

What kind of question? What kind of graph?

Deciding what kind of graph to make is one of the first decisions you have to make when analyzing data.

What kind of graph to make depends on what kind of question is being asked. Here are six kinds of questions that scientists often ask:

Variability questions ask about the variability of a measurement within a group.

Comparison questions ask about how two or more groups compare in a measure.

Relationship questions ask about the relationship between two numeric variables.

Time-series questions ask about how something changes through time.

Proportion questions are about the percentages of different components of a group.

Geographic distribution questions ask about where measurements occur.

For each question, identify the kind of question it is and what kind of graph would be good.

Variability - Group comparison - Relationship - Time - Proportion - Spatial

	Kind of question	A good graph type
What percentage of tropical storms in the Atlantic become hurricanes?		
What was the track of the migrating whales?		
Is there a relationship between age and daily minutes of cell phone use?		
How has the population of elk in Montana changed in the last 10 years?		
How many miles do students in our class commute to school?		
How does the temperature in our classroom change through the day?		
Do rockets go higher if they have more water added to them?		
How many seeds do green peppers typically have?		
What percentage of cars sold in 2017 were all-electric vehicles?		
Is there any geographic pattern to where meteorites land?		

