

BÁBEL NYELVI

VETÉLKEDŐ

ÉSZAK 9-12. osztály

2015.02.05 – 02.27.

Csapat neve: _____

Iskola neve: _____

Elérhető pontszám: 70 pont

Elért pontszám:

Beküldési határidő: 2015.02.27.

Eredmények közzététele: 2015.03.16.



Beküldési cím: Abacusan Stúdió, 1193 Budapest Klapka u. 47.

Kérjük, a feladatlapokat **ne** tértivevényesen adják postára.
A borítékra írják rá: „Bábel”!

GRADES 9-12

THE NORTH AND THE LIGHT

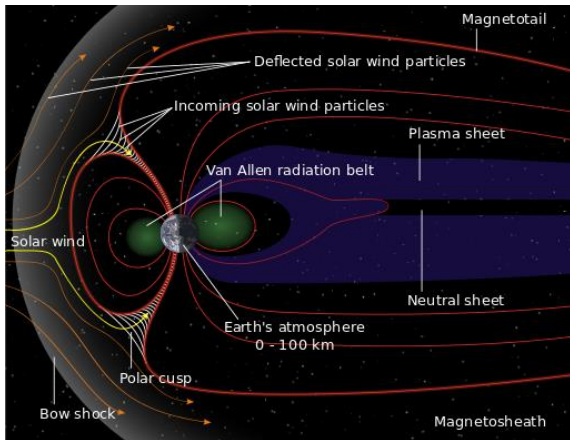


Total points: 70 points

You scored:

Task 1. Light has always been considered as the source of life. How does light prevail the north? See Aurora Borealis, for example....

As physics describes it:



As the dictionary entry says:

”...irregular, luminous phenomena, as streamers, visible at night in a zone surrounding the north magnetic pole and produced in the ionosphere when atomic particles strike and excite atoms; northern lights.

Your task is to decide whether the following statements are true or false: (Mark T/F)

1. It occurs between the 3° to 6° in the and between the 10° and 20° from the geomagnetic poles at longitudes.
2. It is named after a Greek goddess.
3. The diminishing oxygen amount is responsible for the red colour in the display.
4. Geomagnetic disturbance from an enhanced solar wind causes distortions of the magnetotail, resulting in aurora.
5. Electrons are the most responsible for the auroras. ___/5 points

Task 2. The Arctic is a place where sunlight is rare commodity... Nowadays it faces changes to impact its future. Read the following text to identify the problems both environmental and social it has to cope with! **Make 5 statements and illustrate them with the most evocative photos! (You may comment on the highlighted words and phrases!)** ___/10 points

The Arctic

The Arctic region encompasses a large, mostly frozen ocean surrounded by land, and is home to almost 4 million people. The Arctic is expected to experience **the greatest rates of warming** compared with other world regions. Its average temperatures have already risen at almost twice the rate as temperatures in the rest of the world over the past few decades. One of its major issues, polar region melting, results from ongoing increases of



greenhouse gases in the atmosphere. Unfortunately, reduction in sea ice (i.e. melting) is likely to have devastating consequences **for animals and humans**, including accelerated extinction; **destabilization of existing buildings**, roads, **pipelines**, airports and industrial facilities; and many others.

Climate change is taking place within the context of many other ongoing changes, including observed increases in **chemical contaminants** entering the Arctic from other regions, **overfishing**, land use changes that result in **habitat destruction and fragmentation**, rapid growth in the human population, and cultural, governance and economic changes.

Task 3. The State of Alaska is one of the northernmost inhabited areas of the Earth. **The following text about fishing regulation in the state. Some words and phrases have been removed from the text. Find the right words and phrases for the gaps. there is one extra item you do not need!**

Fishing licences

All residents and nonresidents age 16 or older must 1... a sport fishing license to participate in Alaska sport and personal use fisheries. In addition, a king salmon stamp is required to fish for king salmon. These laws apply in 2.... and marine waters. Sport fish licenses and king salmon stamps may be purchased online at most sporting goods stores, and at Fish and Game offices.

State residents age 60 or older who maintain their residency may participate in sport fisheries without a sport fishing license, but must 3,,,,, or and possess an ADF&G Permanent Identification Card. Permanent Identification Card applications are available only at Fish and Game offices. Holders of Permanent Identification Cards DO NOT need to purchase a king salmon stamp in 4.... fish for king salmon.

To participate in sport fisheries that have annual harvest limits (many king salmon and rainbow trout fisheries), anglers younger than 16 and holders of permanent identification cards must obtain a free 5.... (available at license vendors and at Fish and Game offices) in order to record their harvest of those fish.

a. *harvest record card-*

b. *investment involves-*

c. *purchase and possess-*

d. *apply for-*

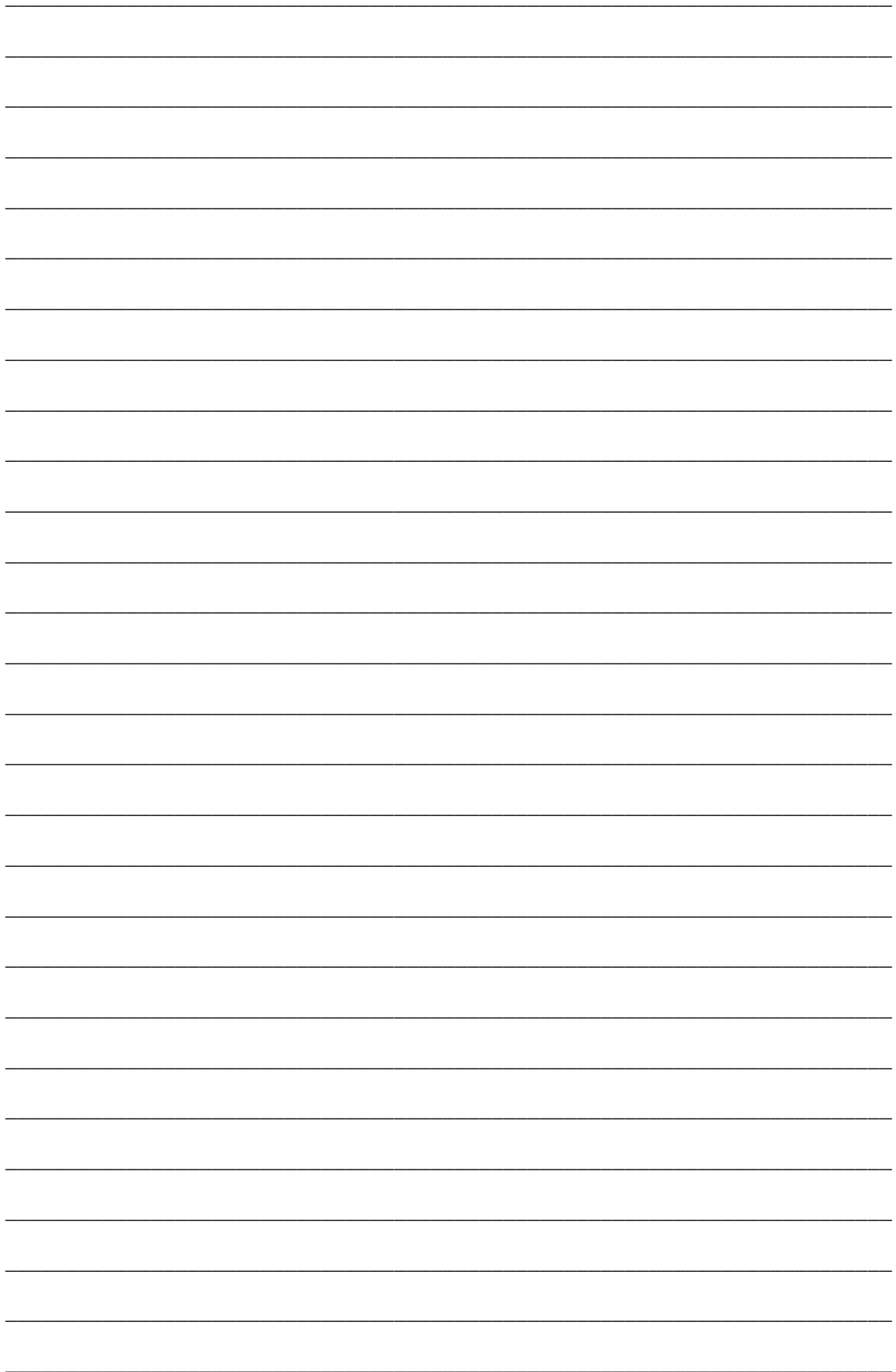
e. *order to-*

f. *both fresh-*

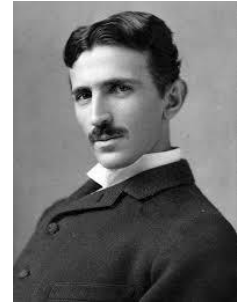
___/5 points

Task 4. To illustrate the life of the Eskimo population in Alaska, try and describe a day in the life of an Eskimo teenager living in the north. **Write an illustrated diary entry in 150-180 words, highlighting what he/she can see, who/what he/she can meet in a day.**

___/15 points



Task 5. Alternative energy sources and lightening? How can these two be linked? By Nikolai Tesla. He conducted research in many fields especially electricity. Read the text about the Tesla Coil and try and guess how it is related to today's search for clean nergy? Name at least one connection and give 2 reasons why.



Tesla Coil

The Tesla coil is one of Nikola Tesla's most famous inventions. It is essentially a high-frequency air-core transformer. It takes the output from a 120vAC to several kilovolt transformer & driver circuit and steps it up to an extremely high voltage. Voltages can get to be well above 1,000,000 volts and are discharged in the form of electrical arcs. Tesla himself got arcs up to 100,000,000 volts, Tesla coils are unique in the fact that they create extremely powerful electrical fields. Large coils have been known to wirelessly light up florescent lights up to 50 feet away, and because of the fact that it is an electric field that goes directly into the light and doesn't use the electrodes, even burned-out florescent lights will glow

___/8 points

Task 6. The Shetland Isles is located in the north of the UK. Their flag is unique:



What does their flag symbolise? (Explain your idea in 50 words).

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___/8 points

