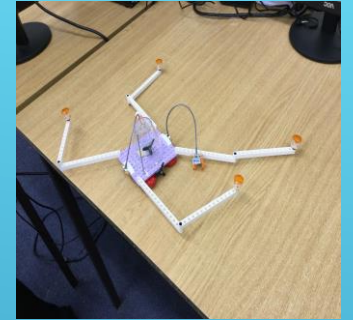


- ▶ We are making a robot that can stand in high pressure and can look at things in the deep depths of the ocean/sea.
- ▶ We have only explored five percent of our world ocean. That means that 95 percent of our ocean is unknown.
- ▶ If you look at this website you will learn way more about our ocean



<https://oceanexplorer.noaa.gov/>

O.B.E'S MASTER PIECE

OLIVIA

BEN

EMILIE



- ▶ Built in fan to heat and cool it.



- ▶ Extending legs that grip the sand (can burrow into the sea bed) – Anchors.



- ▶ Extendable camera so that the main bit of the robot can stay in the low pressure.

- ▶ Only the camera goes deeper.



IDEAS:



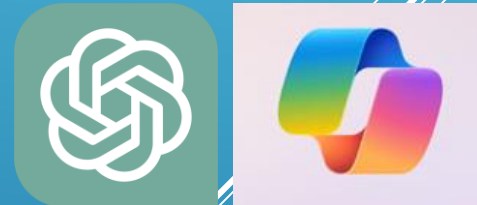
WE RESEARCHED A MAJORITY OF THE STRONGEST, CLEAR MATERIALS (FOR THE CAMERA LENSES). IT WILL NEED TO BE ABLE TO WITHSTAND THE HIGH WATER PRESSURE - IN THE DEPTHS OF THE OCEAN.

- ▶ **AM-3:** This is a super strong type of glass made from carbon. It's even harder than diamonds!
- ▶ **Cubic Silicon Nitride:** This is a tough, clear material. It's almost as hard as diamonds and can handle really high heat.
- ▶ **Transparent Aluminum:** This material is made from aluminum, oxygen, and nitrogen. It's very strong and can stay solid even when it's super hot, like 1200 degrees Celsius!
- ▶ **Polycarbonate:** This plastic is strong and light. It's much tougher than regular glass and won't break easily.
- ▶ **Aerogel:** This is a see-through material that is super light but very strong. It's mostly made of air but can handle a lot of pressure.
- ▶ These materials help make things like spaceships, phones, and buildings even better!

This shows that the Aerogel is light because it is made of air.



Thank you
AI!



AEROGEL: THIS IS A LIGHT, SEE-THROUGH MATERIAL THAT IS VERY STRONG. IT'S MOSTLY MADE OF AIR, SO IT'S SUPER LIGHT BUT CAN HANDLE A LOT OF PRESSURE.

- ▶ We have chosen Aerogel because:
- ▶ It is made of air
- ▶ It can handle a lot of pressure because the more you go down the more pressure builds and can crush mainly anything so it needs to be strong
- ▶ It can float if it needs to because it is super light
- ▶ It is see-through so the camera can see all around.

