## The Graph Choice Chart.

a sub-group is of a total?)

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The Graph Choice. The Science What question would you like to explore? Write your question as a complete sentence. Teacher. Nov. 2014, p. 40. DOT PLOT Does your question FREQUENCY ask about the variability of Examples: either DOT PLOT PLOT make a 1. Do all high tides rise to the same height? a group of data points? measurement values 2. How variable are windspeeds here? 3. What is the range and distribution of incomes (i.e. the range of the data, in the United States? For each group HISTOGRAM the shape of the distribution, HISTOGRAM make a or what the center of the data is) Examples: Do you want to compare the variability 1. Which of the two car designs is most of all data points in each group to measurement unlars BOX PLOT consistently the fastest? decide if any difference between the 2. Is there a meaningful difference in the heights groups is meaningful? BOX PLOTS of fertilized and unfertilized bean plants? Does your question compare two or more groups to -YES Examples: Are you comparing decide if the groups are 1. Was the total snowfall greater this single numbers that the same or different? winter than last winter? BAR GRAPH summarize a group? BAR GRAPH make a -1 2. Do cats and dogs have the same (such as mean, median, average body temperature? or total...) 3. How do the median incomes for the U.S. and Sweden compare? Does it ask if Examples: 1. Is the fuel efficiency of a car related to its weight? two numeric factors are SCHITTER PLOT SCATTER PLOT 2. Are smoking rates correlated with median income? - make a -> correlated? 3. Given a fixed volume, how are temperature and pressure related? Examples: Does it ask about Is the temperature inside the YEShow something changes house correlated with the through linear TIME? temperature outside? Variable 2 Examples: How did electricity used by the Have summer lake water temperatures warmed kitchen circuit fluctuate during LINE GRAPH make a -> over the last ten years? the past week? 2. How did my weight change over the last 3 months? LINE GRAPH PIE CHART unear time Does your question ask how 1. Which circuit accounts for the largest proportion PIE CHART of the electricity use by our household? a total is proportioned 2. What proportion of U.S. energy comes into sub-groups? -YESmake either from wind? STACKED (Or what proportion 3. What proportion of U.S. residents take public STACKED BAR CHART

transportation to work?