ozobot

1) For pre-prograamed mode, hold down the power button on the side of Ozobot until the LED light turns on.

2) To Calibrate: Press the power button for 2 sec until Ozobot flashes white. Release button. While Ozobot is flashing white, place on black calibration circle. Calibration is successful when Ozobot blinks **green**.

3) Create a path for Ozobot to follow by drawing a thick line with a black marker.

4) Give Ozobot coded instructions by drawing a path with color codes.

5) What path does Ozobot choose each time it comes to an intersection with no code?

Use to Calibrate

START
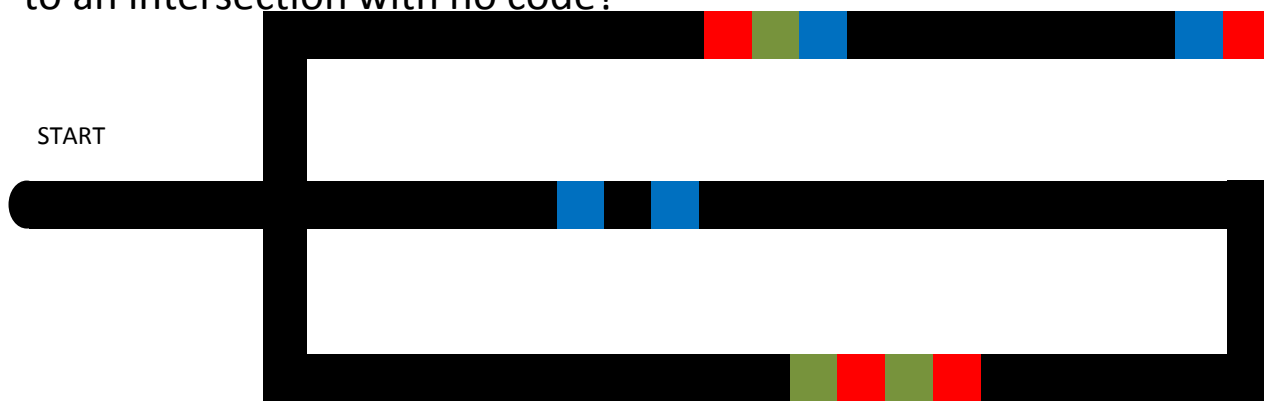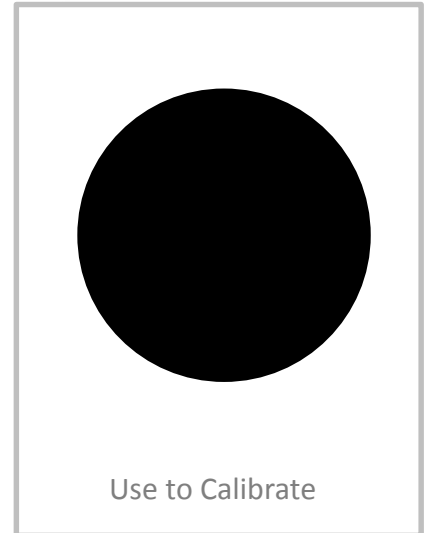
Color Coding

Ozobot is a line-following robot that uses photo sensors to detect a dark line against a white surface. It turns its motors to stay centered on the line. Ozobot recognizes multiple colors, and is pre-programmed to perform actions based on color codes. Users can program new codes using OzoBlockly programming.

NAVY NOTES

The Navy uses unmanned surface vehicles for mine hunting missions. These robots safely find and neutralize underwater mines using sonar, acoustic and magnetic signals.

ozobot

Color code reference chart
OzoCodes

SPEED

SNAIL DOSE	SLOW	CRUISE
FAST	TURBO	NITRO BOOST

DIRECTION

GO LEFT	GO STRAIGHT	GO RIGHT
LINE JUMP LEFT	LINE JUMP STRAIGHT	LINE JUMP RIGHT
U TURN	U TURN (LINE END)	

COOL MOVES

TORNADO	ZIGZAG
SPIN	BACKWALK

OZOBOT & GAMEZONE - C
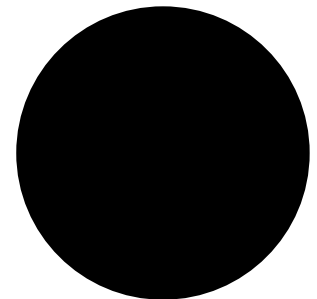
Use to Calibrate

ozobot

Ozo Blockly

STEM — UNITED STATES NAVAL ACADEMY

1) Go to ozoblockly.com on your computer or tablet and select Get Started.
2) In the OzoBlockly Editor, choose a toolbox mode (1-5).
3) Drag and drop blocks to create your program.
4) Select a tab on the right to check out Examples or try a Challenge.
5) Once your program is ready, click Load Ozobot at the bottom of the screen.

CALIBRATE: Press the power button for at least 2 sec until Ozobot flashes white. Release button. While Ozobot is flashing **white**, place against the white spot on screen. Calibration is successful when Ozobot blinks **green**.

LOAD: Power Ozobot back on. While holding against the white spot on the screen, click Load. Ozobot will be **green** until colors stop flashing.
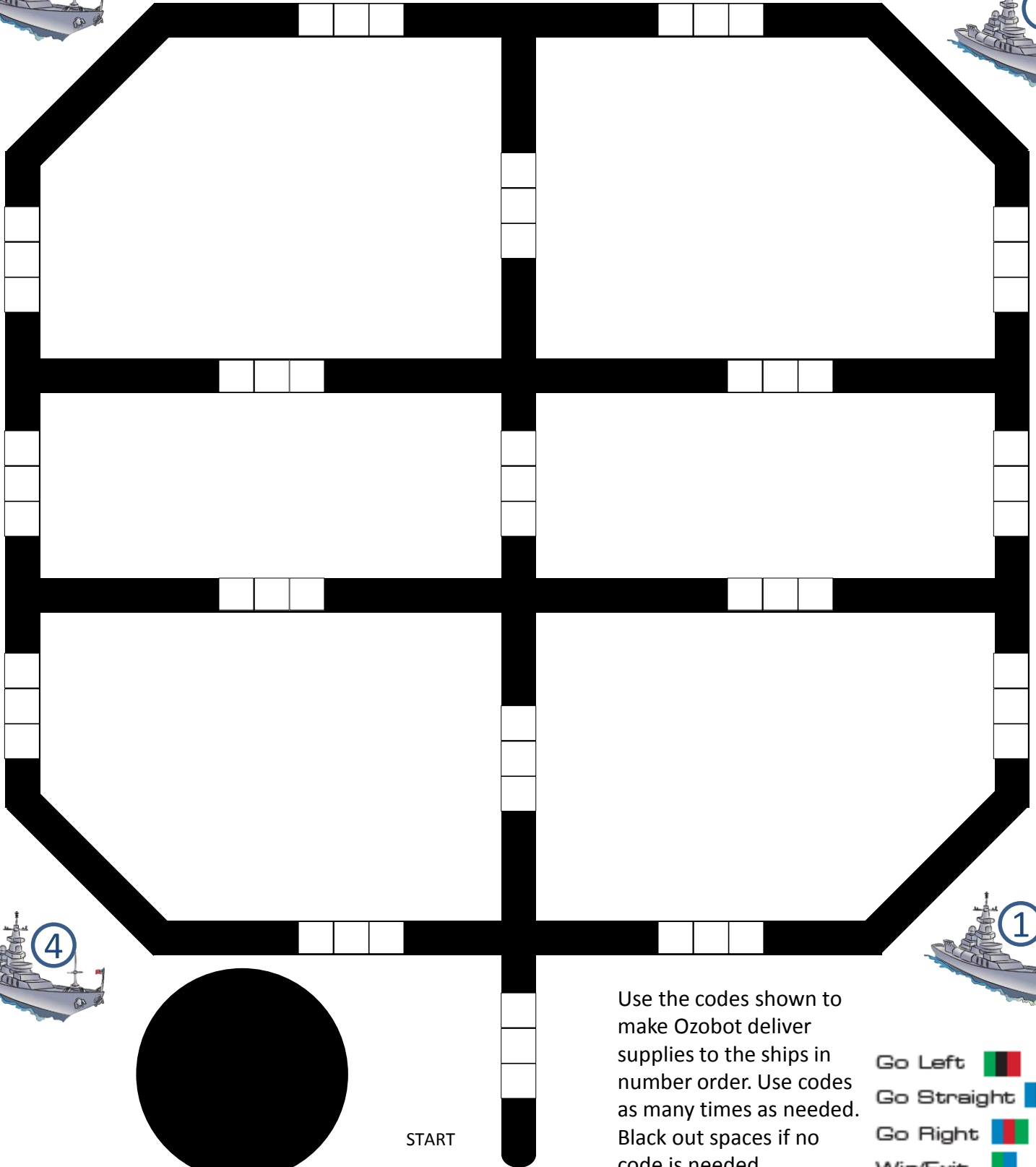
RUN: Place Ozobot on table and **double-click** power button to run program.
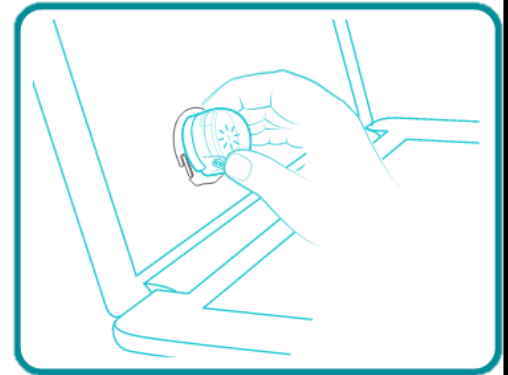
Find other challenges at games.ozoblockly.com

Ozo Blockly

Beginner

1 2 3 4 5

→ Movement

💡 Light Effects

⏱ Timing

🔁 Loops

```
repeat  4  times
do      set light color  ▮
        move  forward  distance  4 steps  speed  medium
        set light color  ▮
        rotate  right  speed  medium
```

Examples

Reference

Challenges

🔄 Load Ozobot

ozobot

Underway Replenishment
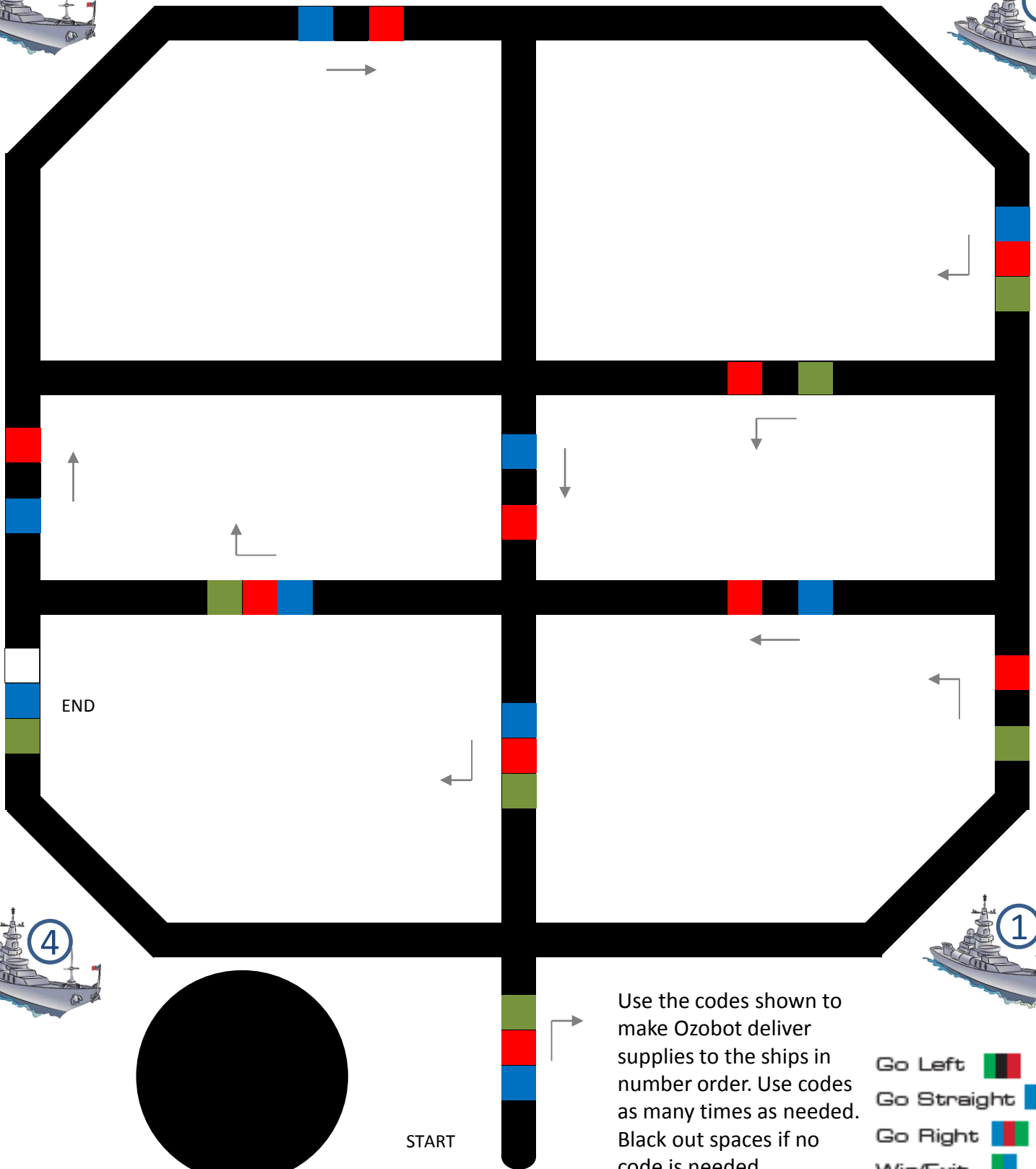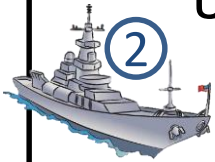
②

③

①

④

START

Use to Calibrate

Use the codes shown to make Ozobot deliver supplies to the ships in number order. Use codes as many times as needed. Black out spaces if no code is needed.

Go Left
Go Straight
Go Right
Win/Exit

ozobot

Underway Replenishment

②

③

①

④

END

Use the codes shown to make Ozobot deliver supplies to the ships in number order. Use codes as many times as needed. Black out spaces if no code is needed.

START

Use to Calibrate

Go Left

Go Straight

Go Right

Win/Exit