Tsolum Watershed Questions with answer key:

1. **What is an estuary?**

The place where freshwater rivers join the sea. Eg. K'omoks Estuary in the Comox Valley receives water from the Puntledge and Tsolum Rivers.

2. **How would you define the word watershed?**

The area of land where all rainfall will drain and collect in the ocean. Eg: Tsolum River is a watershed with "boundaries".

3. **Where does the Tsolum start and end?**

The Tsolum starts near Mt. Washington and ends when it meets the Puntledge River, just below the Condensory Bridge.

4. **Besides mining, what are the two other main activities (land uses) that happen in the Tsolum watershed?**

Agriculture (farming) and logging.

5. **Describe 3 things farmers can do to reduce their contribution to water pollution?**

Spray manure during dry weather and when soil will soak up manure. Leave buffer strips of vegetation or trees between their fields and streams. Preserve wetlands that will soak up water and pollution, and that will store water (prevent downstream flooding).

6. **Why is manure bad for creeks and rivers?**

It leads to a disruption in the water quality balance; leads to algae blooms. Algae can choke stream, and clog fish gills. When algae dies and decomposes, it uses up oxygen, then fish do not get enough oxygen.

7. **When was the mine started on Mt. Washington, and how long did it operate for?**

It started in 1964, and operated for three years.

8. **How long did the copper leachate drain into the Tsolum River before it was fixed? Why was it bad?**

Almost 50 years (1964-2010= 46 years). It killed many of the fish in the river because high levels of copper and acid drainage are lethal for fish.

9. **When did the cover go on the mine, and how much did it cost?**

It was covered in 2010, and it cost 4.5 million dollars.

10. **How long will the cover last, and why is it closed to people?**

It should last 100 years, and it is closed so that the membrane won't be damaged by off road vehicles, which could make a hole in the membrane.

11. **What ecological service to us do trees provide? How do we benefit from having trees in our watershed?** They provide oxygen. Absorb and store large amounts of water so that is doesn't drain quickly into streams. Can prevent downstream flooding. They allow absorbed water to soak back into the groundwater supply (infiltration) and back into the air through leaves, slowly (transpiration).