Essential Question/Summary
Students will be able to use markers and OzoCodes to complete a scavenger hunt for an assortment of winter items.

Information
There are multiple possible solutions, but just one will be shown below.

Prerequisites
Students should be familiar with OzoCodes.

Grouping
Students may work individually or in pairs.

Materials
- Markers for drawing OzoCodes
- Handouts (scavenger hunt map found below)
- Ozobot Bit or Evo

Age/Grade Level
Grades K - 12

Duration
Approximately 30-60 minutes.

Topics
Computer Science

Academic Standards
CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.
ISTE 4.c Develop, test and refine prototypes as a part of a cyclical design process
ISTE 6.a Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication
Overview
Each student will be given a handout, which contains an assortment of winter/holiday items that are connected by black lines that Ozobot can follow. However, there are empty slots for students to fill in with OzoCodes. Students will use OzoCodes to find the fastest path to visit every item—every item must be visited once.

Related Activities
The House Lighting activity is a holiday activity that utilizes OzoBlockly to program the Ozobot instead of OzoCodes.

LESSON/ACTIVITY PLAN

This activity will allow students to think critically to create the fastest path that will visit each item in the scavenger hunt. The items include gifts, cookies, lights, a snowman, hot cocoa, and ice skates.

Instructions:
1. Hand out the printouts to the students (one per pair or student)
2. Explain that they will fill in the OzoCodes into the white slots on the map to guide Ozobot to every item exactly once
3. Hand out the Ozobots and tell students that they should try to find the fastest possible solution to visit every item
   a. There are multiple solutions
   b. The circle around each object indicates which line is associated with it
4. Students may work in pairs and can compete with other pairs to see which team has the fastest solution

Notes:
- It may be helpful to give each student/pair a sheet of OzoCodes and an extra handout so they can find a second solution.
- Link to the OzoCodes
- For more advanced students, see if they can come up with more than two solutions