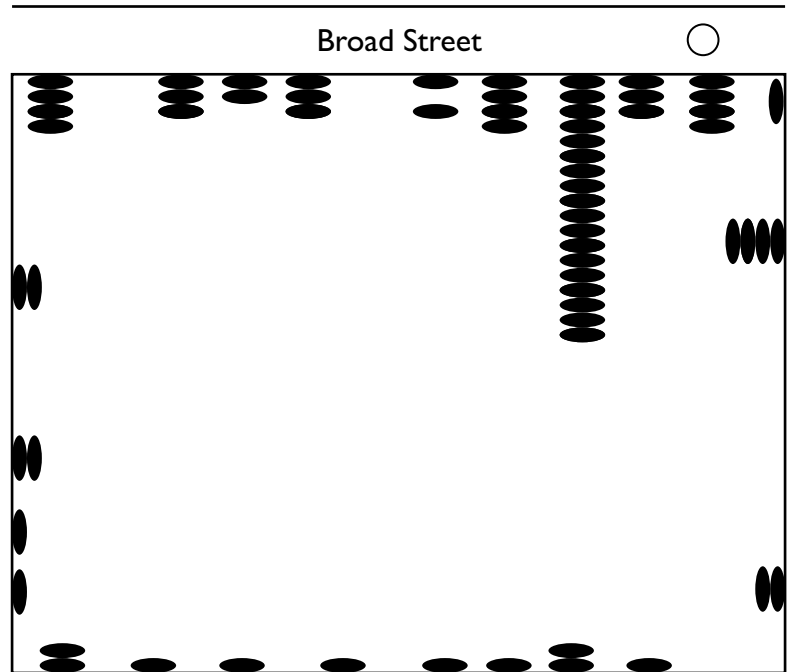


What does the map show?

This is a section of a map similar to that made by Doctor John Snow in 1855.

The map was made to investigate the cause of an outbreak of cholera in London. Cholera is a disease of the digestive system. People suffering from cholera vomit and have diarrhoea and can die in a week. In the early 1850s people were not sure what caused cholera. Doctor Snow believed that it was dirty water.

Doctor Snow recorded a death from cholera with a black line on a map showing the streets. A block of streets is shown on this diagram. The columns of black lines indicate the number of people who died of cholera at a particular house along the street. The circle marks the position of a water pump.



1. How many people died of cholera on Broad Street?

2. Does the map show that some people lived in over crowded conditions?

Explain your answer.

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3. Do you think that there were some houses where nobody died of cholera?

Explain your answer.

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4. Why do you think Doctor Snow thought that the Broad Street water pump was the source of the disease?

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5. How do you think the map might have looked if the pump was not the source of cholera? You may alter the map to help you answer.

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What does the map show?

Age range

- Years 3/4 (SP4/5).
- Years 5/6 (SP6/7).

Resources

Copies of the worksheet.

Using the worksheet

You may like to begin by asking the students to draw a map of their street and to record the number of people living in each home. You can then tell them that Doctor John Snow used a street map to help explain why a disease broke out in a neighbourhood. He recorded how many died of cholera in each home.

Answers



1. 43.
2. Yes. There were 18 deaths in one house.
3. Yes. There are some spaces between the columns of black lines. This suggests that either there was not a house present or that there were no deaths. As houses were built close together, it suggests that the gaps were due to no deaths being recorded.
4. Most cases of cholera occurred close to it.
5. There would have been a similar number of black lines (perhaps about four) at all the houses in all the streets.

Younger students

Let the students work through the questions. They may need help to explain their answer to question 3.

Outcomes

The students can:

- Interpret information from a map.

Older students

Let the students work through the questions. You could add –

Why do you think there were more deaths at the house farthest from the pump on Broad Street than in some of the houses nearer the pump? Look for answers such as there may have been more people living in the house than the other houses. The people may have preferred to go to the pump on Broad Street than go to other pumps. They may have passed the pump on the way to work or school and drunk the water from it.

Outcomes

The students can:

- Interpret information from a map.
- Suggest explanations for anomalies in data.