A Train's Interactions

❶ **Identify the sphere(s) this photo would be in and explain why.**

❷ **Identify 3 types of interactions that might occur here.**

❸ **Identify 3 types of interactions that humans might have here.**

❹ **Identify potential animal and plant life that might live here.**

Potential Answers:

Atmosphere and geosphere and biosphere:

Atmosphere:
• A train's operation produces emissions that can contribute to air pollution, such as nitrogen oxides, sulfur oxides, and particulate matter.

• A train's operation produces noise pollution, which can be a nuisance to nearby residents.

• A train's operation produces heat, which can increase the temperature of the air around it.

• Trains can cause air pollution from the burning of fossil fuels like oil and gas.

• Trains can create dust, which can be inhaled and lead to respiratory issues.

Geosphere:
• A train requires metal to construct, which is mined from the Earth.

• A train runs on tracks, which are constructed from materials such as steel, stone, and concrete.

• A train's operation produces vibrations that can cause soil erosion and damage to structures, such as buildings and bridges.

Biosphere:
• A train can help reduce traffic congestion, which helps to improve air quality.

• A train can transport people and goods, which helps create jobs and economic opportunities.

• Trains can carry more people and goods than cars, reducing the number of vehicles on the road.

• Passengers on trains emit less air pollution than those travelling in cars or buses.