Mapping Skills

Mapping Skills

TEACHING TASK

CONCEPTUAL UNDERSTANDING QUESTIONS (CUQ's)

Multiple Choice Questions

1. C) Natural features such as mountains and rivers
Explanation: A physical map shows the natural features of the Earth, such as mountains, rivers, lakes, and valleys, rather than human-made structures.

2. B) 100 kilometers
Explanation: A scale of 1:1,000,000 means 1 cm on the map represents 1,000,000 cm in real life. So, 10 cm on the map would represent 10,000,000 cm, which is 100 kilometers.

3. B) North
Explanation: On most maps, the top typically shows the northern direction.

4. C) East
Explanation: If you're traveling west and turn right, you'll face east (since turning right from west points you east).

5. B) 100 meters
Explanation: A scale of 1:10,000 means 1 cm on the map equals 10,000 cm (100 meters) in real life.

6. B) By measuring the length of a line with a ruler
Explanation: A bar scale allows you to measure distances by comparing the length of the map scale to the actual distance represented.

7. B) 400 km
Explanation: If 5 cm on the map equals 100 km, then 20 cm would represent 400 km (since 100 km × 4 = 400 km).

8. B) 4,000 meters
Explanation: A scale of 1:25,000 means 1 cm on the map represents 25,000 cm (or 250 meters) in real life. Therefore, 4 cm would represent 4 × 250 meters = 1,000 meters or 1 kilometer.

9. C) 300 kilometers
Explanation: A scale of 1:500,000 means 1 cm on the map represents 500,000 cm (or 5 kilometers) in real life. If the distance on the map is 3 cm, it represents 3 × 5 = 15 kilometers.

10. B) Toward the bottom of the map
Explanation: On most maps, south is typically at the bottom, so moving south would mean heading toward the bottom of the map.

ADVANCED LEVEL

More than One Answer Type

11. A) A ratio scale shows the relationship between the distance on the map and the real-world distance.
B) A bar scale is a visual representation of distance on the map.
D) A scale helps us convert real-world distances to map distances.
Explanation: All these options correctly describe how map scales function. Option C is incorrect because scales can be adjusted for different purposes (e.g., zooming in or out).

12. B) The meaning of symbols, colors, and lines on the map.
Explanation: A map key (or legend) explains the meaning of the various symbols, colors, and lines used on the map to represent different features.

13. A) Enlarging a map means showing more detail for a smaller area
C) Reducing a map shows a larger area with less detail.
Explanation: Enlarging a map focuses on a smaller area but with more detail, while reducing a map allows you to show a larger area with less detail.

Fill In the Blanks

14. The key of a map helps you understand the meaning of the symbols, colors, and lines used on the map.

15. On most maps, North (N) is usually located at the top of the map.

16. To follow directions on a map, you might need to turn left, right, or move straight ahead, based on the directions given.

Matching Type

1. A map scale of 1:100,000 means that 1 cm on the map equals how many centimeters in real life? ------ F. 600,000 cm
Explanation: The scale means that 1 cm on the map equals 100,000 cm (or 1 km) in real life.
2. The symbol for a bus station on a tourist map is usually shown as a? ------ C. A blue circle
Explanation: Tourist maps often use specific symbols like a blue circle for bus stations.
3. A map with a scale of 1:10,000 would show more or less detail than a map with a scale of 1:100,000? ------- D. More detail
Explanation: A smaller scale number (1:10,000) means a more detailed map of a smaller area.
4. If a map has a scale of 1:50,000, and the distance between two cities on the map is

6 cm, what is the real-life distance between the cities in kilometers? ------- E. 3 km
Explanation: 1 cm = 50,000 cm (or 0.5 km), so 6 cm on the map equals 3 kilometers in real life.
5. What do cardinal directions on a map indicate? ------- A. The directions (north, south, east, west) to help navigate
Explanation: Cardinal directions indicate the basic directions to help orient the map.
6. If a map shows parks and gardens using green shading, what type of map information does this represent? -------- B. Key (or legend)
Explanation: The green shading is explained in the map's key or legend.

Answer the Following Questions
18. Going south for 3 blocks = 3 × 100 = 300 meters.
Turning right (west) and walking for 2 blocks = 2 × 100 = 200 meters.
Total distance = 300 meters + 200 meters = 500 meters.

19. Explanation: If the scale is changed from 1:50,000 to 1:25,000, the real-world distance represented by 1 cm will be halved.
1 cm on the 1:50,000 scale equals 50,000 cm in real life (or 500 meters).
1 cm on the 1:25,000 scale equals 25,000 cm in real life (or 250 meters).
So, the real-world distance represented by 1 cm decreases as the map is enlarged.

LEARNERS TASK

CONCEPTUAL UNDERSTANDING QUESTIONS (CUQ's)

Multiple Choice Questions
1. B) Boundaries, countries, cities, and capitals
Explanation: A political map shows boundaries of countries, states, cities, and capitals, often with important landmarks or political divisions.

2. B) Physical map
Explanation: A physical map shows natural features like mountains, rivers, lakes, and landforms.

3. D) 50,000 cm
Explanation: A scale of 1:50,000 means 1 cm on the map represents 50,000 cm in real life (or 500 meters).

4. C) 60 km
Explanation: If 1 cm represents 10 km on the map, then 6 cm would represent 6 × 10 = 60 kilometers in real life.

5. D) 200 km
Explanation: A scale of 1:100,000 means 1 cm on the map equals 100,000 cm (or 1 kilometer) in real life. So, 2 cm would represent 2 × 100 km = 200 kilometers.

6. B) Thematic map
Explanation: Thematic maps show specific information such as climate, population density, or other thematic data, rather than general geography.

7. B) To explain the meaning of symbols and colors
Explanation: A key (legend) explains the meaning of symbols, colors, and lines used on the map, so the user can interpret the features represented.

8. C) To show how distances on the map relate to real-life distances
Explanation: A map scale helps users understand the real-world distances represented by the map's measurements.

9. C) 500 kilometers
Explanation: A scale of 1:500,000 means 1 cm on the map equals 500,000 cm (or 5 kilometers) in real life. So, 5 cm would represent 5 × 5 = 25 kilometers.

10. C) 200,000 cm
Explanation: A scale of 1:200,000 means 1 cm on the map represents 200,000 cm (or 2 kilometers) in real life.

ADVANCED LEVEL

More than One Answer Type

11. A) Political Maps, B) Physical Maps, C) Road Maps
Explanation: These are common types of maps, whereas Solar Maps are not typically classified under general types of maps.

12. B) South (S) is always at the bottom of the map., C) East (E) is on the right side of the map.
Explanation: South is generally at the bottom of most maps, and East is typically on the right. North is usually at the top of the map, and West is on the left.

13. B) A map showing the population density of a region., D) A map showing the climate zones of a country.
Explanation: These are examples of thematic maps because they show specific data related to population or climate, which are often the focus of thematic map types.

Fill In the Blanks

14. 1:50,000 means that 1 cm on the map represents 50,000 cm in real life.
Explanation: This is a direct interpretation of the scale.

15. When you enlarge a map, the scale factor becomes smaller, meaning each unit on the map represents a smaller distance in the real world.
Explanation: Enlarge the map, and the real-world distance represented by 1 cm on the map becomes smaller.

16. When you reduce a map, the scale factor becomes larger, meaning each unit on

the map represents a larger distance in real life.
Explanation: A reduced map shows a larger area, so each unit on the map represents a larger real-world distance.

Matching Type

1. When you reduce a map, the scale factor becomes? ----- C. Less detail
Explanation: Reducing a map means showing more area with less detail.
2. A map scale of 1:500 means that 1 cm on the map represents how many meters in real life? ------- A. 1 meter
Explanation: A scale of 1:500 means that 1 cm on the map represents 500 cm (or 5 meters) in real life.
3. If the map's bar scale shows 5 cm = 50 km, how far are two cities that are 10 cm apart on the map? ------ B. 100 km
Explanation: If 5 cm represents 50 km, then 10 cm represents 100 km.
4. In a map's key, what might a dashed line represent? ------- D. A walking path
Explanation: Dashed lines on a map often represent walking paths, trails, or less formal routes.
5. What is the purpose of a map key (legend)? ------- F. A chart that explains symbols, colors, and lines on the map
Explanation: The map key or legend explains what the symbols, colors, and lines on the map represent.
6. The symbol of a red star on a map is most likely used to represent what? ------ E. Famous landmarks
Explanation: A red star is often used to highlight important or famous landmarks on a map.

Answer the Following Questions

18. You have a map with a scale of 1:200,000, which means 1 cm on the map equals 200,000 cm in real life. If the distance between two cities on the map is 5 cm, what is the real-life distance between the cities in kilometers?
Explanation: 1 cm on the map equals 200,000 cm in real life (or 2 kilometers).
So, 5 cm on the map equals $5 \times 2 = 10$ kilometers.
Therefore, the real-life distance between the cities is 10 kilometers.