Lesson Focus: How does the Sahara Desert affect how homes are built in Luxor?

Materials:

- Internet access for videos
- Notebook and crayons

Invitation to Learn: In this lesson you will gather evidence to explain how the Sahara Desert influences (cause) how homes are built (consequence) in Luxor.

(Fun Fact: Did you know that BC has all the climatic zones? Osoyoos has a desert climate.)

Watch and read the following. Be ready to discuss what you have learned.

What is a desert? https://www.youtube.com/watch?v=RZLpE7jJSsE

Bill Nye the Science Guy: https://www.youtube.com/watch?v=Cl0mNRKaRrs

Deserts

The Sahara Desert – Trent https://www.youtube.com/watch?v=L7XrabWYHSg

Millard

A Walk in the Desert. By https://www.youtube.com/watch?v=uw2yFf3vn94

Caroline Arnold

Ask/Discuss:

What do the words "cause" and "consequence" mean?

For example, if something "causes" something, what happens?

- Causes include people, events, and ideas that make something happen.
- Consequences are the things that happen as a result of the cause.

What is a desert?

- A desert is a very dry area/region with very few plants. Some desert plants include shrubs, cacti, and woody trees.
- There are both cold and hot deserts.
- Some cold deserts and polar deserts are found in Antarctica, Canada (Arctic), Greenland, Iran and China.
- Most hot deserts are in the subtropics. These deserts are hot during the day and chilly at nights.
- The Sahara Desert of Africa is a hot desert. Luxor, Egypt, is in the eastern part of the desert. The Sahara has very little rainfall; very high heat during the day; very chilly temperatures in the evenings; and few trees.

Learning from First Peoples

First Peoples in Canada have had to adapt their homes to the climates they live in. Those who lived in warm deserts, built homes in spring and summer made from light grass. Reed grasses were woven to provide shade and allow breezes to blow through.







Look at these images.

- What do you think the houses are made of?
- Why do you think these materials are used?
- What do you notice about the roofs?
- Why do you think the roofs are flat? (Does your house have a flat roof?)
- What do you notice about the windows?
- Why do you think the windows are small and close to the roof?
- What do you notice about the colour of the houses?
- Why do you think they are light coloured?
- Why do you think so many homes are apartments?

Have a Discussion:

The homes in Luxor are carefully built to withstand the conditions of a desert.

- There are no natural forests in Egypt and as a result wood is scarce (cause) so homes are constructed of brick and clay (consequence). These materials provide good insulation to keep the heat out during the day and keep homes from becoming too cool in the evenings.
- Most homes have a flat roof since rainfall is rare and there is no concern about rain collecting/accumulating.
- The windows are small and near the roof to limit the amount of direct sunlight that gets into the house.
- The houses are light in colour to deflect the heat of the Sun.
- Most families live in apartment-style homes rather than separate homes because building materials are hard to find and space is limited in the city.
- Families often live in the same apartment building as other extended members of their family.

Notebook Time:

- 1. Research your local climate.
- 2. Think about how your local climate (temperatures, rainfall) affects your life (your home, your clothing choices, your transportation choices, your recreational choices.)
- 3. Draw an illustration of your climate
- 4. Write a paragraph describing how your local climate affects your life