

Lesson

RECYCLEBOT

CREATED BY

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TOPICS

Robotics, Programming, Earth
Science

AGES

Grades K-5

METHOD

Color Codes

DURATION

30-45 minutes



Students will use previous knowledge of Ozobots and OzoCodes to program RECYCLEbot to pick up recyclables and deliver them to the recycle bin.

Grade Levels: K, 1, 2, 3, 4, 5

Duration: 30-45 min

Materials: OzoBot (1.0 or higher), markers, printable course templates, scissors & tape (optional)

Objective: Help RECYCLEbot pick up recyclable trash while staying away from the landfill and garbage truck !

Prerequisites: Knowledge of how OzoCodes work



Your Mission:

Help RECYCLEbot pick up recyclable materials around town, and deliver them to the recycle bin before the recycle truck comes.

You must program RECYCLEbot to:



Avoid the landfill and garbage truck

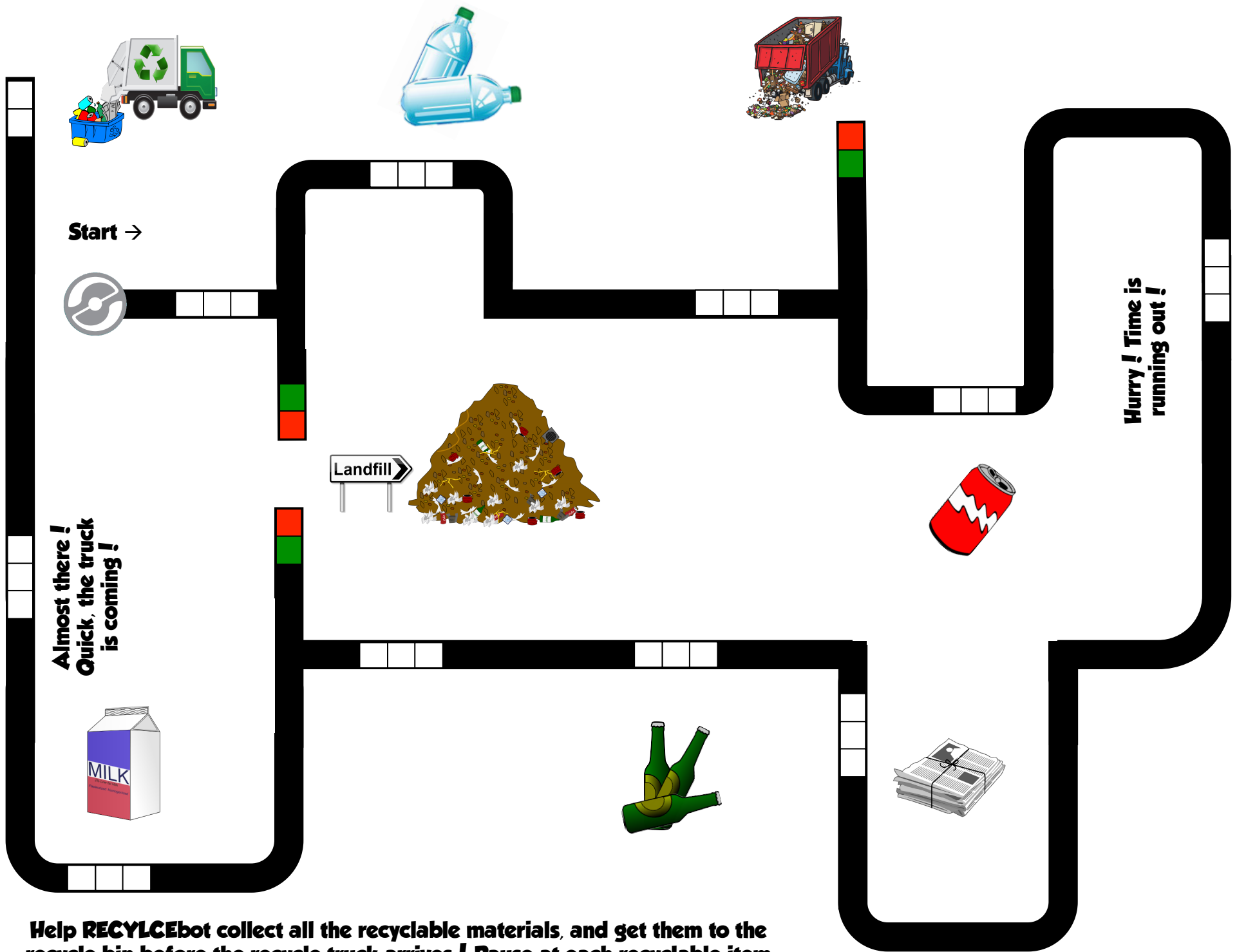


Stop at each recyclable to pick it up

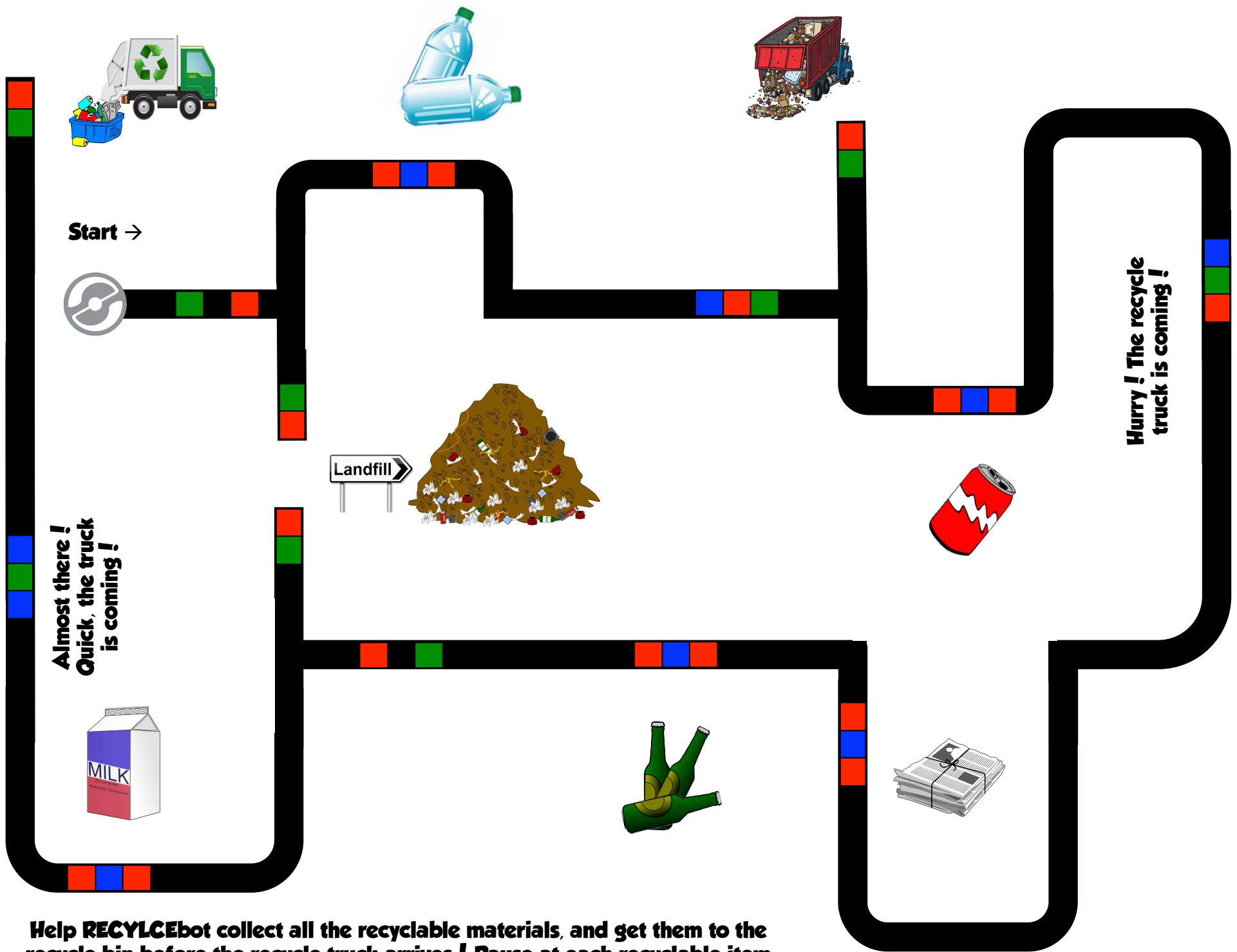


Get to the recycle bin before the recycle truck arrives !



Use your OzoCode cheat sheet, and printed course template, to complete your mission.







Help RECYLCEbot collect all the recyclable materials, and get them to the recycle bin before the recycle truck arrives ! Pause at each recyclable item to pick it up, but be sure to stay away from the landfill and garbage truck !




OzoCode Cheat Sheet



 **turn left**
 **turn right**


 **pause (3sec)**




 **fast**
 **turbo**
 **nitro boost**


 **win/exit**
(game over)

OzoCode Cheat Sheet



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 **turn right**


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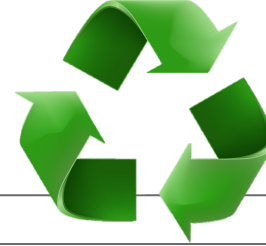
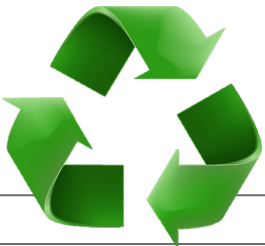
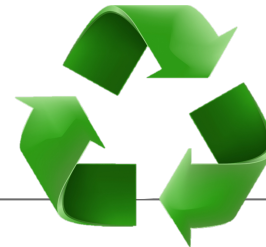
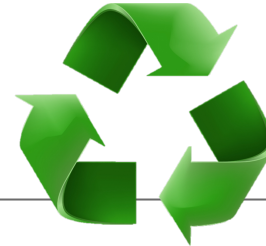
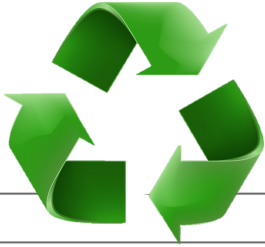
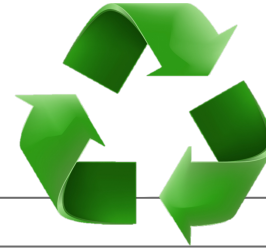
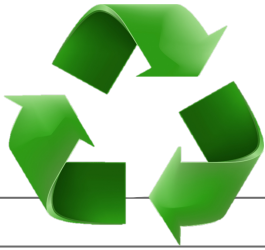
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(game over)

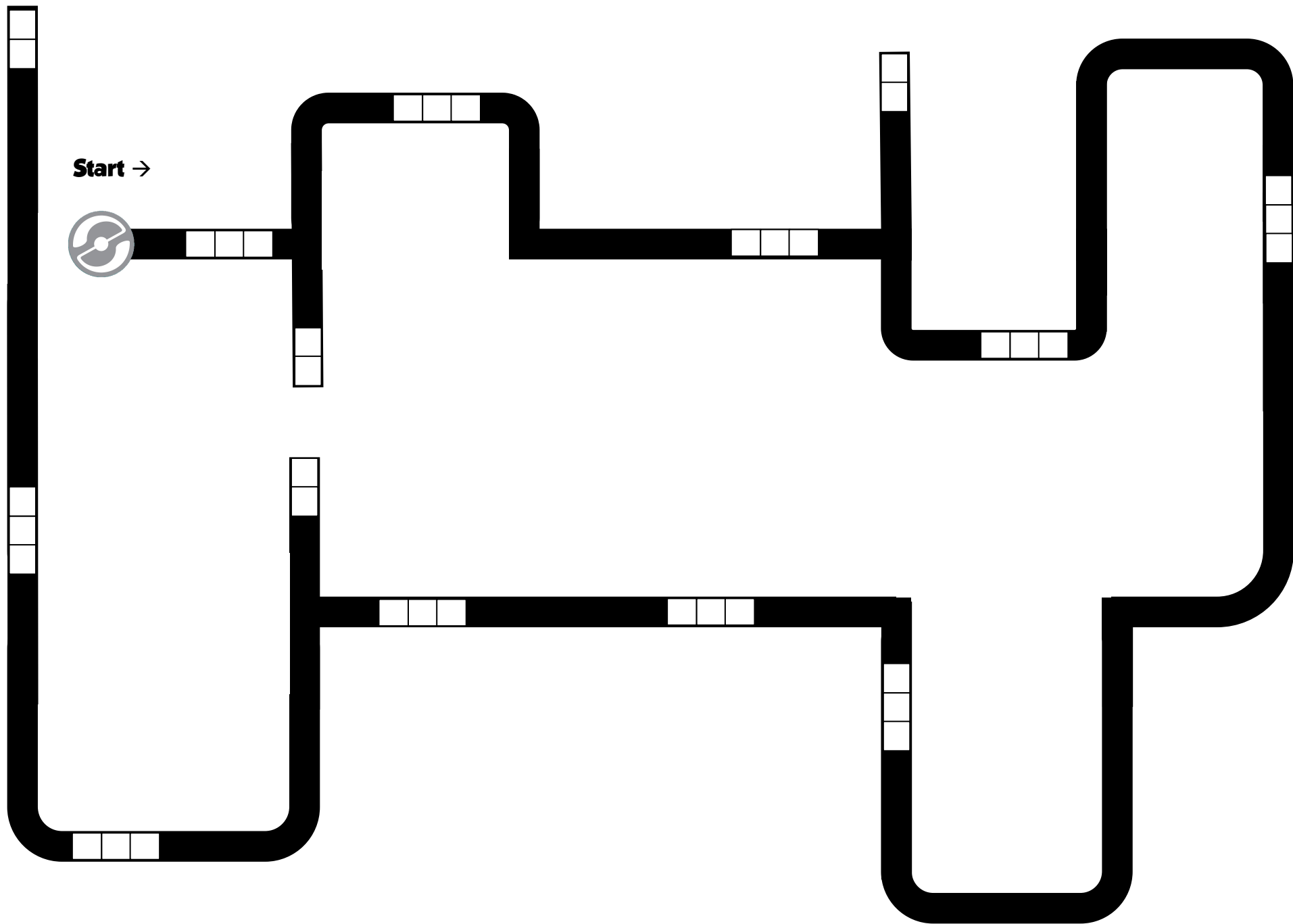
Optional Resources

- RECYCLEbot costume**

- Blank template for students to draw their own recyclable materials and/or make up their own course**

- *Additional ideas: make 3D pop-up items for the course**





Questions?

Please feel free to contact me with any questions or lesson suggestions !



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Use the hashtags #RECYCLEbot & #OzoNation to share photos of your students on social media !