ORION CREW SURVIVAL SYSTEM SUIT

SAFETY SUIT
This suit is designed for a custom fit and equipped with safety technology and mobility features to help protect astronauts on launch day, in emergency situations, high-risk parts of missions near the Moon, and during the high-speed return to Earth.

ARTEMIS GENERATION SPACESUITS
When astronauts are hours away from launching on Artemis missions to the Moon, they'll put on a brightly colored orange spacesuit called the Orion Crew Survival System (OCSS) suit.

UPGRADE STATUS
The Orion Crew Survival Suit (OCSS), sometimes called a flight suit or a launch and entry suit, has been enhanced from head to toe with improvements from the suit worn on shuttle missions.

How to Draw Artemis
WE ARE GOING!

With the Artemis program, NASA will land the first woman and next man on the Moon by 2024, using innovative technologies to explore more of the lunar surface than ever before.

Learn more: nasa.gov/artemis
1. **LET'S DRAW THE ORION CREW SURVIVAL SUIT**

The spacesuit can be drawn using simple shapes. Using the pencil, draw a series of circles that you will use to create the basic shape of the top section of the spacesuit and helmet.

**SUPPLY LIST**
- Pencil with eraser
- Black pen or marker
- Sheet of paper

**FUN FACT**

Many missions require two spacesuits—one worn outside a spacecraft during spacewalks that is designed as a self-contained personal spaceship, and another worn inside a spacecraft during high risk parts of a mission such as inside Orion during launch and reentry through Earth's atmosphere.

This activity requires a pencil and a black pen or a marker. You will use the pencil to draw the guidelines and the marker to draw the final shapes. For every step, the current shapes to be drawn are shown in red.
2. **FINISH THE BASIC SUIT OUTLINE**

Now draw a series of circles and ovals that will complete the basic outline of the astronaut. This section includes the legs and feet.

**DRAW THESE SHAPES USING A PENCIL.**
3. **LET'S DRAW THE HELMET**

Using the two top circles, start to build out the hardware of the helmet. Ink the outline of the entire helmet.

**DRAW THE ENTIRE HELMET USING A BLACK PEN**

**FUN FACT**
The new helmet is lighter, stronger, comes in more than one size, helps reduce noise, and is easier to connect to the communications system needed to talk to other crew members and mission control.
This is the main form of your astronaut. Make sure to use your circle body guides to create the actual suit outline.

Add details such as folds and wrinkles into the fabric to show the 3-D shape of the suit, especially at the arms and knees.

Draw the body of the spacesuit.

The suit is a pressure garment that includes a restraint layer to control the shape and ease astronauts' movements.

A reengineered zipper also allows astronauts to quickly put the suit on and has increased strength.

Draw the suit using a black pen.

Fun Fact

While shuttle-era spacesuits came in off-the-shelf sizes like small, medium, and large, the Orion Crew Survival System suits will be custom fit for each crew member and accommodate astronauts of all sizes.
5. **DRAW THE GLOVES AND BOOTS**

Use the circle guides at the hands and feet to create the astronaut gloves and boots.

**Fun Fact:** Astronauts could survive inside the suit for up to six days as they make their way back to Earth.

**Fun Fact:** Improvements to the boots design provide protection in case of fire, fit better, and help an astronaut move more nimbly.

**Fun Fact:** The suit’s gloves, the part of a spacesuit that receives the most wear and tear, are more durable and touch-screen compatible.

**Draw These Shapes Using a Black Pen**
The OCSS suit has several pockets, pouches, straps, ports, and other accessories for crew member survival. These attachments are necessary for astronauts to carry tools, store items, and connect to the Orion spacecraft if necessary.

The suits are also equipped with a suite of survival gear in the event the astronauts have to exit Orion after splashdown before recovery personnel arrive.

Each suit will carry its own life preserver that contains a personal locator beacon, a rescue knife, and a signaling kit with a mirror, strobe light, flashlight, whistle, and light sticks.
7. SHARE YOUR MASTERPIECE!

**Fun Fact:** The outer cover layer is orange to make crew members easy to recognize in the ocean should they ever need to exit Orion without the assistance of recovery personnel.

**Artist Hint:** Refer to the image on the front cover to enhance your drawing even further with colors and markings.

Instead of a dark visor, consider drawing your face in the helmet!

Make it your own! Add exciting colors. Draw several crew members getting ready for launch!

Don't forget to share your masterpiece on social media!

#DRAWARTEMIS