



HunGeoContest - 2016/17

Online forduló

Megoldások

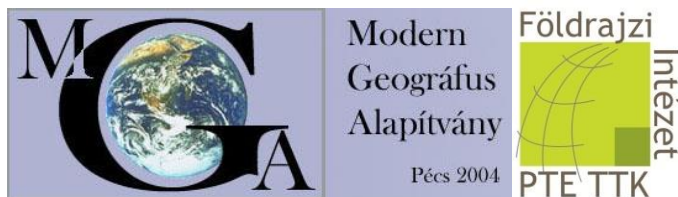
2016. október 29.

Versenyünk NTP-NTV-16-B „Tehetséges magyar fiatalok nemzetközi tanulmányi vagy művészeti versenyeken, nemzetközi tudományos diákolimpiákon való részvételének támogatása” című pályázat keretében elnyert támogatás segítségével valósul meg.

Támogatóink:



A verseny a Modern Geográfus Alapítvány és a PTE Földrajzi Intézete szervezésében valósul meg



1. Where NOT to take a selfie!? [max. 16 points]

Megjegyzések a feladathoz: minden esetben elfogadtunk szinonimákat a megnevezéshez. A hely megnevezésnél a kitöltött lapon a konkrét hely szerepel, de elfogadtunk más hasonlókat is természetesen. Nem fogadtunk el ugyanakkor olyan válaszokat, amelyek csak egy-egy országot adtak meg. A 3. részkérdés (explain...) a lényeg az volt, hogy minél szakszerűbben, bizonyos kulcsfogalmak használatával magyarázd meg a jelenséget. A pontok száma az A és B elemekre 1-1; a C elemre 2 pont. Minden esetben voltak félpontok is, amennyiben ezt indokoltnak láttuk.

A



A.1. Name of the process / phenomenon:

geyser

A.2. Possible location:

picture taken at El Tatio, And

A.3. Explain what happens!

water can reach 85°C+ or even be in steam phase, sudden eruption of spring (varying time range), large eruption heights + discharge >> can't avoid hot water, slippery SiO₂ crust, ground is not stable everywhere >> surface around geyser can have hollows filled with water, sediment, usually geyser is located on loose gravel or soil (water circulation) [or similar]

B



B.1. Name of the process / phenomenon:

volcano eruption

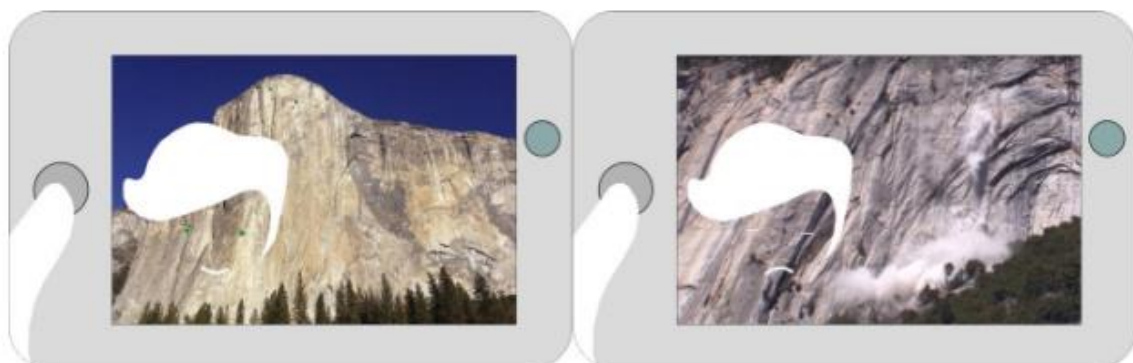
B.2. Possible location:

Location: Mount Ontake, Hor

B.3. Explain what happens!

Key words like: hot ash, pyroclastic flow, some lava, steam-driven explosion – phreatic eruption, VEI 3-4 eruption, no earthquake or other signs of eruption

C



C.1. Name of the process / phenomenon:

rock fall, debris avalanche, rc

C.2. Possible location:

Yosemite National Park, Half

C.3. Explain what happens!

huge boulders at high speed, Yosemite has steep, glacier-carved cliffs, already long path of rock debris at the base of cliffs >> trees can't stop them, weathering + bedrock fractures, more than half of documented rockfalls could not be associated with a recognizable trigger, can't be predicted

D



D.1. Name of the process / phenomenon:

flash flood

D.2. Possible location:

Zion National Park, The Narro

D.3. Explain what happens!

even storms miles away can cause floods here, water level rises within minutes, 3+ meter high walls of water in the canyons, floating debris, stronger currents, cliffs and slopes like concrete >> every water pours off quickly, waterfalls, streams occur everywhere

2. Hollywood all over the World [max 6 points]

Megjegyzések a feladathoz: jellemzően senkinek sem okozott különösebb gondot, ennek a feladatnak volt a legmagasabb átlagpontszáma. Minden helyes megoldás egy pontot ért.

	A. Indiana Jones and the Last Crusade	B. The English patient	C. Mad Max Fury Road	D. GoT - Astapor	E. Hidalgo	F. Star Wars - A new hope - Tatooine
Namibia	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
USA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Saudi-Arabia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jordan	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iraq	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Egypt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Iran	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Morocco	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Australia	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Italy	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
none of them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

3. River regulation & GIS [max 16 points]

Általános megjegyzések: ez a feladat okozta talán a legtöbb nehézséget, technikailag valóban komplikált és e legtöbbetek számára vélhetően elég idegen volt. Három esetben a térképet nem tudtuk értékelni, mert a bemásolt link vagy nem létező file-ra mutatott, vagy nem adatok hozzáférést. Aki megcsinálta a térképet (rosszul, vagy kevésbé jól) és az alapján már helyese kalkulált, a másik két feladatrészben kapott bizonyos pontokat (ha nem is az összes megszerezhető)

A. Draw (cover with polygons) on your own map the areas that have been exempted from yearly floods. These are normally located between the main embankments and the built-in area, and presently are cultivated. Copy the link of the map here, as explained above! [8 points]

Valami ilyet vártunk ideális esetben:

<https://www.google.hu/maps/@46.8501403,19.9761906,33315m/data=!3m1!1e3!4m2!6m1!1s15GRzZ9wHyTVJbYM3sEliudodoE?hl=hu>

A pontozásnál a határok megtalálása (mostani fő védvonal a folyó mellett, a műholdfelvételen kirajzolódó szintvonal, precíz, alapos munka (sok felvett pont a poligonban), a folyó jobb partján maradt (ahogy az instrukciókban írtuk). Önmagában pontot adtunk azért is, ha valaki sikeresen használta a térképező alkalmazást.

B. Calculate the approximate total size of the area in square kilometres. [2 points]

75-78 sqkm. According to the

C. How many settlements are affected along this section? Calculate the total number of their residents as of 01/01/2016. Use official sources to determine the population, and name the source in your answer. [4 points]

There are only four settlements: Tiszaécske, Lakitelek, Tiszaalpár and Csongrád with a total population of 37,346 according to KHS Helységnévtár: <https://www.ksh.hu/Helysegnevtar>. Different answers might be accepted, if they are consequent with the map drawn. Different, but official data sources are also accepted.

D. Suppose that all the areas gained by the regulation work and calculated above is used for wheat production. Calculate the amount of the expected yield in metric tons, if the average yields are equal to the national one. In your answer, please name your source used for the calculation! [2 points]

Average yield of wheat is approx. 5,400-5,000 kg / hectares So it's theoretically takes about 42,350 tones for the calculated are. Different answers might be accepted, if they are consequent with the map drawn.

4. Trains & economy [max 10 points]

Talán csak egy magyarázattal tartozunk: a D kérdésnél azért Dánia a helyes válasz, mert Grönland révén jelen van az amerikai kontinensen is. Minden helyes válasz egy pontot ért.

A. Opening of the new Gotthard Base Tunnel in June 2016 was a milestone in the Transalpine traffic. The line connects basically Zurich and Milan, the latter being the most important economic centre in Italy. Which one is not true for Milan's economy?

- ☐ 1. It is the home of the largest Italian stock exchange.
- ☒ 2. It has the busiest airport in Italy.
- ☐ 3. Was home of EXPO 2015.
- ☐ 4. It is one of the World's fashion capitals.

B. This funny little train is heading to Darjeeling, India, offering one of the most spectacular views among the world mountain railway lines. The region is also famous for its tea production. Which is the perfect combination of geographical conditions, ideal for tea plantations?

- ☐ 1. Tropical warm with constant temperature and low humidity.
- ☐ 2. High altitude and high insolation, independent from temperature and humidity.
- ☐ 3. High-quality, fertile soils, low participation, can resist heavy winters too.
- ☒ 4. Variable temperature from tropical to subtropical zones, high humidity and rainfall in growing season, some seasonality is also required.

C. A large and busy freight terminal in the outskirts of Chicago, Illinois. Which one is not true about the United States' transport system?

- ☒ 1. Inland navigation is negligible, because the lack of the high capacity inland waterways.
- ☐ 2. Rail passenger traffic does not play an important role because of the high level of motorisation, the large distance of the major urban metro areas and the intensity of air transport.
- ☐ 3. Traditional products, like coal, grain and wood are still very important in the rail freight transport.
- ☐ 4. Four among the ten busiest airports (passenger traffic) in 2015 were located in U.S.

D. Building the new Marmaray Tunnel in Istanbul, Turkey. The new line (operates as a metro in daylight and as a freight traffic corridor at night) connects the European and Asian part of the city. There are only a few countries located in two continents (according to the physical geographical approach of continents) – which one of the followings has territories in two continents?

- ☐ 1. Sweden
- ☒ 2. Denmark
- ☐ 3. Georgia
- ☐ 4. Canada

E. Travelling by one of the world longest trains could be an exciting experience – except you need to travel on the top of some tons of iron ore under the hot African sun... 47% of the value of the Mauritanian export comes from the iron ore – but which are the two countries, that together gave 71% of the World's iron ore export in 2014?

- ☐ 1. Australia and Sweden
- ☐ 2. Canada and Ukraine
- ☒ 3. Brazil and Australia

F. Military guard posts next to the bridge over Lhasa River on the Qinghai–Tibet railway. It is now one of the most important mountain lines and a great engineering work: it is not easy to build a railroad in permafrost areas. Tibet is still a sparsely populated area, but some cities and agglomerations worldwide concentrate large number of inhabitants in high altitudes. Which one is the largest of these cities over 2,000 meter elevation?

- ☐ 1. Asmara
- ☒ 2. Sana'a
- ☐ 3. Sucre
- ☐ 4. Thimphu

G. The transcontinental train called "The Ghan" heading to Darwin, Australia. Like many other former British colonies, Australia has a population with various origins. Which of these groups have not played significant role in the inhabitation of the country?

- ☐ 1. Irish and English prisoners in the 19th century
- ☐ 2. Gold rushers from various countries of Europe and Asia
- ☐ 3. Post-war migrants from Central Europe
- ☒ 4. Russian immigrants after the revolution of 1917

H. Like a snake: both front and rear engines are visible in this exciting photo about a long freight train in Matucana, Peru. Although many of South American countries are rich in minerals and economic resources, many of them have highly polarised society with large proportion of people living in poverty. Which one of the following sentences is not a possible reason for that?

- ☐ 1. The long traditions of political instability keep potential investors away from these countries.
- ☐ 2. The low quality of infrastructure reduces the profitability of the most industrial branches
- ☒ 3. The high price and low number of available labour force slows economic development.
- ☐ 4. The low efficiency of state makes income redistribution invisible, poor people are hardly helped in social mobility.

I. This suspension railway line is located in Wuppertal, Germany, North-Rhine Westphalia. The city is part of the polycentric agglomeration of Ruhr District. Which one of the following sentences is true for the district's economic structure today?

- ☐ 1. Beyond many traditional role-players (for example in steel industry) technology parks with R&D and other technology intensive firms are the new flagships of local economy.
- ☐ 2. Reduced in number and production, but coal mines are still very important in the employment of local labour force.
- ☒ 3. After 1990, light industry branches, like textile and leather industry resettled here from the East-German states (former GDR).
- ☐ 4. The region still has the highest GDP/capita figures in Germany.

J. New light rail system started to operate in 2015 in Addis Ababa, capital of Ethiopia thanks to a Chinese investment. After the year of 2001, some of the African countries have shown spectacular economic growth, although they still have not emerged from poverty at all. Which is probably not a factor of Africa's growth?

- ☐ 1. The prices of oil, minerals and raw materials increased significantly and this valorised the export of many African countries.
- ☒ 2. The successful economic integration of the Sub-Saharan Africa caused massive impulses of growth.
- ☐ 3. Chinese investments and Chinese technology appeared in traffic, building industry, mining and some other branches and mitigated the shortage of financial resources in these countries. The low interest rates also boosted economic proliferation and investments.
- ☐ 4. The wireless telecommunication (mobile phones) spread rapidly and became leading economic branch in many countries, also provided first time access to services (for example: banking) for large number of people.

5. Stories told by coins [max 16 points]

Bevallom, ez nekem nagyon nehéznek tűnt – de Ti elég ügyesen megoldottátok...☺. Az „A” és „B” elemnél 0,5-0,5, a „C” elemnél 1-1 pontot ért minden helyes válasz.

a. Endemic species. National symbol.	b. Maritime subarctic climate zone.	c. European high mountains.	d. Coastal areas from Florida to South America	e. Tropical South and Southeast Asia. National (and religious) symbol.	f. Mediterranean region. National symbol.	g. Rainforests, mangroves and eucalypt forests of Asia and Australia.	h. Arid regions of South Africa.
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i. The flag with Union Jack in its canton was replaced by the recent one in 1966.	j. During the 2.5 months of a conflict, almost 1000 hispanophone and anglophone people died.	k. Centre of the Maronite Church.	l. If you cross the state borders either to the west or east you find yourself in a different time zone, but the same in both direction	m. An unresolved border dispute has been existing with its neighbouring state for 25 years.	n. The oldest daily newspaper in the country is "Allgemeine Zeitung".	o. Ethnically the most diverse country in the world.	p. The 'indigenous' tribes of the territory (descendants of people emigrated from Taiwan) arrived only in the 13th century.
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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C. Name the countries!

[1 point each]

1.

Guyana

2.

Bangladesh

3.

Falkland Islands

4.

New Zealand

5.

Papua New Guinea

6.

Lebanon

7.

Slovenia

8.

Namibia

6. The Olympic Challenge

Megint egy olyan feladat, ami talán csak távolról földrajz – reméljük, élveztétek. Az első feladatrészben a legjobbak egyértelműen meghatározhatók, a hőbiztonságnál a januári alacsony átlaghőmérsékletet és magas csapadékot tekintettük irányadónak. Az érvelős kérdések esetében mindegy volt, melyik várost választottátok, a pontot az érvek minőségére (kidolgozottságára és relevanciájára) osztogattuk. Az „álomhelyszín”-es kérdést (C) néhányan félreértették, itt már nem az általunk megadott települések közül kellett választani. A leggyakrabban megadott helyszínek svájci vagy skandináv városok voltak.

Name the city in every aspects most suitable for hosting the games!
[1 point each]

A.1. Number of inhabitants in the city.

Munich ▼

A.2. Per capita GDP (country)

Munich ▼

A.3. Average annual GDP growth between 2011-2015 (country).

Kayseri ▼

A.4. Distance from the nearest international airport

Kayseri ▼

A.5. Distance of the nearest large ski resort from the city centre.

Bansko ▼

A.6. Highest altitude of the ski resort.

Kayseri ▼

A.7. Probability of snow coverage in January.

Kayseri ▼

A.8. Outcomes of the hosting country in the Olympic movement in the last 20 years.

Munich ▼

B. Provide a subjective answer, which city would you personally prefer? Give at least three arguments not mentioned above [4 points]

Possible arguments: political/economic stability, democracy, low level of corruption, security issues, overall infrastructure, future economic impact, city's overall attractiveness, former experiences... and so on.

C. Could you find a perfect candidate? Name a city of your choice, which is better at least in four factors among the nine listed above. Name the city, the connecting ski centre and the strengths from the list [4 points]

Swiss cities are strong in economic and sport-based arguments, some Scandinavian location has a very high probability for a snowy January. Kitzbühel is also an ideal choice because of the proximity of the ski centre.