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| **C:\Users\Jana_User\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\Q3TECIRA\MC900212731[1].wmf** | **Science Exchange to Canada** | C:\Users\Jana_User\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\GZ0O8FHI\MC900326976[1].wmf |

Congratulations! You have been selected to participate in this year’s

**Science Exchange to Canada.**

In this information package you will be informed about your flight information, a packing list, your itinerary in Canada as well as some cultural information about the students with whom you will be working in Canada.

# Flight information

***TO CANADA***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Date** | **Airport** | **Airline** |
| **Departure** | Friday, November 28th, 2014  1:30 pm | Frankfurt International Airport | Air Canada |
| **Arrival** | Friday, November 28st, 2014  7:20 pm | Edmonton International Airport | Air Canada |

***RETURN***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Date** | **Airport** | **Airline** |
| **Departure** | Saturday, December 20th, 2014  4:30 pm | Edmonton International Airport | Air Canada |
| **Arrival** | Sunday, December 21st, 2014  11:20 am | Frankfurt International Airport | Air Canada |

# Packing List

|  |  |  |
| --- | --- | --- |
| **Outdoor equipment** | **Necessary clothing** | **Personal items** |
| down coat  ski pants  winter boots for hiking  sleeping bag  small backpack  refillable water bottle  ski goggles | scarf, gloves, hat  long underwear  warm sweaters | passport  health insurance card  spending money (suggested - amount $ 200.)  camera  personal medicine  cell phone (optional) present for your host family |
| **Laboratory equipment** |  |  |
| lab coat  safety goggles |  |  |

*\*\*Besides these personal items, we will also be taking equipment from our chemistry class to Canada due to a shortage at the local school. This equipment will be packed in a special suitcase by the teachers.*

|  |  |
| --- | --- |
| **Materials** | **Chemicals** |
| 6 x 300 mL beaker  6 x 100 mL Erlenmeyer flask with stopper  12 x 250 mL Erlenmeyer flasks  6 x magnetic stirrer/hot plate  6 x thermometer  12 x stand  12 x stir bar  6 x separatory funnel with stopper  3 x funnel  6 x fermentation tube  4 x stillhead  6 x round bottom flask  6 x tripod  6 x Bunsen burner  12 x clamps | methanol  ethanol  sodium hydroxide  acetic acid  hydrochloric acid  glucose  calcium hydroxide |

# Itinerary

|  |  |  |
| --- | --- | --- |
| **Date** | **Daily activity** | **Extra information** |
| 28.11.2014 | Arrival in Edmonton |  |
| 29.11.2014 | Bus trip from Edmonton to Coal River Lodge | Departure: 7 am  Arrival: 9 pm  Distance travelled: 1,282 km |
| 30.11.2014 | Bus trip from Coal River Lodge to Tombstone Territorial Park | Departure: 8 am  Arrival: 9 pm  Distance travelled: 1,272 km |
| 01.12.2014 | Tombstone Territorial Park | Hiking trip |
| 02.12.2014 | Bus trip from Tombstone Territorial Park to  Innuik, Northwest Territories  *Arrival at host families* | Departure: 8 am  Arrival: 3 pm  Distance travelled: 664 km |
| 03.12.2014 | Inuvik - *East Three Secondary School* | Getting to know the school |
| 04.12.2014 | Inuvik - *East Three Secondary School* | Attending grade 10 classes |
| 05.12.2014 | Inuvik - *East Three Secondary School* | Experiments |
| 06.12.2014 | Inuvik - Weekend | Activities with host family |
| 07.12.2014 | Inuvik - Weekend | Activities with host family |
| 08.12.2014 | Inuvik - *East Three Secondary School* | Experiments |
| 09.12.2014 | Inuvik - *East Three Secondary School* | Experiments |
| 10.12.2014 | Inuvik - *East Three Secondary School* | Presenting your results |
| 11.12.2014 | Inuvik - *East Three Secondary School* | Theoretical background of the experiments |
| 12.12.2014 | Inuvik - *East Three Secondary School* | Theoretical background of the experiments |
| 13.12.2014 | Weekend - Trip into the wild | Adventure trip |
| 14.12.2014 | Weekend - Trip into the wild | Adventure trip |
| 15.12.2014 | Inuvik - *East Three Secondary School* | PRESENTATION DAY  Goodbye Party |
| 16.12.2014 | Flight to Edmonton |  |
| 17.12.2014 | Edmonton | sightseeing |
| 18.12.2014 | Edmonton | sightseeing |
| 19.12.2014 | Edmonton | sightseeing |
| 20.12.2014 | Departure from Edmonton |  |
| 21.12.2014 | Arrival in Frankfurt |  |

# C:\Users\Jana_User\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\XAZK29DD\MC900278998[1].wmfThe science project

We are travelling to Inuvik, Northwest Territories in Canada to collaborate with the local high school, *East Three Secondary School,* in a science project on alternative fuels. This topic is unknown to both German and local students, who will learn together in this project. Since communities in northern Canada often lack funding to buy scientific school equipment, we will provide the chemicals and materials so that the grade 10 students (local and German) can do experiments on alternative fuels. The German students will help the local students with the experimental setups and the experiments in general because the local students don’t have a lot of experience with practical scientific work. The theoretical background of these experiments will be learned by all the students together. At the end of the project, both German and local students will present the project, what they have learned as well as the experimental results, to the school community.

This science project will allow students to not only get to know a different culture but also to learn more about chemistry and alternative fuels, a topic which is very relevant and important today, since we are using up our fossil resources very quickly.

# Your host families

In Inuvik, you will be staying with a host family for two weeks. Your host family will have a child your age and gender with whom you will be going to school, *East Three Secondary School,* while you are staying in Inuvik. You will have your own room at their house and the family will bring you to school every day. On the first weekend in Inuvik, you will be spending the weekend with your family. The second weekend we will go on a trip into the wild where we will be sleeping in igloos.

# Background information[[1]](#footnote-1)

Inuvik ( “place of man”) is a city which lies in the Northwest Territories. The city is the largest Canadian community north of the Arctic Circle and was planned and built by the Canadian government. Since oil and natural gas were discovered in the 1970s, the city has been growing. The city has a population of 3,484 of which 38,9 % belong to the ethnic group *Inuvialuit*. Furthermore, 24,4% of the population belong to other native Canadian tribes. The main language spoken is English, but many people in the community speak *Inuvialuktun*, the native language of the Inuvialuit ethnic group.

The *Inuvialuit* ethnic group is part of the *Inuit* (“the people”), an Aboriginal people which mostly live in the northern region of Canada. Although they used to be a nomadic people, they have settled in communities. The Inuit still mostly live off seal, whale, duck, caribou, fish and berries, food which they can get from the land, as did their ancestors. Culturally the Inuit preserve their language, their own family and cultural laws, as well as their behavior and attitudes. Their art is an important part of their culture and well-known throughout Canada. The symbol mostly associated with the Inuit is the *Inukshuk*, a large stone structure used as landmarks or to fool caribou while hunting (see picture 1).



Picture 1: Inukshuk in northern Canada.[[2]](#footnote-2)

After the Canadian federal government tried to force the Inuit to assimilate to a more Canadian way of life and settle down into communities in 1939, the Inuit organized themselves politically and fought for self-government. Today, federal laws allow the Inuit some level of self-government. Despite this, there are many social problems that these people, living in the extreme north, face. Ever since the government forced the Inuit to live in settlements, there has been a serious housing shortage and lack of medical attention. As a result, the Inuit are more likely than other Canadians to face obesity or diabetes. Furthermore, the highest suicide rates in Canada are among Inuit youths due to a lack of opportunities for young people.

**Sponsored by:**







1. This information has been adapted from the following websites: http://www.thecanadianencyclopedia.ca/en/article/inuit/, http://eastthreesecondary.com/about-east-three-secondary-school/ [↑](#footnote-ref-1)
2. Picture taken from: http://www.thecanadianencyclopedia.ca/en/article/inuit/ [↑](#footnote-ref-2)