17th Hungarian Geographical Contest 2025/26

2nd Round

Written Response Test

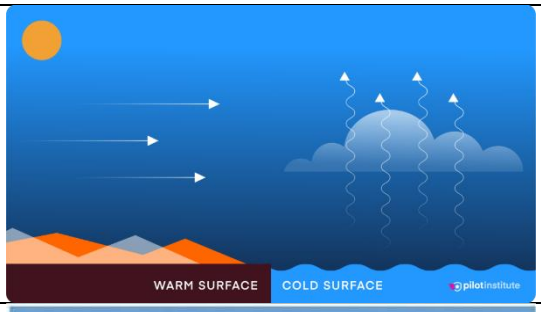
Source Booklet

12 December 2025

Do NOT open the booklet until told to do so by a supervisor!

Your answer will NOT be marked if you write it in this booklet!

Section A

A.1.1.	
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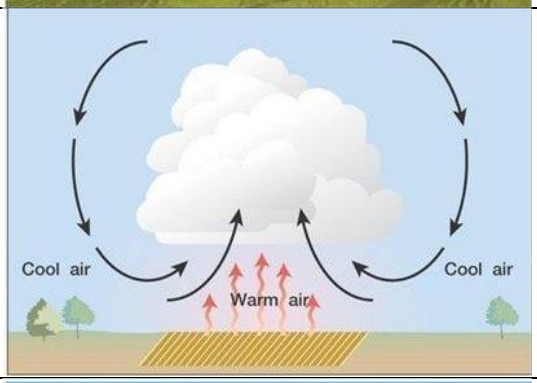
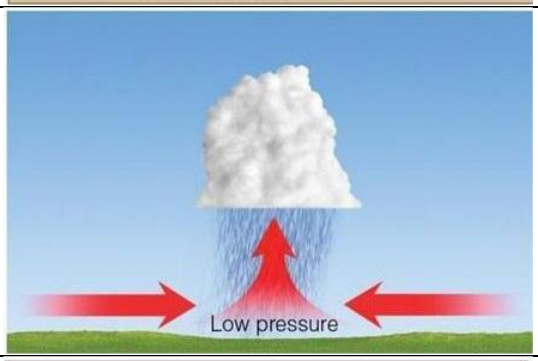
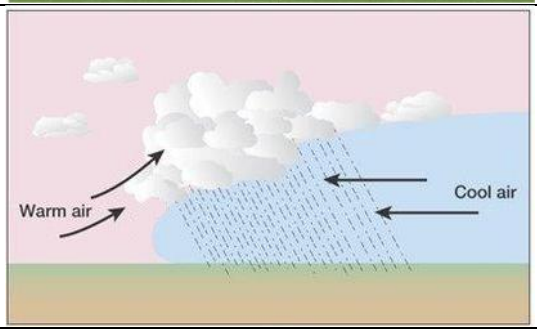
A.1.3.	
A.1.4.	
A.1.5.	

Section B

B.1.1.	B.1.2.
	
B.1.3.	B.1.4.
	
B.1.5.	B.1.6.
	

B.2. Mammoth Cave

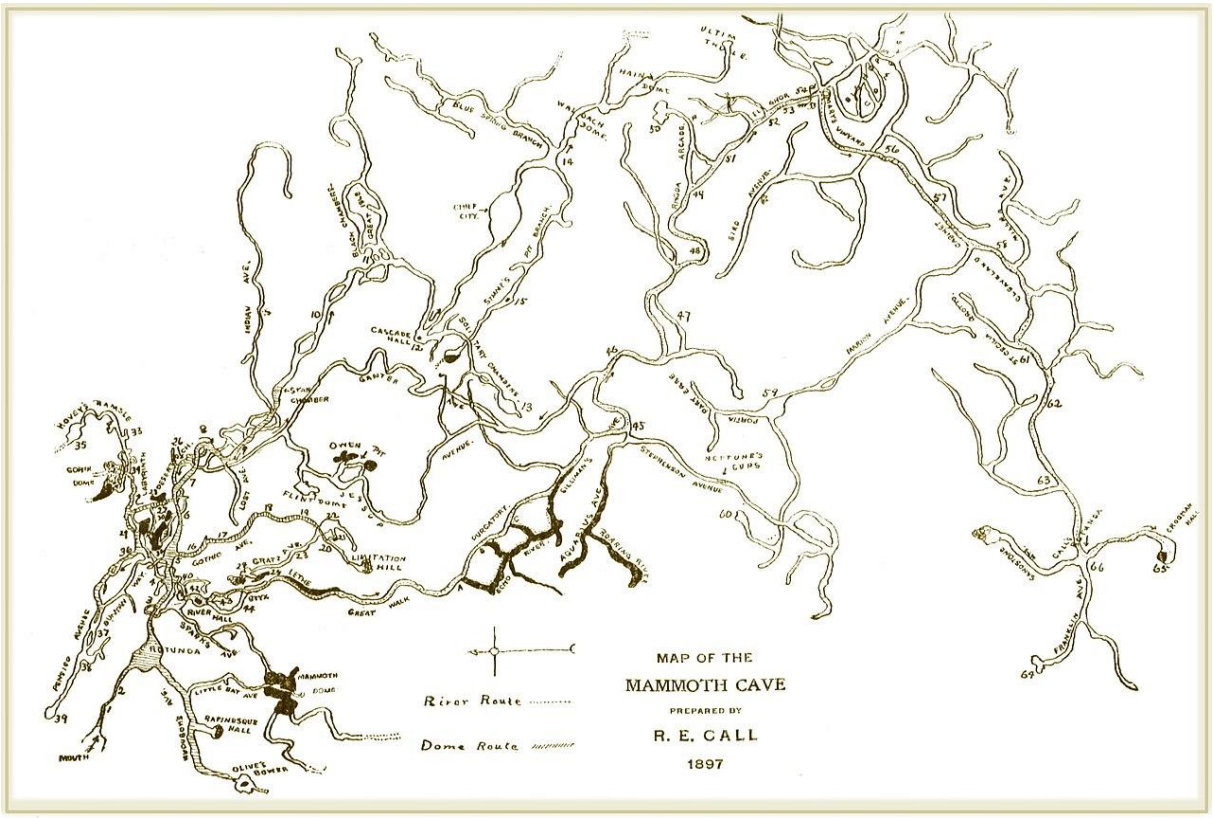
B.2.1. A VISIT TO THE MAMMOTH CAVE OF KENTUCKY. BY JOHN WILSON, THE SCOTTISH VOCALIST. EDINBURGH: 1849. FIRST DAY'S VISIT TO THE MAMMOTH CAVE.

"… A gentleman, who accompanied us from Nashville, and myself, having been provided with coats that had been coats once, and low-crowned soft hats, we set off for the cave. … We descended by about thirty rude steps to the entrance, where our lamps being lighted, we bade farewell for a while to the light of day. In a very short time we come to a wall that had been built by the miners, and in which there is a door-way, inside of which we are fairly in the cave. The temperature of the cave is always at sixty, and when the temperature out of doors is higher, the air rushes out at this doorway, so as to blow out the lamps, if the command of the guide is not obeyed to keep your lamps before you. … The "Church," as it is called, is the first apartment where we make a halt. It is very large, with galleries round it, and a projection of rock at one side, called the pulpit. Being told by the guide to put our lights behind us, he set fire to a Bengal light, and then we were struck with wonder and awe at the splendour and the vastness of the rocky apartment. For size, Exeter Hall is nothing to it. … The church is in the "Main Cave," which is five miles in extent, and as we move along we see the marks of the action of the water upon the rocks in every part. The average height is 50 feet, its width 100 feet; at one place, however, it is 340 feet wide.

We leave the Main Cave, and enter the "Gothic Avenue," where the first apartment we come to is called the "Haunted Chamber," from two mummies having been found there by the miners in 1809. They were in a sitting position, and clothed with deer-skins. One of them is now in a museum in New York; the other was burned by the museum in Cincinnati taking fire. The friend who was with me being somewhat of a utility sort of a person, wishes everything to be made proper use of, and suggested that the cave would be a capital place for keeping meat, vegetables, &c., when he was told by Stephen, much to his satisfaction, that the hotel people used it for that purpose. We go along farther, and soon find ourselves in the "Register Room," which has, or rather had, a beautiful white ceiling, but it is now considerably defaced by many persons wishing to immortalise themselves by writing their names on the roof with the smoke of a candle. They must have had the candle attached to a pretty long pole, for the roof is high…

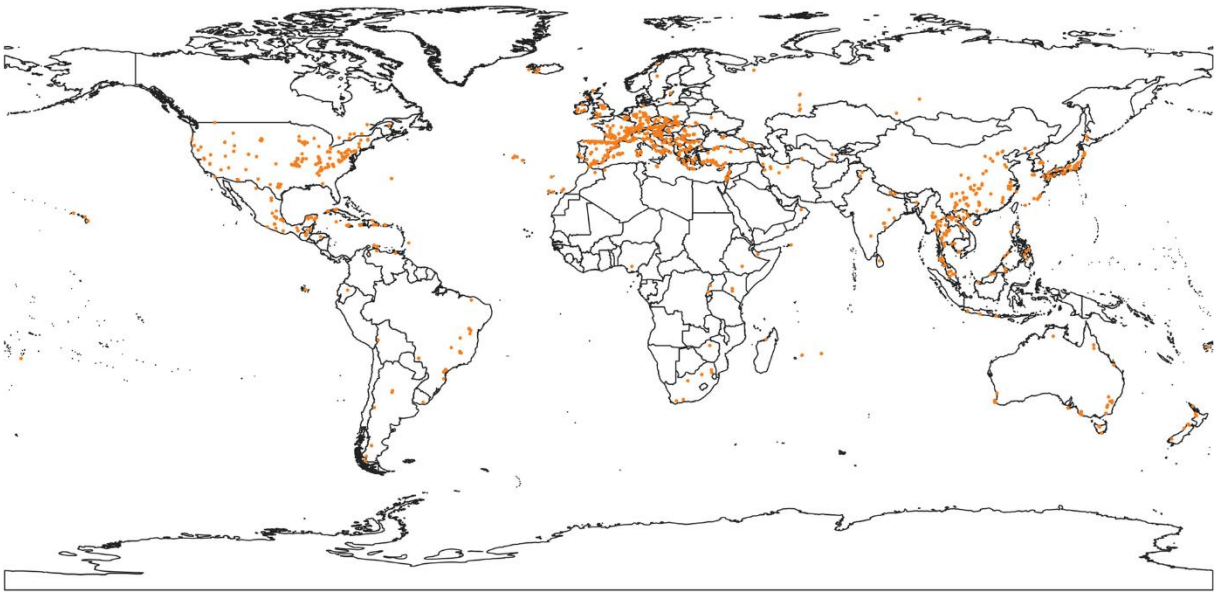
After passing "Vulcan's Forge," so called from the stone resembling very much the refuse of a forge, we come to the "Gothic Chapel." Before entering it, however, Stephen takes our lamps, and leaves us in the dark for a time, while he goes and places them on the stalactite pillar in the chapel. He calls out to us to "come on—there's nothing to stumble over," and we advanced towards the chapel. How splendid! how beautiful! The stalactite pillars are all opposite to each other, as if they were really supporting the roof. It reminded me of the crypt under the Cathedral at Rochester, in Kent, excepting that here the pillars were translucent. About ten or twelve feet high are the pillars, and the stalactite formations are still going on in some of them. It has been ascertained, it seems, that it takes thirty years to form the thickness of a wafer, then how many times thirty years must it have taken to form these pillars! It was a solemn scene, the stillness was indeed quite awful. … We came next to what is called "Napoleon's Breastwork," an immense block of limestone, that has evidently fallen away from the roof at some time or other, and now lies in a slanting form. It is about 60 feet long, 20 feet to the top, and looks over into a deep ravine… We descend to the left of the "Lover's Leap" and presently enter an extraordinary passage in the rock, called the "Devil's Elbow;" it is about three feet wide and twelve high, and leads to the lower branch of the Gothic Avenue. The stone of the passage bears evidence of water having rushed through it with tremendous force, though how long ago it is impossible to ascertain."

B.2.2. Map of the Mammoth Cave (1897)



Source: Wikipedia

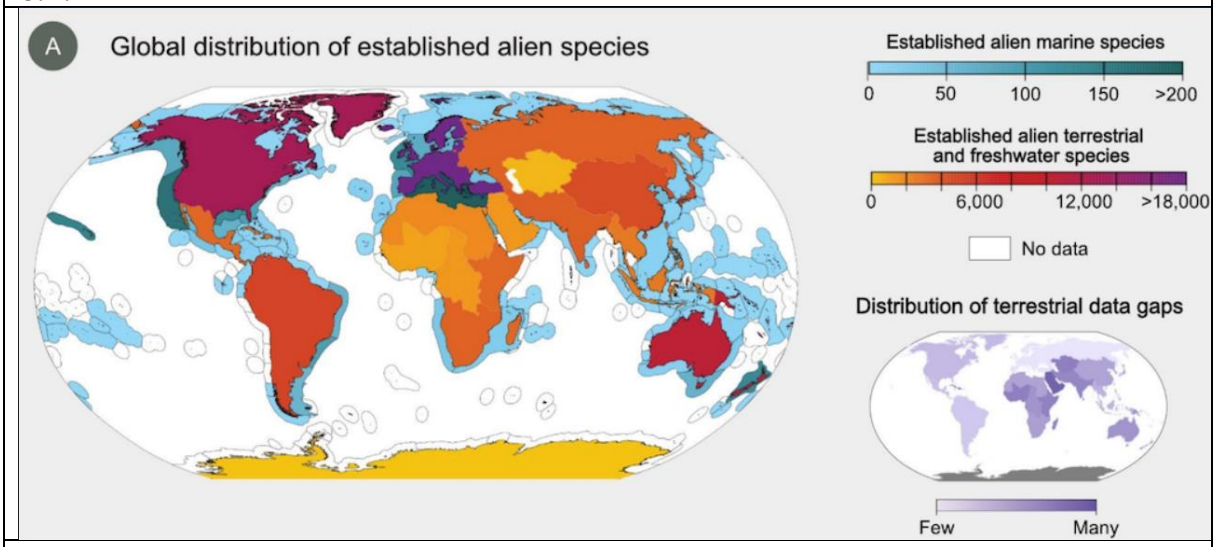
B.3.



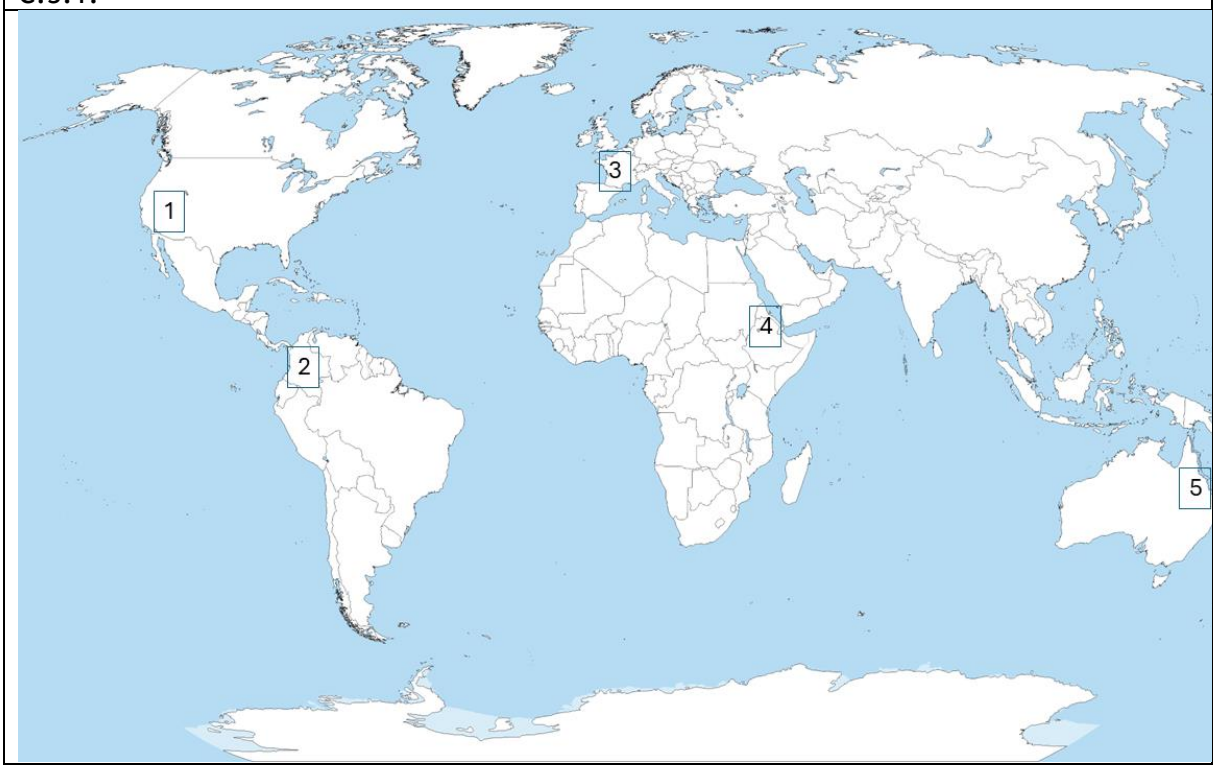
Global show cave distribution (orange dots). Source: Chiarini, V., Duckeck, J. & De Waele, J. A Global Perspective on Sustainable Show Cave Tourism. Geoheritage 14, 82 (2022).

Section C

C.2.



C.3.1.



C.3.1.

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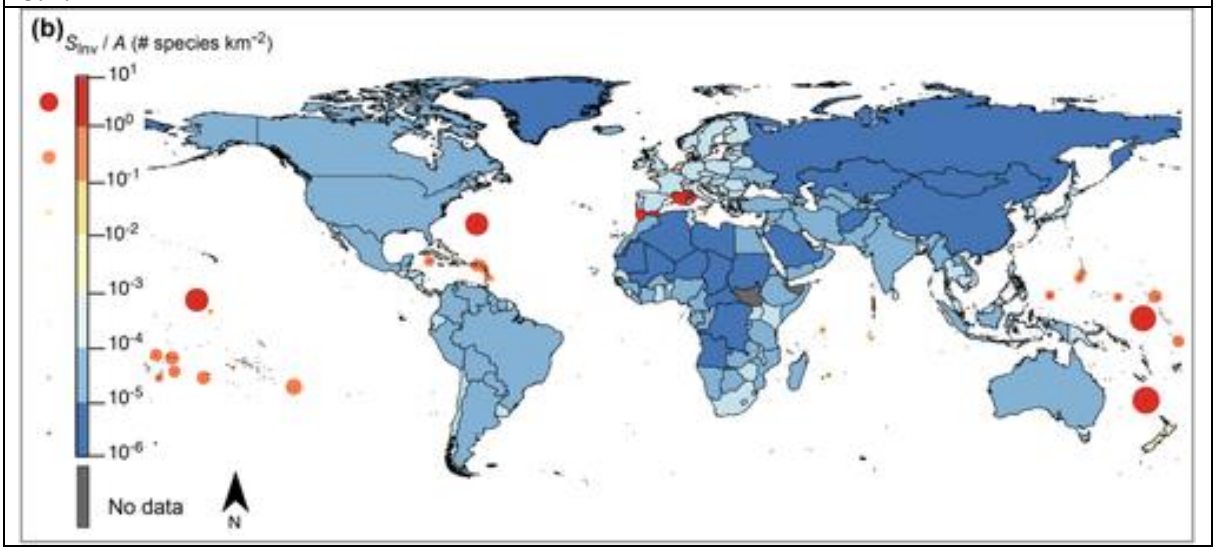

Section D

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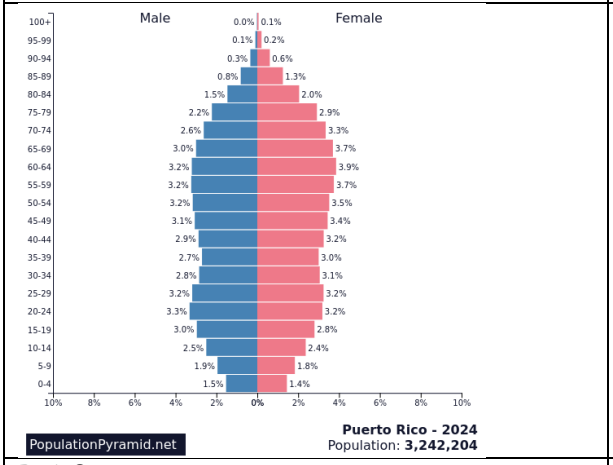

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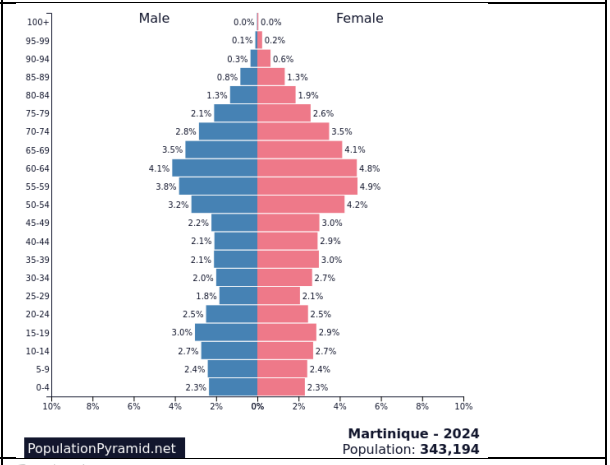

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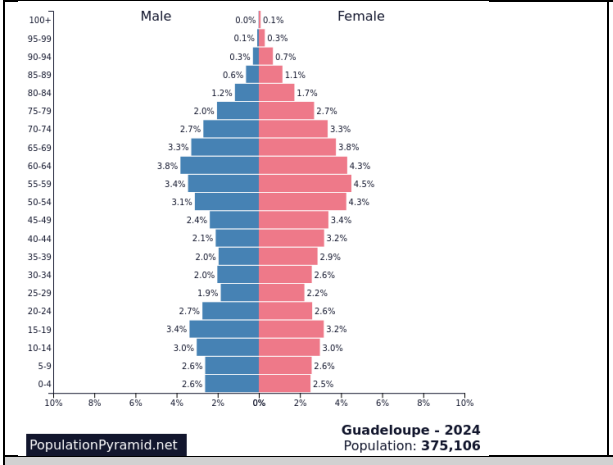

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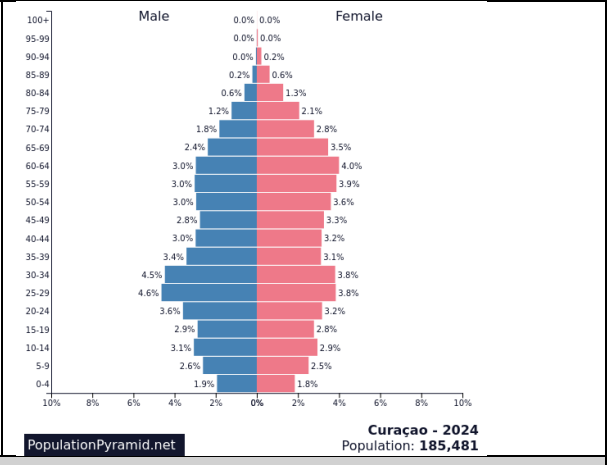
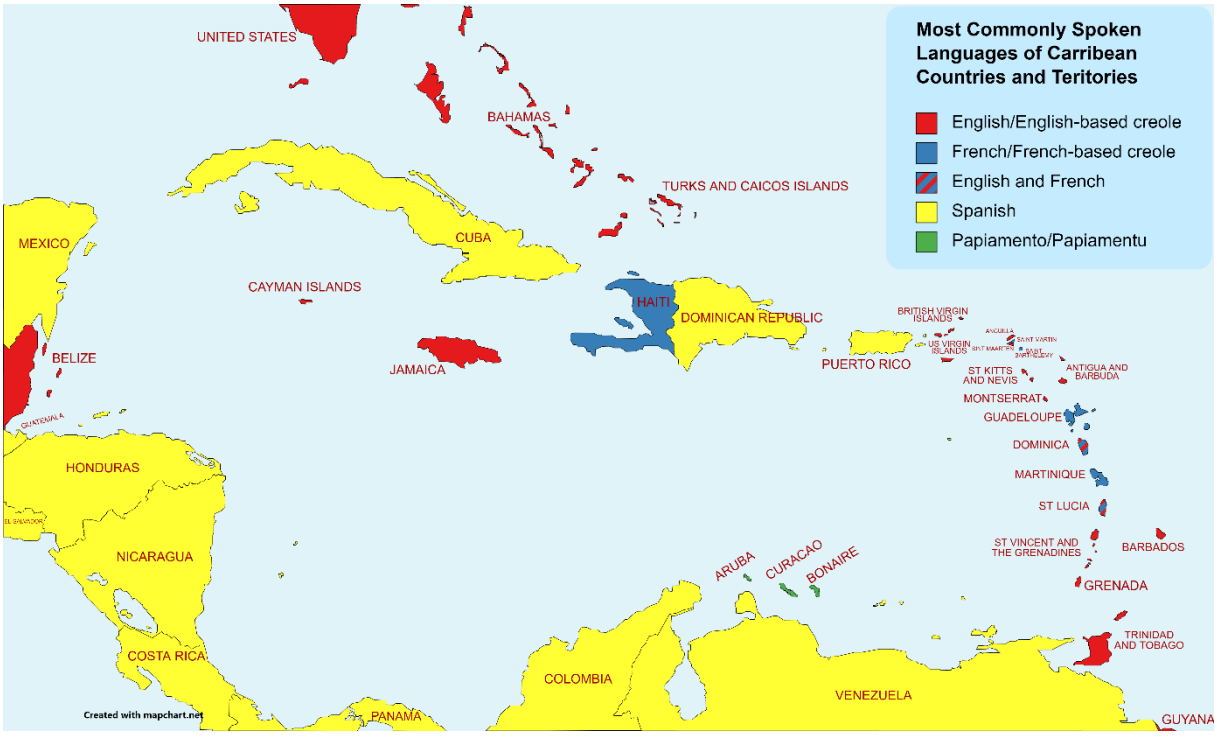


D.2.1.



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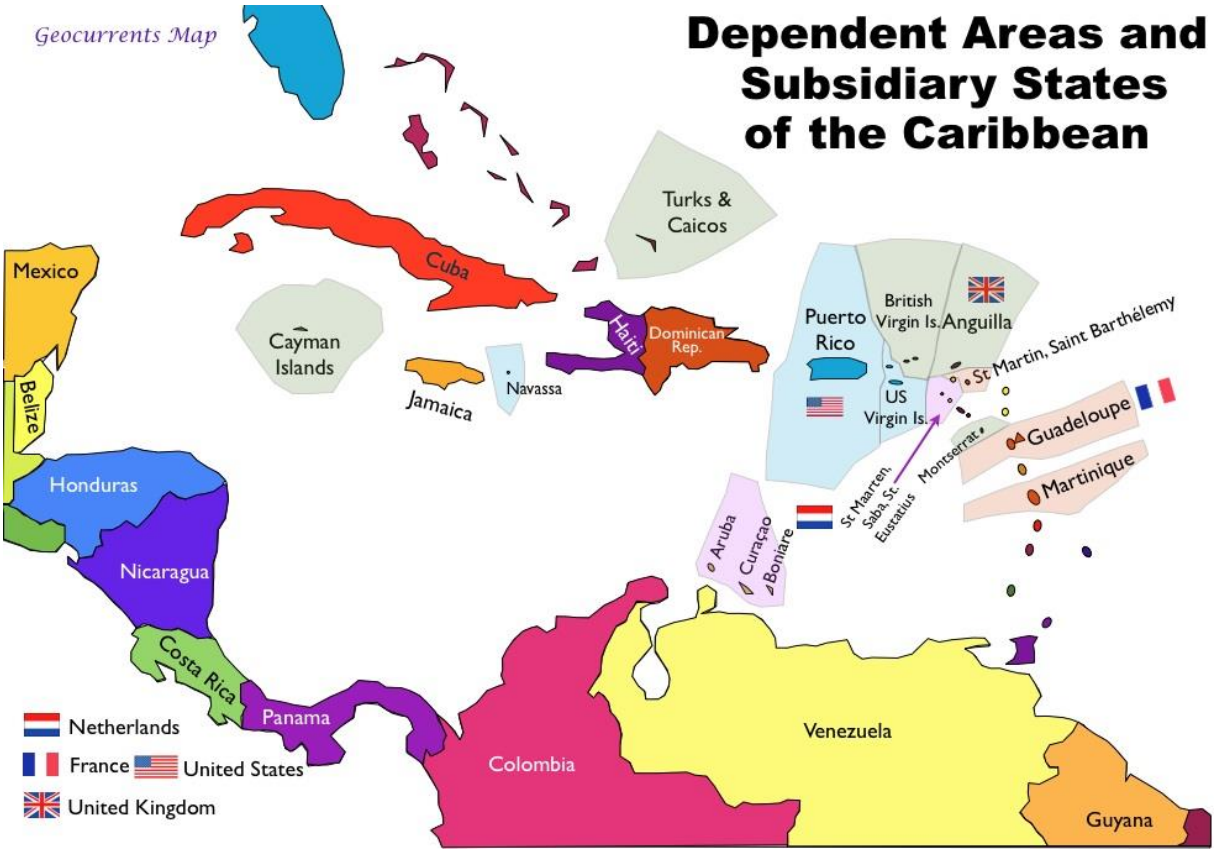

Geocurrents Map
Dependent Areas and Subsidiary States of the Caribbean
Turks & Caicos
Cuba
Mexico
Cayman Islands
Haiti
Dominican Rep.
Jamaica
Navassa
Puerto Rico
British Virgin Is.
Anguilla
St. Martin, Saint Barthélemy
US Virgin Is.
Guadeloupe
Martinique
Montserrat
St. Maarten, Saba, St. Eustatius
Aruba
Curaçao
Bonaire
Belize
Honduras
Nicaragua
Costa Rica
Panama
Colombia
Venezuela
Guyana
Netherlands
France
United States
United Kingdom

D.3.

Section E

E.1.: The BRI World Map

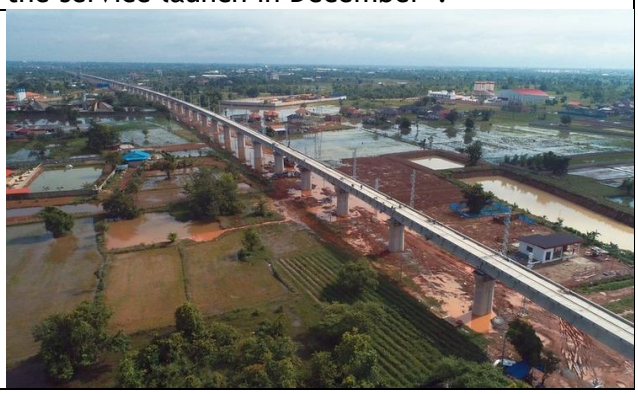
Announced by Chinese President Xi Jinping in 2013, the Silk Road initiative, also known as China's Belt and Road initiative, aims to invest in infrastructure projects, including railways and power grids in central, western, and southern Asia, as well as Africa and Europe.

E.2.: Investment Data (outflow FDI in China)

The following table provides a comparison of Foreign Direct Investment (FDI) data for 2015 and 2022. It includes the number of Foreign-Invested Enterprises (FIEs) and the total value of realised FDI from various countries and regions. Use the data below to answer the accompanying questions in your assignment.

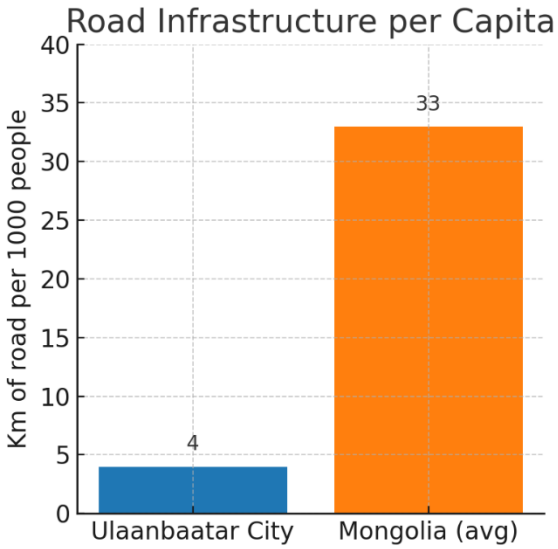
Country/ Region	2015 Number of companies	2015 Realised FDI value*	2019 Number of companies	2019 Realised FDI value*	2022 Number of companies	2022 Realised FDI value*
Hong Kong, China	386,213	8,333.25	474,773	11,955.1	525,478	15,703.1
Indonesia	1,852	24.79	2,100	26.3	2,299	27.0
Malaysia	5,791	72.46	7,324	78.6	8,387	91.2
The Philippines	2,905	32.28	3,092	33.7	3,243	34.2
Singapore	22,481	792.21	26,111	1,028.3	29,849	1,314.4
Republic of Korea	59,740	639.46	67,375	825.7	73,460	968.3
Taiwan	95,298	626.89	112,442	694.0	129,994	720.0
United Kingdom	8,106	196.99	10,040	253.9	11,808	291.7
Germany	9,002	254.67	10,834	350.5	12,258	406.5
France	4,997	148.59	6,035	183.2	6,873	203.0
Spain	2,203	33.19	2,653	39.5	2,998	42.7
Sweden	1,357	35.98	1,629	53.8	1,855	64.3

*(Note: Realised FDI value in $100 million USD)

E.3.A The Mombasa-Nairobi Railway, Kenya	
A section of the Mombasa-Nairobi Railway (Kenya) passing through a wildlife reserve.	The railway is owned by the Kenya Railways Corporation (KRC), a state-owned company. Its operation and maintenance are managed by the Africa Star Railway Operations Company (Afristar), a subsidiary of the China Road and Bridge Corporation (CRBC), which was also the main constructor of the line.
	
E.3.B Gwadar Port, Pakistan	
A view of the Gwadar deep-sea port (China-Pakistan Economic Corridor.	The Eastbay Expressway has blocked residents of Khulgari Ward's access to the sea.
	
E.3.C Boten-Vientiane Railway, Laos	
A viaduct of the Boten-Vientiane railway (China-Laos Economic Corridor).	China and Laos are to complete the railway by the end of 2021. Laos to test train line to China in August – [23/06/21] "The test on the 420-kilometre track was set for August before the service launch in December".
	

Section F

F.1. Road infrastructure per capita



F.2.1. Background: Urban Growth and Ger District Expansion

Since the early 1990s, Ulaanbaatar has experienced rapid urbanisation due to political and economic transition. After the collapse of the socialist system, internal migration increased sharply. Migrants from rural provinces (aimags), especially herders affected by climate shocks (dzud winters), moved to Ulaanbaatar seeking economic stability. These newcomers often settled in informal areas on the city's outskirts. The government policy allowing citizens to claim 0.7 hectares of land near Ulaanbaatar accelerated the spread of *ger districts* (areas with traditional felt tents and self-built houses). These settlements grew primarily to the north, northeast, and east, where land was unoccupied and accessible. Ulaanbaatar's basin geography, surrounded by mountains and crossed by Tuul River valleys, also influenced the shape of urban expansion. By 2020, an estimated 60–66% of Ulaanbaatar's population lived in ger districts, and the total Ulaanbaatar territory is around 4,700 km^2.

What Is a Ger? (Traditional Housing and Urban Reality)

A ger (also known as a yurt) is a traditional Mongolian portable home used by nomadic herders for centuries. It is made of a wooden lattice frame and thick felt layers for insulation. Gers are lightweight, easily transportable, and typically take 2 to 4 hours to build by a small team or family.

A ger is circular in shape and designed for practicality and mobility (Fig.4). It usually has:

- A central window or opening at the top (called a *toono*) to let light and smoke out
- A wooden door in the front centre, often colourfully painted
- Ropes and belts are tightly wrapped around the structure to hold the felt and wooden frame in place

Although originally used in the countryside, gers are now widely present in urban areas—especially in the ger districts of Ulaanbaatar and other cities. These informal districts have grown rapidly due to rural migration but lack basic urban infrastructure, such as piped water, central heating, sewage systems, and road access. Residents fetch water from kiosks, use pit latrines, and rely on raw coal for heating. In winter, smoke from coal stoves produces high levels of air pollution in the city. Untreated human waste also contributes to soil and groundwater contamination. The circular form of gers and the unplanned street layouts in ger areas have influenced the irregular shape of urban growth, often spreading into nearby valleys and hills.

F.2.2. A ger district-urban sprawl (foreground) adjacent to newly built apartments (background) in Ulaanbaatar. The city's skyline juxtaposes modern high-rises with sprawling informal ger neighbourhoods, illustrating the divide in infrastructure and living conditions.

F.3.2. (2000) and (2014) show satellite images of Ulaanbaatar. Purple areas are built-up urban zones, and pink areas show newer expansion.