# Sea Dragons

## Port Townsend STEM Club — Port Townsend, WA

#### About the Team

**Dimensions:** 26.7cm by 54cm by 45.5cm **Weight:** 10 kg **Student Hours:** 800 hours



#### Sea Dragons Team left to right

Back Row: Logan, Ella, Nathaniel Front Rows: Everest, Ayden

80 miles to the MATE International ROV Competition!

## **ROV Specs**

Cost: \$2,250 ROV value including the

value of donated or discounted components.

# **Special Features:**

- Custom LEGO manipulator powered by manual hydraulics
- Six T-100 thrusters for balanced and controlled thrust
- Joystick controllers programmed with onboard Arduino software

### **Safety Features:**

- Shrouded T-100 thrusters
- Handholds on ROV for safety
- Insulated tether for protection

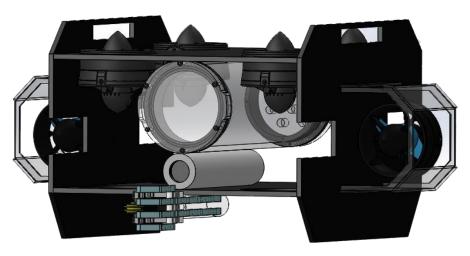
Ayden Ratliff: 5<sup>th</sup> grade, O.C.E.A.N. School, 2<sup>nd</sup> year in MATE Competition: Hydraulics and Manipulator Engineer

Ella Ashford: 11th grade, I.D.E.A. School, 3<sup>rd</sup> year in MATE Competition: CEO, Pilot, Electrical and Software Engineer.

Everest Ashford: 6<sup>th</sup> grade, I.D.E.A. School, 3<sup>rd</sup> year in MATE Competition: Tether Manager and Safety Captain

Logan Flanagan: 11<sup>th</sup> grade, Port Townsend High School, 1<sup>st</sup> year of MATE Competition: **ROV Tool Engineer and Mathematician** 

Nathaniel Ashford: 8th grade, I.D.E.A. School, 3<sup>rd</sup> year of MATE Competition: CFO, Pilot and Mechanical Engineer



S.S. Dragon — The Sea Dragons' ROV