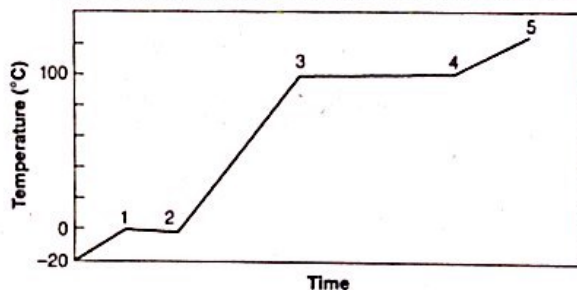


5. Kenji must conduct a scientific investigation for a science project. Which step should Kenji complete **first**?
- List the steps to be used for the procedure of the investigation.
  - Use appropriate tools to collect data, and then organize the data using tables and graphs.
  - Develop a testable question based on research or prior knowledge.
  - Analyze data, recognize any patterns, and make inferences based on those patterns.
6. Some line graphs have several lines rather than a single line plotted on the graph. These lines are usually either a different color or pattern. For example, one line could be solid and the other made of dashes. Each line represents a different series of data. Which graph element is used to help you understand what information the different lines represent?
- the key
  - the range
  - the axis labels
  - the graph title
7. The temperature of an ice-filled beaker is measured and recorded every minute as the beaker is heated continuously. The resulting temperature and time data are shown in the following graph.

Temperature Changes During Changes of State for Water



Which portion of the graph shows the **greatest** increase in temperature?

- from point 1 to point 2
- from point 2 to point 3
- from point 3 to point 4
- from point 4 to point 5

8. Two students conduct the same experiment, but they get different results. What should the students do next?
- The students should check their procedure and tools for sources of error.
  - Both students should throw out their data and start over.
  - The students should compare data with other students and then use the data from the student who was closest to the rest of the class.
  - The students should find the average of each data set and each report the average data.
9. A group of students works together on several different activities during the week. Which of these activities could be part of a scientific investigation?
- eating lunch in the cafeteria
  - reading parts of a play aloud
  - learning the rules of a new game
  - recording the outdoor temperature
10. Many people who are not scientists use scientific thinking in their jobs and homes. How might a baker use scientific thinking at work?
- He decorates his cakes with artistic designs.
  - He makes careful, accurate measurements of ingredients.
  - He makes cakes of different sizes.
  - He asks his customers which of his cakes they like best.