Sometimes, Always, Never – Statistics - Answers

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| ALWAYS | SOMETIMESIf the data is DISCRETE (e.g. you can count it, as in favourite colours, pets, etc.) then there should be gaps between the bars. If the data is CONTINUOUS (i.e. measurements, length, weight, etc.) then there should not be gaps. | NEVERTally marks should always be in bundles of 5. |
| SOMETIMESEach picture could stand for one, two, five, ten, etc. things. That’s why you need a key. | NEVERReading from left to right, the symbol < means ‘less than’. | NEVERReading from left to right, the symbol > means ‘more than’. |
| NEVERThe numbers must be in order first:2, 3, 4, 5, 6The middle one is now the median (4). | NEVERTime always goes along the horizontal axis. | SOMETIMESBus, train and flight timetables are always in 24-hour format. A school timetable probably uses a.m. and p.m. times. |
| ALWAYSNo number occurs more than once. | NEVERIf there is an even number of values, then the median is the mid-point of the middle pair. Here the median is 5.5. | ALWAYSOtherwise you don’t know how many things each picture stands for. |
| ALWAYSThe total of the four numbers is 22. 22 divided by 4 is 5.5. | SOMETIMESThe mean and mode of the numbers 3, 4, 4, 5 are both 4. The mean of the numbers 3, 3, 4, 6 is 4 but the mode is 3. | SOMETIMESThe median of the numbers 3, 4, 4, 5 is 4, which is in the set. The median of the numbers 3, 4, 5, 6 is 4.5, which is not in the set. |