This is a preliminary logic outline for a person starting in a classroom, attempting to find a bathroom. This assumes no distinction between male/female restrooms (ie, the cognitive agent has only one choice – ie a unisex restroom). This also assumes that the cognitive agent can identify and understand objects, signs, etc. and its only purpose is to decide on the correct path given the identifying characteristics of its environment. The comments (“//”) denote thought process.

Starting location: classroom

Logic flow:

1. How many doors are there? //need to get out of classroom, into hallway via door
   1. One -> exit door
   2. More than one 🡪
      1. How many doors are there with windows? //door to hallway generally has window vs. storage closets, which don’t
         1. One 🡪 exit door with window
         2. More than one 🡪 exit door with window closest to current position
2. What is in hallway? //listed in order of cognitive priority
   1. Sign
      1. Sign leading toward bathroom 🡪 follow
      2. Sign leading toward staircase 🡪 follow
         1. Look for bathroom signs or water fountain near staircase
      3. Sign leading toward exit 🡪 follow
         1. Look for common areas & bathroom signs
   2. Open hallway
      1. Path that leads to open/common area 🡪 follow
      2. Path that leads to hallway intersections 🡪 follow
         1. At intersection point, look down competing hallway and redo logical loop.
      3. Path that leads to hallway turning point (ex. forced 90- degree turn)