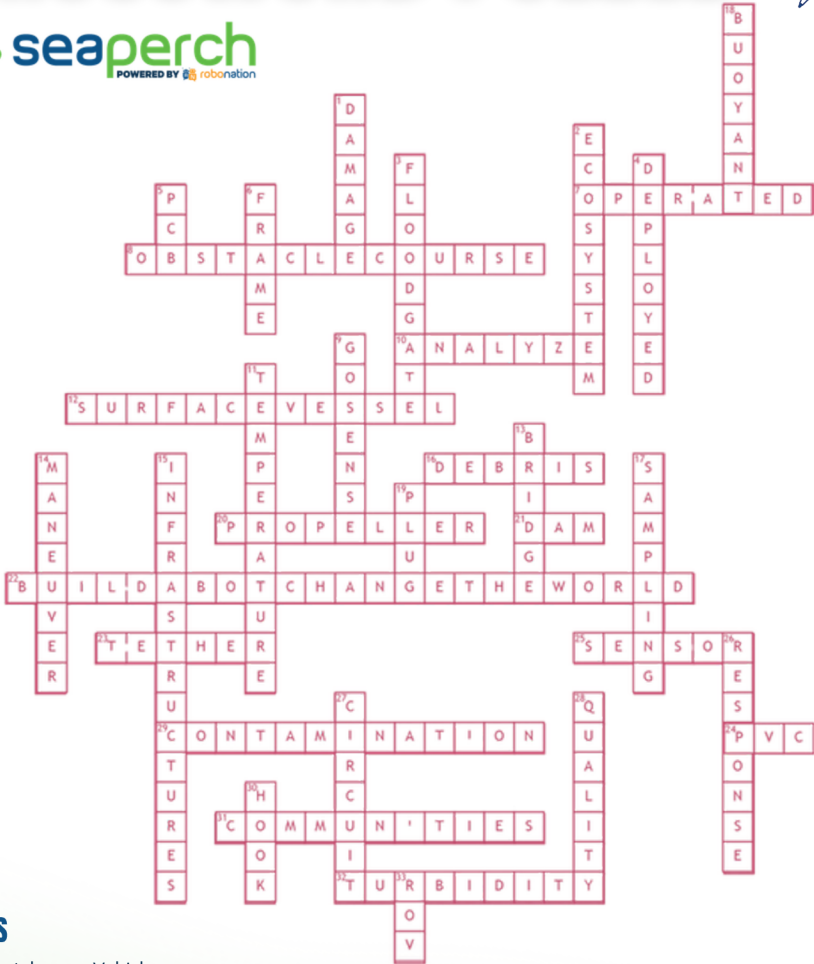


CROSSWORD PUZZLE



ACROSS

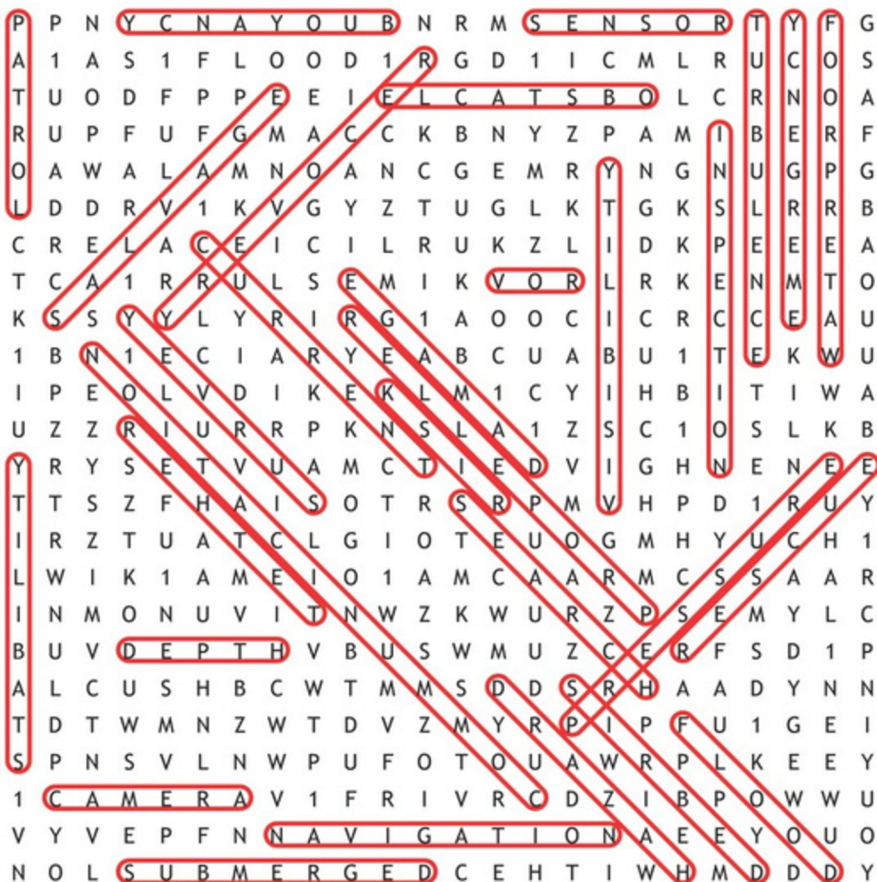
7. Remotely _____ Vehicle
8. Hoops oriented at different angles
10. What scientists do after collecting data
12. Final destination for water sample
16. The storm's messy leftovers
20. Helps the SeaPerch move
21. Holds back water
22. RoboNation tagline
23. A cable that connects an ROV to its controller
24. Polyvinyl Chloride (ROV frame material)
25. Detects and measures environmental changes
29. Microscopic problems in the water
31. Restore balance for both _____ and ecosystems
32. How clear or cloudy the water is

DOWN

1. When things are broken from the storm
2. Community of plants, animals & their environment

3. Rotating barrier to stop water
4. When an ROV is sent out
5. Printed Circuit Board abbreviation
6. Body of your SeaPerch
9. RoboNation product
11. How warm or cold it is
13. Task 1 Structure being repaired
14. Controlled turning in tight spaces
15. Inspecting damaged _____
17. Collecting water for testing is called
18. Able to float in water
19. Stop the leak with this
26. Storm _____
27. Complete path that electricity flows through
28. Making sure water _____ is safe to drink
30. Final placement location for debris
33. A SeaPerch is a _____

WORD SEARCH



FIND THESE WORDS

- | | | | | |
|-------------------|-------------------|------------------|-------------------|----------------------|
| ROV | Risk | Search | Depth | Patrol |
| Flood | Tether | Sensor | Rescue | Survey |
| Debris | Hazard | Camera | Salvage | Current |
| Damage | Pressure | Stability | Propeller | Obstacle |
| Visibility | Navigation | Recovery | Inspection | Waterproof |
| Buoyancy | Submerged | Emergency | Turbulence | Communication |

ROV TOOLS & TASKS: MATCH-UP CHALLENGE



Remotely Operated Vehicles are critical tools in underwater science and exploration. Match each ROV component to the task it's best suited for to show your mission-ready mind!



ROV TOOLS

A. Manipulator Arm

Used by NOAA's Deep Discoverer

B. Sonar System

Used by Ocean Exploration

Trust's ROV Hercules

C. Sediment Scoop

Used by Woods Hole Oceanographic

Institute's ROV Jason

D. Hydraulic Cutter

Used by Saab's Seabeam Cougar XT

E. Camera System

Used by NOAA's Deep Discoverer

F. Buoyancy Control Unit

Used by Schmidt Ocean Institute's

ROV SuBastian

G. Water Quality Sensor

Used by NOAA's Deep Discoverer

H. Sample Retrieval Basket

Used by University of Miami's Bethic ROV



ROV TASKS

1. Collect footage of any cracks or shifts in bridge supports

2. Slice away netting or wire that could trap wildlife

3. "Outlines" debris, structures, and terrain using sound waves

4. Gather samples to test for pollution, chemicals, or contaminants

5. ensures smooth movement critical for precise inspections or sampling.

6. Can grab branches or trash out of the way for inspections or navigation

7. Can scoop up mud, sand, or small organisms disturbed by the storm

8. Can quantify how murky the water is, helping assess how much sediment was displaced.

