COLLECTION OF TASKS

Around the World with Maths

eTwinning project

2015 - 2016



Statue of Liberty (USA) - by Czech Republic

Pupils from the eighth class - Bara, Jindra, Vasek, Jirka, Petr, Jarda and Honza visited the Statue of Liberty. Bara was studying map, Jarda was observing upper part of the statue, Peter was getting ready for taking photos, Jindra was inspecting whether he will look good on the photos and Jirka was refreshing himself by the hamburger and cola. Vasek and Honza were just looking for some way upwards. Honza tried to climb the pedestal and Vasek has found the door and stairs up. About how many stairs lead into the headband and how many to the torch of Statue of Liberty?



By Eldar Kamalov (Own work) [Public domain], via Wikimedia Commons

Giza (Egypt) - by Czech Republic

Jindra and his friends visited great pyramid of Giza. While the friends were making the photos, Jindra was searching the treasure under Cheops pyramid. How long (in meters) will be the tunel, which leads along diagonal base of pyramid.



By Nina at the Norwegian bokmål language Wikipedia [GFDL (http://www.gnu.org/copyleft/fdl.html), CC-BY-SA-3.0 (http://creativecommons.org/licenses/by-sa/3.0/) or CC BY 2.5 (http://creativecommons.org/licenses/by/2.5)], via Wikimedia Commons

Mt. Everest (Nepal) - by Czech Republic

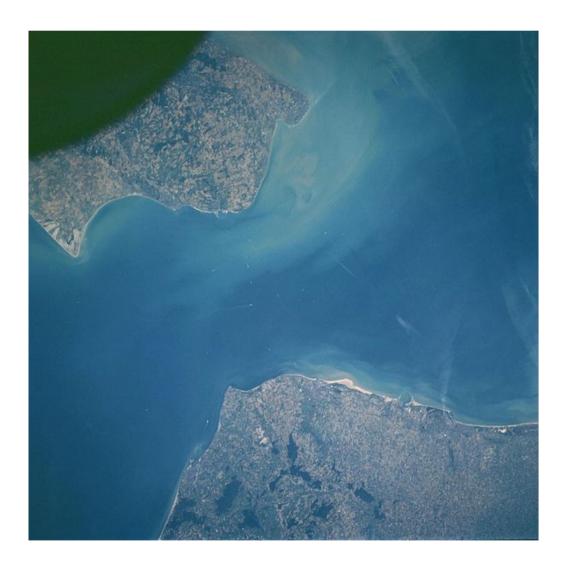
Katka, Kristýna, Matěj, Vítek, Jirka, Jarda and Michal want beat the highest mountain of the world, but they were losing their energy during the way up. How high they each climbed, if Katka climbed 56 % of the mountain height, Kristýna 52 %, Matěj 64 %, Vítek 51 %, Jirka 73 %, Jarda 82 % and Michal 79 % of the mountain height?



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English Channel (Great Britain) - by Czech Republic

We stopped at English Channel during our trip around the World. But one group was in France and second group was in Great Britain. Jirka, as great sportsman, jumped into waves in Dover at 8:00 and swam 0,75 kilometers per hour to France, supported by Jan and Petr. Motorboat driven by Bara started at 8:30 from Calais and run 25 km per hour. When and how far from Dover Bara met Jirka?



By NASA [Public domain], via Wikimedia Commons

Pont du Gard (France) - by Czech Republic

We went to France to Pont du Gard. We decided to climb to the top floor. Everyone went up on the right side of the bridge, only Honza went on the left side. He reached the top at 10:02 and walked to us at average speed of 0,5 km/h (he was shooting). We reached the top at 10:04 and sledged towards him 1,5 km/h. How long and how far we rode our sledge before we met Honza?



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Eiffel Tower (France) - by Czech Republic

One group of 9th grade students will go to the 2nd floor of the Eiffel Tower by the stairs, the second group will take the lift. How long can the second group stay in the cafe at the base of the tower so that they all reach the 2nd floor at the same time?



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Cristo Redentor (Brasilia) - by Czech Republic

Pupils of 9th grade from Stráž traveled to Rio de Janeiro to check preparation of Olympic games. They had to visit statue Cristo Redentor of course. They discovered, that the statue is really high and they started to compare her with average 9th grade pupil.

Task for teams: You will measure figure height, arm span, elbow length, palm length, hair length, leg length, circumference of head of all team members. Draw up your data to a table. Calculate average of all taken measurements for every attribute and find out how many times is Cristo Redentor larger than average pupil of your class.



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Barcelona (SPAIN)/Sydney (AUSTRALIA) - by Spain

From **Barcelona**, Cristian and Xurxo, take a plane at 23 hours in the direction of Sydney (Australia). If they travel for 14 hours, what time will mark the clock hanging on the wall from Sydney Airport when landing children?



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From Santiago de Compostela to Czech Republic - by Spain

The 1° ESO group from Alca School, living from Santiago De Compostela, is going on a trip to the Czech Republic by coach. The coach travell 3,24m, for each time the wheels go round. How many times do the wheels have to go round for the complete length of the journey, using the shortest route?





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Colorado river (USA) - by Slovakia

James and Mia sailed in the boat on the Colorado river. James sailed 53% of the length of the river. Mia sailed 15% less than James. How many km did they sail together? Find out how long is the Colorado river:)



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The biggest city of Brazil - by Slovakia

Gertrúda, Jožo, Uršuľa, Fero and Stela went to the biggest city of Brazil. They visited monument which is 30 metres high and 1000 tons weight. It is very popular mostly in Catholics. They wanted to document it buy photograph from each side. How many photos did they have to take if each of them could snap only 1,5 metre?



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Thales 'cane (Turkey) - by Spain

"An Egyptian priest asks smiling at Thales, which may be the height of the pyramid of King Khufu. Thales thinks and then says no calculate it conforms to eye, but measured without the help of any instrument. He leans on the sand and determines the length of his body.

The priest asks what he's thinking, and Thales explained to them, 'I'll just at one end of this line, which measures the length of my body, and I will wait until my long shadow matches. At that moment, the shadow of the Pyramid of Khufu your measure also has many steps as the height of the pyramid.'

The priest, bewildered by the extreme simplicity of the solution, wonders whether there is not some mistake, some sophistry, Thales added: 'But if you want me to measure that point, at any time, stick it in the sand my stick."

Now suppose that at a certain time of the day, the shadow of the pyramid, in antiquity, measuring 280 meters and the shadow of the stick measured 2.87 meters. Calculate how tall cane and tell us who was the sage who owned.



Piazza Dei Miracoli (tower). Italy - by Spain

Piazza dei Miracoli is recognized as one of the main centers for medieval art in the world and in 1987 was declared a World Heritage Site by Unesco. In it we find the Duomo Santa Maria Assunta with its bell tower tilted and world famous. Can you find out the length of the vertical from the highest point of the bell tower to its base?



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La Great Glass Pyramid (France) - by Spain

Noelia and Lucia, during their Easter holidays, traveled to the city of the Seine River. There, they visited the most famous picture painted by Leonardo da Vinci. Can you reveal the name of this picture and tell us the museum's name where it is?. They were impressed by the great glass pyramid located in the square that gives access to the building and they returned to Santiago de Compostela with a task, calculate the pyramid volume, can you help them?



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Around the world, (Aircraft Rutan Voyager) - by Spain

The Rutan Voyager was the first aircraft to circumnavigate the world nonstop without refueling. The average flight speed was 187 km/h. Upon landing, he had only 1.5% of that fuel. How far did the Rutan Voyager? How much fuel it needed for the flight?. Where it landed?



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