



International Geography Championships

2026 Battery Examination - Part 4 High School and Middle School Division

**Instructions – Mark your answers on the scantron provided.
Correct answers are worth 2 points. Incorrect answers are
worth –1 point. Questions left blank are worth 0 points.**

Questions 1-10 are about geographic concepts.

1. Satellites and aircraft collecting data about the Earth's surface from high above are using which of these methods?

- A. ground truth
- B. remote sensing
- C. geographic inquiry
- D. field sampling

2. Which system would be most useful to city planner who wants to combine maps of flood risk, road networks, and population to choose the best place for a new emergency shelter?

- A. GPS
- B. a globe
- C. a topographic map
- D. GIS

3. The term 'territory' in geography most commonly refers to which of the following?

- A. an area of land under the control or authority of a government
- B. any named geographic region
- C. a district defined by its linguistic characteristics
- D. a region organized for a religious or cultural purpose

4. The term 'perceptual regions' describes places defined by which of these?

- A. physical characteristics like landscape or climate
- B. official government boundaries
- C. shared cultural identity rather than hard borders
- D. a central financial hub that organizes surrounding areas

5. Describing a library as 'next to the park, across the street from the fire station' is defined as which of these?

- A. absolute location
- B. nominal location
- C. relative location
- D. coordinate location

6. The term 'distribution' describes which of these in geography?

- A. the number of people per square mile in a region
- B. how people or features are spread across an area
- C. the rate at which people move between regions
- D. a measure of cultural similarity between places

7. Which of these best describes the concept of environmental determinism?

- A. the physical environment shapes and controls what human cultures can become
- B. humans can adapt their surroundings to overcome physical limitations
- C. population growth determines how quickly a society develops
- D. culture spreads outward from a central origin point

8. A geographer studying how people use land, build cities, and create cultures is working in which branch of geography?

- A. physical geography
- B. environmental geography
- C. human geography
- D. geomorphology

9. Projects like OpenStreetMap, where volunteers worldwide contribute and update geographic information, are an example of which of these?

- A. official government mapping
- B. vector data collection
- C. remote sensing analysis
- D. crowdsourced geographic data

10. What key advantage do drones offer geographers over traditional aerial photography when making maps and observations?

- A. they can fly at low altitudes and photograph small areas with very high precision
- B. they can travel faster than jet aircraft
- C. they collect data across entire continents in a single flight
- D. they replace the need for any ground-based measurements

Questions 11-20 are about volcanoes and volcanic landforms.

11. One of the most famous examples of a stratovolcano is what prominent national landmark of Japan?

- A. Mt. Mazama
- B. Chimborazo
- C. Mt. Fuji
- D. Mt. Vesuvius

12. The 1980 eruption of Mount Saint Helens devastated a large area of which volcanically active US state?

- A. Louisiana
- B. Texas
- C. Idaho
- D. Washington

13. Iceland uses volcanic activity to generate which type of energy for its homes and cities?

- A. solar energy
- B. geothermal energy
- C. wind energy
- D. hydroelectric energy

14. Mount Etna, the most active volcano in Europe, is located on which Italian island?

- A. Crete
- B. Sicily
- C. Knossos
- D. Capri

15. A caldera is a volcanic landform best described as which of the following?

- A. a large bowl-shaped depression formed when a volcanic summit collapses
- B. a gently sloping field of hardened lava surrounding a volcanic vent
- C. a steep-sided valley carved into a volcanic mountain by ancient glaciers
- D. an underground chamber where magma is stored before an eruption

16. All of these are major types of volcano EXCEPT which of the following?

- A. tidal volcano
- B. shield volcano
- C. stratovolcano
- D. cinder cone

17. Which of these best describes a volcanic hot spot?

- A. a region where two tectonic plates are colliding and creating subduction
- B. a zone along the ocean floor where tectonic plates are pulling apart
- C. a fixed area of intense heat in the mantle that melts rock through overlying plates
- D. a temporary pocket of trapped magma that forms near the edges of continents

18. The 1991 eruption of Mount Pinatubo in the Philippines had a global effect by doing which of the following?

- A. raising global sea levels by melting glaciers with its intense heat
- B. increasing global rainfall by adding large amounts of water vapor to the atmosphere
- C. accelerating global warming by releasing large amounts of carbon dioxide
- D. temporarily cooling global temperatures by injecting sulfur dioxide into the stratosphere

19. Which of the following is a reason people have historically chosen to live near active volcanoes?

- A. volcanoes provide natural barriers that protect communities from floods
- B. volcanic rock is the cheapest and strongest material for building homes
- C. living near a volcano gives communities access to underground fresh water
- D. volcanic soil is extremely fertile and excellent for growing crops

20. A shield volcano is best described as which of the following?

- A. a steep, cone-shaped volcano that erupts with great explosive force
- B. a broad, gently sloping volcano built by low-viscosity lava flows
- C. a small, steep volcano built from loose fragments of hardened lava
- D. a sunken bowl-shaped depression formed when a volcano collapses

Questions 21-30 are about political geography.

21. A relic boundary is one that no longer functions as a border but still does which of these?

- A. influences the cultural or landscape patterns of the area
- B. divides two nations with active border crossings
- C. is enforced militarily by one of the former states
- D. appears on all current official maps of the region

22. A superimposed boundary, like the one between India and Pakistan, is one that was drawn by which of the following?

- A. the local population through a democratic vote
- B. natural features like rivers or mountain ranges
- C. an outside power, often ignoring the existing cultural or ethnic divisions
- D. the two countries themselves through a mutual treaty

23. A geometric boundary is drawn using which of these?

- A. lines of latitude and longitude or straight lines on a map
- B. the course of a river or coastline
- C. mountain ridges or other physical features
- D. the edges of an ethnic or cultural region

24. Which of the following is a disadvantage faced by a landlocked country?

- A. it cannot form alliances with other countries
- B. it is unable to develop its own military
- C. it has no direct access to ocean trade routes
- D. it cannot grow food without importing technology

25. Which of these best describes the European Union?
- A. an international police force to prevent terrorism and serious crime
 - B. an organization that controls the foreign policies of its member states
 - C. a political and economic union of European countries with shared laws and a single market
 - D. a group of nations that have entirely eliminated national borders

26. OPEC is an organization of countries that cooperate to control which of the following?
- A. international military deployments
 - B. the production and pricing of oil
 - C. the regulation of global trade tariffs
 - D. the allocation of fishing rights in international waters

27. NATO was formed primarily to serve which of these purposes?
- A. collective military defense among member nations
 - B. economic cooperation and free trade
 - C. sharing of scientific research
 - D. management of refugee crises

28. A fragmented state is one whose territory consists of which of these?
- A. one large landmass completely surrounded by another state
 - B. several separate pieces of land not connected to each other
 - C. a very narrow strip of land stretching over a long distance
 - D. a rounded territory with another country entirely enclosed within it

29. A perforated state is one that completely surrounds which of these?
- A. a large lake or inland sea
 - B. a disputed territory claimed by a rival country
 - C. a demilitarized zone established by an international treaty
 - D. another independent country within its borders

30. A forward capital is one that has been deliberately moved to achieve which of these goals?
- A. to be closer to the country's main trading partners
 - B. to reduce the costs of running a large government
 - C. to assert control over a frontier region or promote national development
 - D. to make the capital easier to defend from foreign invasion

Questions 31-40 are about deserts.

31. The Sahara Desert is located on which continent?
- A. Asia
 - B. Africa
 - C. Australia
 - D. South America

32. The Thar Desert is shared primarily between which two countries?
- A. China and North Korea
 - B. India and Pakistan
 - C. Iran and Iraq
 - D. Saudi Arabia and Yemen

33. The Patagonian Desert, the largest desert in South America, is contained mostly within which country?
- A. Argentina
 - B. Brazil
 - C. Colombia
 - D. Guyana

34. The Great Victoria Desert, Australia's largest desert, is in which part of Australia?
- A. the northeastern coast near the Great Barrier Reef
 - B. the tropical north near Darwin and the Gulf of Carpentaria
 - C. the southeastern corner near Melbourne and Sydney
 - D. the interior of the continent, spanning Western and South Australia

35. Star dunes form in deserts where the winds are doing which of the following?
- A. always blowing in one direction
 - B. only coming from the North or South
 - C. regularly coming from different directions
 - D. no strong winds are ever blowing

36. A flat-topped hill or elevated area with steep sides common in desert landscapes is which of the following?
- A. mesa
 - B. krummholz
 - C. isolate
 - D. caldera

37. A wadi is a desert landform best defined as which of these?
- A. a flat-topped rocky plateau rising above the surrounding desert
 - B. a fertile green area in a desert fed by an underground spring
 - C. a cone-shaped hill formed by wind depositing sand in one location
 - D. a dry riverbed or valley that can flood suddenly after rainfall

38. An erg in a desert describes which of the following?
- A. a rocky flat desert surface covered in gravel and pebbles
 - B. a vast expanse of sand dunes covering large areas of desert
 - C. a dry salt lake left behind when a desert lake evaporates
 - D. a steep-sided canyon carved by an ancient desert river

39. Ventifacts are rocks found in deserts that have been shaped into smooth flat faces by which of these?
- A. sand particles carried by wind grinding against the rock surface
 - B. repeated heating and cooling that splits the rock along natural lines
 - C. rainwater slowly dissolving the softer minerals in the rock
 - D. salt crystals growing inside cracks and forcing the rock apart
40. An alluvial fan forms in a desert when which of the following happens?
- A. wind deposits sand in a cone shape at the base of a rocky ridge
 - B. a dry salt lake slowly refills with water during a rainy season
 - C. rocks tumble down a steep cliff and pile up at the bottom
 - D. a stream carrying sediment slows as it exits a canyon and spreads across flat ground

Questions 41-50 are about religion.

41. Religion in ancient societies most often attempted to explain which of the following?
- A. how to build roads and trade routes across empires
 - B. how to grow crops and manage irrigation
 - C. the rules for organizing armies and warfare
 - D. the forces of nature and the meaning of life and death
42. Which of the following best describes a polytheistic religion?
- A. belief in many gods or divine beings
 - B. belief in a single all-powerful God
 - C. belief that spirits live in natural objects
 - D. belief that no God or gods exist
43. Which of these is the sacred text of Christianity?
- A. the Torah
 - B. the Bible
 - C. the Tripitaka
 - D. the Upanishads
44. Shintoism is the traditional religion most closely associated with which country?
- A. China
 - B. India
 - C. Japan
 - D. Indonesia
45. A community of Jewish people living in Argentina, having left their homeland generations ago, is an example of which geographic concept?
- A. a pilgrimage
 - B. a diet
 - C. a synod
 - D. a diaspora

46. The total number of Christians in the world today is closest to which of these numbers?
- A. 500 million
 - B. 1 billion
 - C. 2.5 billion
 - D. 5 billion
47. Animism is a belief system that holds which of the following ideas?
- A. the Genesis story from the Christian Bible
 - B. spirits or souls inhabit natural objects such as rivers, trees, and mountains
 - C. reincarnation and karma
 - D. one supreme God rules over many lesser divine beings
48. Christianity first spread widely through the ancient world partly because it was adopted as the official religion of which of the following?
- A. the Persian Empire
 - B. the Roman Empire
 - C. the Mongol Empire
 - D. the Ottoman Empire

49. The fact that most people in Brazil today practice Christianity rather than indigenous religions is best explained by which of these?
- A. centuries of Portuguese colonial rule during which Christianity was spread by missionaries
 - B. Brazil's geographic proximity to Europe, which allowed Christian ideas to travel easily
 - C. the voluntary adoption of Christianity by indigenous leaders before European arrival
 - D. a United Nations treaty that required all South American nations to adopt one religion
50. Christianity, Islam, and Buddhism are all classified as universal religions because they do which of the following?
- A. are practiced only by people born into a specific cultural group
 - B. require followers to speak a single sacred language in worship
 - C. actively seek to gain new followers from all people and places
 - D. only spread through trade routes rather than missionary activity

Questions 51-60 are about agriculture.

51. The Fertile Crescent, often called the cradle of agriculture, is located in which region of the world?
- A. North America
 - B. West Africa
 - C. the Middle East
 - D. Central America

52. Which of these groups of countries are among the world's leading producers of tea?

- A. Brazil, Argentina, and Chile
- B. the United States, Canada, and Mexico
- C. China, India, and Kenya
- D. Germany, France, and Italy

53. Herding cattle and goats across the savanna is the dominant agricultural practice in large parts of which region?

- A. sub-Saharan Africa
- B. East Asia
- C. Western Europe
- D. Southeast Asia

54. Which of these is NOT a practice associated with organic farming?

- A. using natural compost to improve soil fertility
- B. rotating crops to prevent soil depletion
- C. controlling pests with natural predators instead of chemicals
- D. applying synthetic nitrogen fertilizers to increase crop yields

55. Approximately what percentage of the world's workers are employed in agriculture?

- A. about 5%
- B. about 27%
- C. about 50%
- D. about 75%

56. A major critique of the Green Revolution from a development geography perspective is that it primarily benefited which group?

- A. larger, wealthier farmers who could afford the required seeds, fertilizers, and irrigation
- B. subsistence farmers in the poorest nations who needed the most help
- C. urban consumers in developed nations seeking cheaper food imports
- D. international agricultural companies that supplied traditional seed varieties

57. Which of these crops was NOT significantly improved by Green Revolution research programs during the 1960s and 1970s?

- A. barley
- B. soybeans
- C. sorghum
- D. corn

58. Land reform programs in developing countries typically aim to accomplish which of these goals?

- A. converting subsistence farms into large industrial plantations to increase export capacity
- B. transferring ownership of farmland from private individuals to the state
- C. reducing the total amount of land under agricultural use to protect the environment
- D. redistributing farmland from large landowners to small farmers or landless peasants

59. Desertification, the transformation of fertile land into desert, is most directly caused by which combination of factors?

- A. overgrazing, unsustainable farming, and deforestation that strip protective vegetation from dry regions
- B. climate change alone causing rainfall patterns to shift permanently in arid regions
- C. excessive irrigation that causes the water table to rise and flood the soil with salt
- D. strip mining and resource extraction that removes topsoil from agricultural regions

60. A country that relies on a single agricultural commodity for most of its export earnings is said to have which type of economic vulnerability?

- A. food sovereignty issues that prevent importing supplemental food supplies
- B. subsistence trap conditions that prevent development of other industries
- C. commodity dependence, which exposes it to price shocks and market volatility
- D. von Thünen displacement, where export focus pushes food crops to the urban fringe

Questions 61-70 are about rivers.

61. Which of these is NOT a landform created by river deposition?

- A. a delta
- B. a gorge
- C. an oxbow lake
- D. an alluvial fan

62. A natural levee alongside a river is formed by which of these?

- A. ice and frost pushing soil upward along the edges of the channel
- B. sediment deposited on the riverbanks each time the river floods and retreats
- C. tree roots and vegetation binding soil along the riverbank
- D. erosion cutting down into the floodplain on both sides of the river

63. Rivers develop meanders in flat, low-lying areas mainly because which of these occurs?

- A. the river gains speed and cuts straight through soft rock
- B. rainfall adds so much water that the river overflows and bends
- C. the river erodes the outer banks of bends while depositing sediment on the inner banks
- D. the river loses all its sediment load and begins to flow sideways

64. Which of these is NOT one of the four main processes by which a river erodes its channel?

- A. saltation
- B. hydraulic action
- C. abrasion
- D. solution

65. Sudden rapid deposition of sediment in a river channel is most likely caused by which of these?

- A. a rapid decrease in discharge or velocity as the river loses energy
- B. an increase in gradient that accelerates flow and drops the sediment
- C. an increase in hydraulic action that lifts sediment off the bed
- D. a reduction in channel width that concentrates the river's erosive power

66. A braided river channel forms when a river has which combination of characteristics?

- A. a very low gradient that causes the river to meander across a wide plain
- B. a high discharge and a narrow, well-defined single channel
- C. a high sediment load and a variable discharge that causes frequent deposition
- D. a bedrock floor too hard to erode, forcing the river to divide

67. Saltation as a form of fluvial transport involves which of these movements?

- A. large boulders being rolled and dragged along the channel floor
- B. particles bouncing along the riverbed in a leaping motion
- C. fine clay and silt suspended throughout the water column
- D. soluble minerals dissolved and carried invisibly in the water

68. Within a meander, the point bar and the cut bank are located on which sides?

- A. the point bar on the outside of the bend and the cut bank on the inside
- B. the point bar on the inside of the bend and the cut bank on the outside
- C. the point bar on the upstream side and the cut bank on the downstream side
- D. the point bar in the deepest part of the channel and the cut bank in shallowest part

69. A river's competence refers specifically to which of these?

- A. the total amount of sediment it can carry at any one time
- B. the rate at which it erodes its bed through abrasion
- C. the minimum discharge needed to maintain river flow
- D. the maximum size of particle it can transport at a given velocity

70. A Yazoo stream forms primarily due to which of the following?

- A. natural levees along the main river are too high for the tributary to cross
- B. the tributary's gradient is too low to reach the main channel
- C. the main river's floodplain is too wet for the tributary to flow across it
- D. the tributary was captured by a neighboring river system

Questions 71-80 are about climate and hazard mitigation.

71. Renewable energy sources are different from fossil fuels because they do which of the following?

- A. produce more energy per unit than fossil fuels can
- B. cost less to produce and are already cheaper than fossil fuels everywhere
- C. replenish naturally and will not run out the way coal or oil will
- D. create no pollution of any kind when used to generate electricity

72. Which of these groups is generally considered MOST vulnerable to health risks from extreme heat?

- A. elderly people, young children, and those with chronic illnesses
- B. teenagers and young adults who are physically active outdoors
- C. people living in mountainous regions with cool climates
- D. people in countries with advanced healthcare systems

73. Green roofs help reduce urban heat islands by doing which of these?

- A. reflecting all sunlight back into the sky before it can heat the building
- B. absorbing sunlight, releasing moisture, and cooling the air through evaporation
- C. generating wind currents that push hot air out of the city center
- D. producing oxygen that chemically neutralizes the greenhouse gases in the city

74. Natural gas is considered the cleanest of the three main fossil fuels for which of these reasons?

- A. burning it releases no greenhouse gases at all into the atmosphere when used for heat
- B. it produces less carbon dioxide and fewer pollutants than burning coal or oil
- C. it can be burned without oxygen, eliminating the production of harmful emissions
- D. it creates energy more efficiently, so smaller amounts are needed for the same amount of power

75. The melting of Arctic sea ice is considered a positive feedback mechanism in climate science for which of these reasons?

- A. melting ice releases trapped greenhouse gases directly into the upper atmosphere
- B. the freshwater released from melting ice disrupts ocean salinity and slows the Gulf Stream
- C. ice melt increases coastal flooding, which destroys coastal vegetation that absorbs CO₂
- D. less ice means less reflected sunlight, so the darker ocean absorbs more heat, accelerating warming further

76. Which of the following policies would address the root cause of subsidence in a coastal city?

- A. regulating the extraction of groundwater and developing alternative water supply sources
- B. building higher seawalls and levees to protect the city from rising floodwaters
- C. relocating residents from the lowest-lying neighborhoods to higher ground
- D. restricting new construction in flood zones and purchasing flood insurance

77. Which of these best describes the relationship between climate change and the likelihood of armed conflict?

- A. warmer temperatures reduce human aggression and have historically been associated with lower rates of violent conflict
- B. climate change has no demonstrated statistical relationship with rates of armed conflict
- C. conflict increases primarily in wealthy nations as competition for green energy resources intensifies
- D. resource scarcity caused by drought, crop failure, and water stress increases the risk of political instability and conflict, particularly in already vulnerable regions

78. A disruption in the Atlantic Meridional Overturning Circulation caused by accelerating Greenland ice melt would most directly cause which of these?

- A. rapid sea level rise along all Atlantic coastlines as displaced ocean water redistributes
- B. acceleration of Arctic warming because less cold water flows south to moderate temperatures
- C. increased hurricane frequency in the Caribbean because the warmer stagnant water intensifies storms
- D. cooling of Northwestern Europe as the flow of warm tropical water northward weakens or stops

79. Scientists classify Arctic permafrost thaw as a potential climate tipping point primarily due to which of the following?

- A. permafrost contains frozen freshwater whose release raises sea levels high enough to flood coastal cities
- B. the dark soil exposed by thawing permafrost increases surface albedo and accelerates local cooling
- C. thawing permafrost releases stored methane and CO₂, which accelerate warming, which thaws more permafrost in a self-reinforcing loop
- D. permafrost thaw destabilizes Arctic infrastructure, triggering emergency fossil fuel use for reconstruction

80. The climate justice framework argues that addressing climate change requires which of these in addition to technical solutions?

- A. prioritizing the economic development of wealthy nations first so they can fund global climate solutions
- B. recognizing and correcting the unequal distribution of climate harms and benefits across race, income, and national lines
- C. focusing exclusively on emissions reductions in the ten highest-emitting countries
- D. delaying adaptation measures until global mitigation agreements are fully binding

Questions 81 to 100 refer to Image 1 in the resource section at the end of the exam.

81. Empires in Greece and the Fertile Crescent relied on what body of water marked number 11 to trade?

- A. Baffin Bay
- B. Arctic Ocean
- C. Indian Ocean
- D. Mediterranean Sea

82. The lake indicated by number 20 belongs to the basin of what brackish arm of the Atlantic Ocean?

- A. Yellow Sea
- B. Baltic Sea
- C. Labrador Sea
- D. Irish Sea

83. The majority of the nation of Türkiye is contained on the peninsula marked by what number on the map?

- A. 9
- B. 1
- C. 13
- D. 15

84. The body of water indicated by number 12 separates the Italian Peninsula from which of the following?

- A. Low Countries
- B. Balkans
- C. Azores
- D. Baltics

85. What city marked number 18 served as the easternmost trade hub of the Hanseatic League due to its location on the Volkhov?

- A. Bergen
- B. Lubeck
- C. Bruges
- D. Novgorod

86. The disputed region indicated by the number 8 is internationally recognized as part of what nation?

- A. Belarus
- B. Romania
- C. Ukraine
- D. Armenia

87. The port of Arkhangelsk is located on what southern inlet of the Barents Sea indicated by number 2 on the map?

- A. Bay of Biscay
- B. White Sea
- C. Gulf of Bothnia
- D. North Sea

88. Mount Elbrus lies within the range indicated by what number on the map?

- A. 3
- B. 14
- C. 6
- D. 15

89. Which of the following is true of the body of water shown at number 17 on the map?

- A. It is the shallowest sea in the world.
- B. It is the saltiest sea in the world.
- C. It is the most biodiverse sea in the world.
- D. It is the youngest sea in the world.

90. What Slovakian peak is the highest point of the mountain range shown at number 15?

- A. Belukha
- B. Everest
- C. Gerlach
- D. Aconcagua

91. Murmansk Oblast includes the territory of what peninsula shown at number 1?

- A. Scandinavia
- B. Korea
- C. Jutland
- D. Kola

92. The Danube flows through four national capitals on its way to supply what body of water shown at number 7?

- A. Caribbean Sea
- B. Black Sea
- C. Red Sea
- D. Coral Sea

93. What range in the area of number 3 on the map is often referred to as the conventional boundary between Europe and Asia?

- A. Urals
- B. Appalachians
- C. Rockies
- D. Himalayas

94. What endorheic basin shown at number 5 is the world's largest inland body of water?

- A. Chesha Bay
- B. Aral Sea
- C. Norwegian Sea
- D. Caspian Sea

95. Istanbul straddles what natural strait marked number 10 that divides Asia Minor from Thrace?

- A. Bering Strait
- B. Strait of Hormuz
- C. Bosphorus Strait
- D. Strait of Gibraltar

96. Eight nations including Switzerland and Austria share the range indicated by what number on the map?

- A. 6
- B. 9
- C. 15
- D. 14

97. Which of the following is NOT located on the peninsula indicated by the number 13?

- A. Monaco
- B. Spain
- C. Portugal
- D. Andorra

98. The Pripyat is a tributary of what river indicated by number 16 on the map?

- A. Rhine
- B. Thames
- C. Loire
- D. Dnieper

99. What freshwater lake shown at number 19 contains forty-eight varieties of fish?

- A. Lake Bled
- B. Lake Como
- C. Lake Ladoga
- D. Lake Saimaa

100. What number on the map indicates the longest river in Europe?

- A. 12
- B. 4
- C. 16
- D. 20

Image 1 (Questions 81-100)

