



## **Kamloops Exploration Group (KEG) Downtown Geology Walking Tour – Kamloops BC**

Minerals and mined products are all around us. We hope this tour will show you some interesting sites and uses of rocks and/or mined products in the downtown area. It will take about 2 hours to complete. As you visit each site, please answer the appropriate question. To complete this tour, use the map to visit each site location.

Please stay safe during your time touring the downtown, cross the streets at crosswalks and always watch for vehicles. **Have fun!**

1. Art is all around us. This stop is at a well-known statue created by Garry Davies and Terry Norlander. The metals used in this statue are copper and tin (bronze). Major sources of copper are the minerals chalcopyrite and chalcocite and tin comes from the mineral cassiterite. The main part of the statue sits on a base of concrete. Many items around us have been mined, including the sidewalk you are standing on, roads, the streetlights, and even your car is made of mined products.

**Name one item (there are many) that comes from mining that you can see from this location.**

2. This site has many interesting geological aspects. The beautiful stone wall is made of many different rocks that have a subrounded shape (how many different rock-types can you count?). The bronze statue (bronze is a mixture of copper and tin), the wooden benches with metal arms, and even the stained glass windows of the church adjacent, are made of mined products (Did you know, this church was constructed in September 1887?). The main component of glass is silica obtained from quartz, a common mineral in most sand deposits.

**What is the large concrete structure at the centre of the square?**

3. This cathedral was built built in 1921 to replace a wood frame church which had burned. The building is made mainly of brick and has stained glass in its front doors. Glass is coloured by mixing metals into the glass while it is molten. The blue is from adding cobalt, yellow glass is created by adding cadmium or lead and the addition of gold forms red glass.

**What shape are the windows under the dome?**

4. Large tiles of stone cover the lower portion of this building. The rock is called syenite. This syenite contains large crystals (phenocrysts) of potassium feldspar.

**What colour are the phenocrysts?**

5. Underneath this building there used to be a collection of shops, passageways and wooden stairways connecting rooms of various sizes. Two stone columns grace the entrance of this building. Both these columns are made of granite, a type of igneous rock; an igneous rock is the frozen product of once molten magma or lava. As the magma moves up through the earth, it may pick up pieces of existing rock that do not completely melt. When this happens, the foreign rock is called a xenolith. One of these columns has a xenolith in it (it is dark, about 7cm long, and looks different than the rock around it).

**Which column has the xenolith, the left or the right?**

6. This building was built in 1935 to replace the wood frame building on Victoria Street. This 'new' firehall was designed to accommodate more trucks and staff. The building was designed in the Spanish style popular at the time, and surprisingly, the tower did not house a bell, but was used as a lookout and to hang hoses and gear to dry. On the doors of the building, there are metal handles and backplates that are made of an alloy, or mixture, of copper and zinc. Many alloys of metals are used as decorative embellishments in our homes and our buildings.

**What is the name of the alloy used to make these door handles?**

7. This interesting monument pays tribute to a geologic phenomenon in the area. The monuments have copper banding, depicting different water levels. The copper of these bands comes from the mineral chalcopyrite, which is mined from various locations around BC, including the Highland Valley Copper Mine in Logan Lake.

**What was happening 10,500 years ago?**

8. This outdoor art is a relative new-comer to Kamloops, arriving in June 2007. It is created by renowned Canadian sculptor Joe Fafard. The statue is made of a textured bronze. Bronze is an alloy of copper and tin.

**What is the name of this statue?**



**KAMLOOPS  
EXPLORATION** GROUP

**DOWNTOWN KAMLOOPS WALKING GEOLOGY TOUR**





Thompson River

Riverside Park

Lorne St

Lansdowne St

Victoria St

Seymour St

2nd Ave

3rd Ave

4th Ave


 Kamloops Museum & Archives

Nicola St

Downtown Kamloops, B.C.



**DOWNTOWN KAMLOOPS  
WALKING GEOLOGY TOUR**

 Geocache Location

 Suggested Walking Path

0 50 100 150 200 Meters

