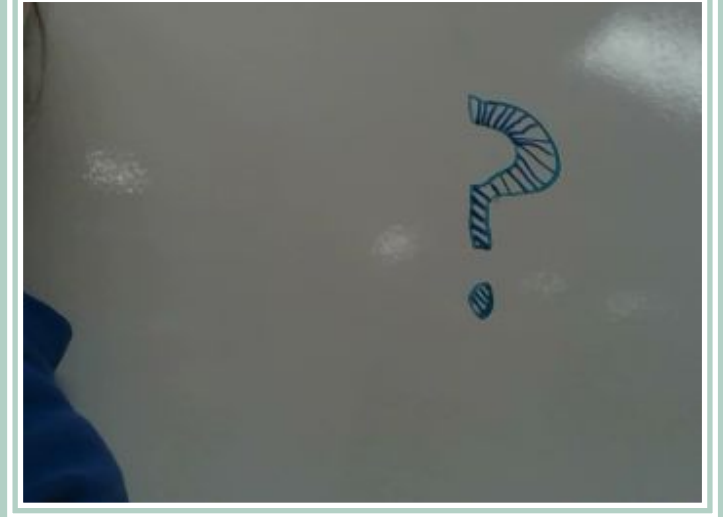
A person in a white astronaut suit with a black helmet, holding a small object, set against a dark background with a red light source on the left.

My genius hour research!

What is my genius hour?

Most of you know what I am doing but for those of you that don't know I am designing technology that will be going onto the spacesuit and spaceship.



A decorative border made of repeating pink triangles with white outlines, arranged in a larger triangular pattern.

Some research



Black Holes

A black hole can be a tidal disruption event. This happens when a star passes too close to a black hole. Extreme gravity causes a star to bulge and fall apart turning it into gas. The tail of the star (now gas) gets released into space when the rest of it swings around to form an accretion disc. The first picture of a black hole was captured on April 6th 2019. No light can escape from a black hole. When people/things other than light something called spaghettification happened. Spaghettification is when something/someone stretches so much that you become human spaghetti. Absolutely nothing is darker than a black hole. Black holes form at the end of some stars lives. The energy that held the star together disappears and it collapses onto itself producing a magnificent explosion. All the energy that's left over from the explosion many times the mass of the sun falls into an infinitely small point.



spacesuits



The spacesuit is basically a really small spacecraft and it protects the astronauts from the dangers of space.

Spacesuits protect the astronauts from not getting too hot or too cold.

Spacesuits have a portable thing on the back that lets them breathe oxygen.

The suits also hold water if the astronauts are thirsty

The suits protect the astronauts from space dust which is very dangerous to humans.

The suits have special gold lined visors that protect their eyes from the sunlight.

Some parts of the suit are made of many layers of material.

Each layer does something different. Some keep oxygen in the suit while others protect astronauts from space dust.

How the astronaut stays cool is under the suit, astronauts wear another piece of clothing. It covers their body except for the head, hands and feet. Tubes are woven into it.

Water flows through the tubes.

Connected to the back of the suit is a tool called SAFER.

SAFER has several small thruster jets. If an astronaut floated away from the space station, he or she could use SAFER to fly back.



Space shuttles



There were five space shuttles which were Enterprise, Columbia, Challenger, Discovery, and Atlantis. Atlantis is in the Kennedy Space Center.

Columbia and Challenger both crashed and 14 people lost their lives.

A space shuttle can only hold 7 people at a time.

The space shuttle completed 135 missions.

Space shuttles were not equipped with software that could handle a year change while in orbit so missions never took place between December and January.

While in orbit, the space shuttle travels around Earth at a speed of about 28 000 kilometers per hour. At this speed, the crew can see a sunrise or sunset every 45 minutes.

Which I find really cool.

Only one president has been on hand to witness a space shuttle launch. President Bill Clinton, along with his wife Hillary Clinton, watched Mercury astronaut John Glenn's return to space on the STS-95 flight on Oct. 29, 1998 from the Kennedy Space Center in Florida.

The space shuttle isn't only a mode of transport and a place to stay in space it is also a laboratory. There have been 22 Spacelab missions, or missions where science, astronomy, and physics have been studied inside a special module carried on the space shuttle.

