OPEN RESPONSE: G, MOTION AND FORCES

A book is on a table. A student pushes it for a short time. Initially the book moves, but then it comes to a complete stop.

a. Identify the forces acting on the book before it is pushed. You may include a labeled diagram in your answer.

b. Explain why the book moves and then comes to a complete stop. Use the laws of physics in your answer.

c. The student wants the book to move at a constant speed in one direction. Describe the physical conditions needed for this to occur.