6	(2 symbols) +1

Mastery with Greater Depth

Create two separate pictograms to display the following information. The symbol used in each should have a value of more than 1.

Which value will you choose for each pictogram?

Explain your decisions.

Class	Number of merits awarded	
	Hard work	Good behaviour
YR	42	32
Y1	39	18
Y2	24	27
Y3	30	33
Y4	18	24
Y5	30	24
Y6	39	36

Mastery	Mastery with Greater Depth
Transfer the information from the weekly awards table to the table below.	

<div>

Transfer the information from the weekly awards table to the table below.

Class	Number of awards
YR	
Y1	
Y2	6
Y3	
Y4	
Y5	
Y6	

Present the information in a bar graph.

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The graph shows how many minutes Sam spent watching TV at home last week.

Watching TV
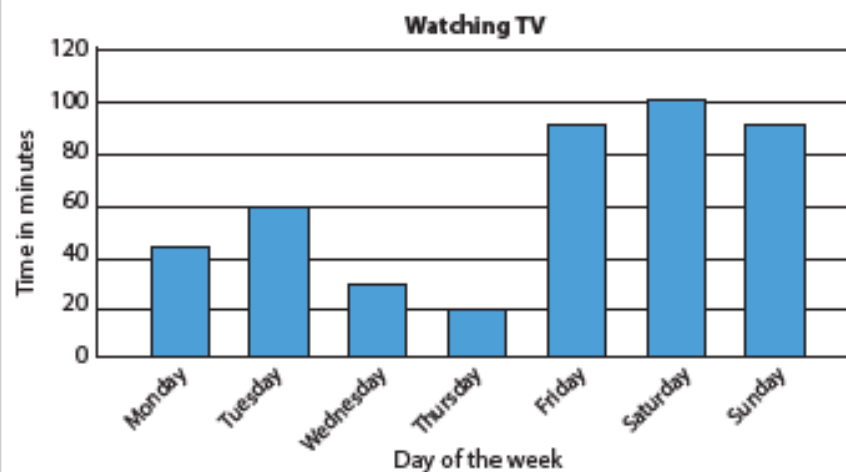
On which day did Sam watch the most TV?

How many minutes of TV did Sam watch on Wednesday?

How many more minutes did Sam watch on Friday than on Tuesday?

How many fewer minutes did Sam watch on Thursday compared to Sunday?

Mastery with Greater Depth

Work with two friends to collect data on how many hours each of you watch TV for a week.

Decide how you will combine and present the data using just one graph.