name: class: date:

Data Visualization in Geographical Information Systems

1. Fill in the gaps with the right words!
2. Scan the QR code to check your answers interactively!
3. Copy the text in your exercise book!
4. Formulate the content of the text yourself!
   Use all gap words!

Data visualization plays a critical role in understanding the complex data generated by Geographical Information _____ (GIS). These systems collect, manage, and analyze data related to _____ on Earth's surface. Through data visualization, GIS can transform raw data into _____ and other visual formats, making it easier to identify patterns, trends, and relationships. For example, urban _____ use GIS to visualize the growth of cities and predict future development. They rely on _____ images and ground surveys to gather data about land use, population density, and _____. This information is then visualized to assist in planning roads, schools, and public _____.

Environmental scientists use GIS to monitor environmental changes, such as deforestation, _____ quality, and the spread of invasive species. By visualizing these changes, they can better understand their _____ and develop strategies for conservation.

In agriculture, farmers utilize GIS to optimize crop _____. They analyze soil data, precipitation patterns, and crop rotations, visualizing this _____ to make informed decisions about planting and irrigation.

GIS is also essential in disaster _____. Agencies map affected areas to coordinate rescue operations and deliver aid more effectively. _____ help responders understand the extent of damage and prioritize their efforts. In public _____, GIS tracks the spread of diseases by visualizing cases over time and _____. This helps health officials make decisions about where to allocate _____ and how to control outbreaks.

Data visualization in GIS is not just about creating maps. It includes _____, graphs, and 3D models that provide deeper insights into the data. For instance, _____ visualizations of urban areas can help assess the impact of new buildings on sunlight and wind _____ in neighborhoods. The key is to present GIS _____ in a way that is easy to understand and act upon, making data visualization an indispensable _____ in various fields.

satellite	impact	information	Visualizations	tool	services	planners	health
patterns	yields	charts	data	locations	Systems	response	water	infrastructure
3D	resources	maps	space				

Reference: https://materials.school/educational-activities/task-collection/geography/data-visualization-geographical-information (created with ChatGPT)