



## **Coral Reef Cleanup**



Code your VR Ocean Cleaning
Robot to collect as much trash as
possible from the Mangrove Reef
before the battery runs out!

## **Key Information:**

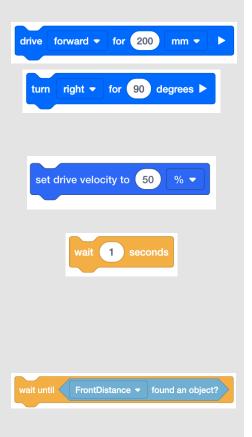
- The VR Robot is equipped with a solar charger and a battery.
- The battery's charge only lasts a few minutes. You must collect as much trash as possible before the battery drains completely.
  - Remaining battery life, along with the total trash collected in kilograms, is shown at the bottom left of the Playground.



- The VR Robot has sensors that can be used to monitor its location and to detect trash.
- The VR Robot must not collide with the coral reef. If it does, the mission will immediately end.

## Reminders & VEXcode VR Tips

- Blocks Use Drivetrain blocks to code your robot to complete the challenge.
  - [Drive for] drives the robot forward or in reverse for a specified distance
  - [Turn for] turns the robot right or left for a specified distance
- Balance speed with battery life Driving faster drains the battery on the robot more quickly.
  - [Set drive velocity] sets the speed of the Drivetrain
- Try waiting More trash falls to the floor the longer your robot is running.
  - Try adding a [Wait] block to your project to make the robot wait for more trash to fall.
- Use a sensor The VR Ocean Cleaning Robot is equipped with multiple sensors to detect trash and the blue border around the coral reef.
  - Try using a [Wait until] block with a sensor to make the robot drive until the Eye Sensor detects trash.



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