

HOW TO DRAW

ARTEMIS

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.

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.



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.

ORION CREW SURVIVAL SYSTEM SUIT

National Aeronautics and
Space Administration



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.

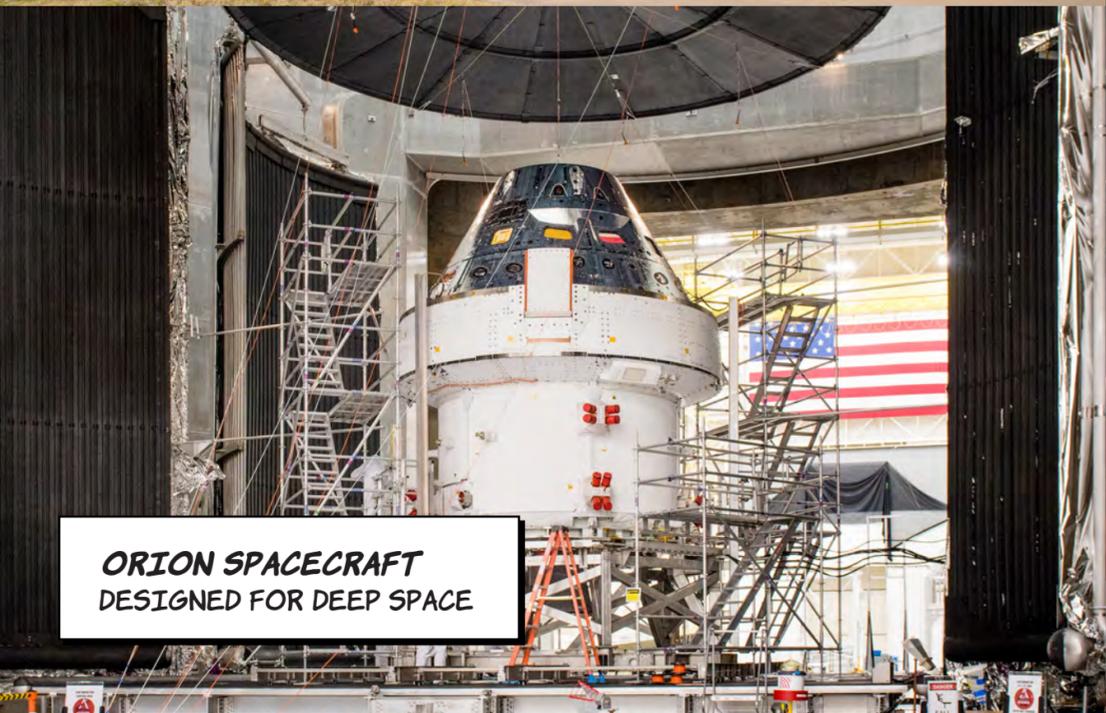
LEARN MORE: [NASA.GOV/ARTEMIS](https://www.nasa.gov/artemis)

**THE SPACE LAUNCH SYSTEM
WORLD'S MOST POWERFUL ROCKET**

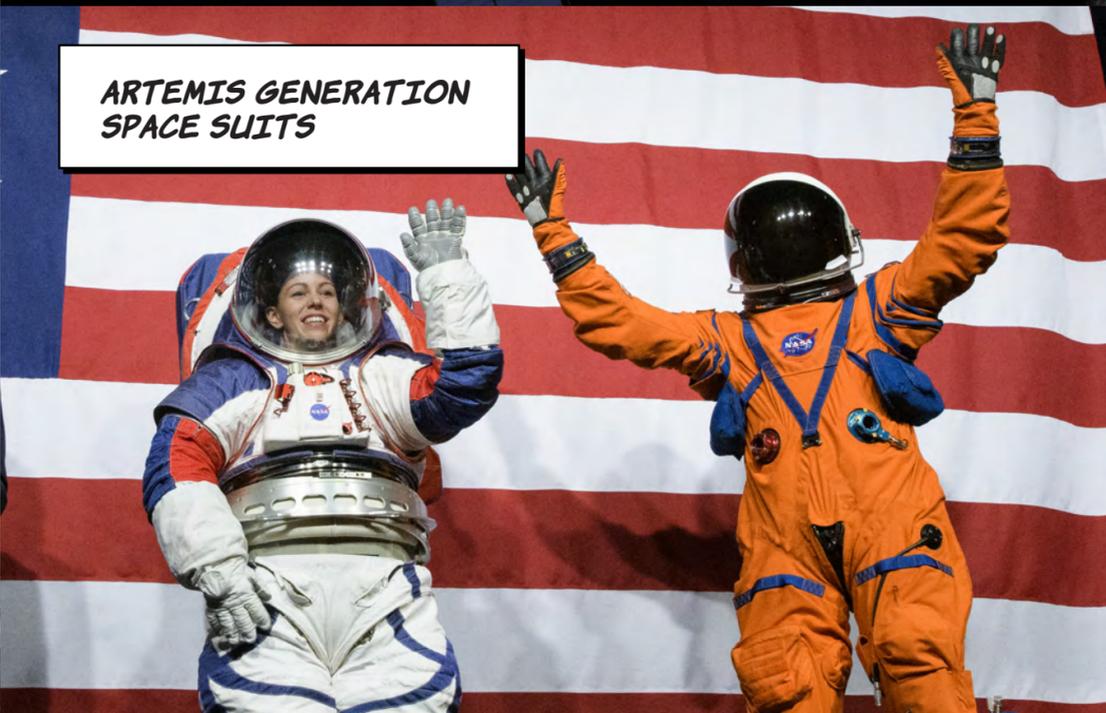


**THE GATEWAY
OUTPOST ORBITING THE MOON**

**ORION SPACECRAFT
DESIGNED FOR DEEP SPACE**



**ARTEMIS GENERATION
SPACE SUITS**

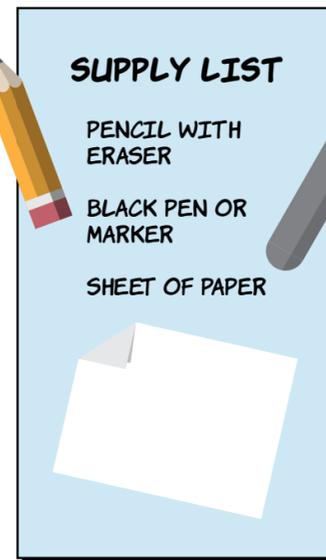


1. LET'S DRAW THE ORION CREW SURVIVAL SUIT

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

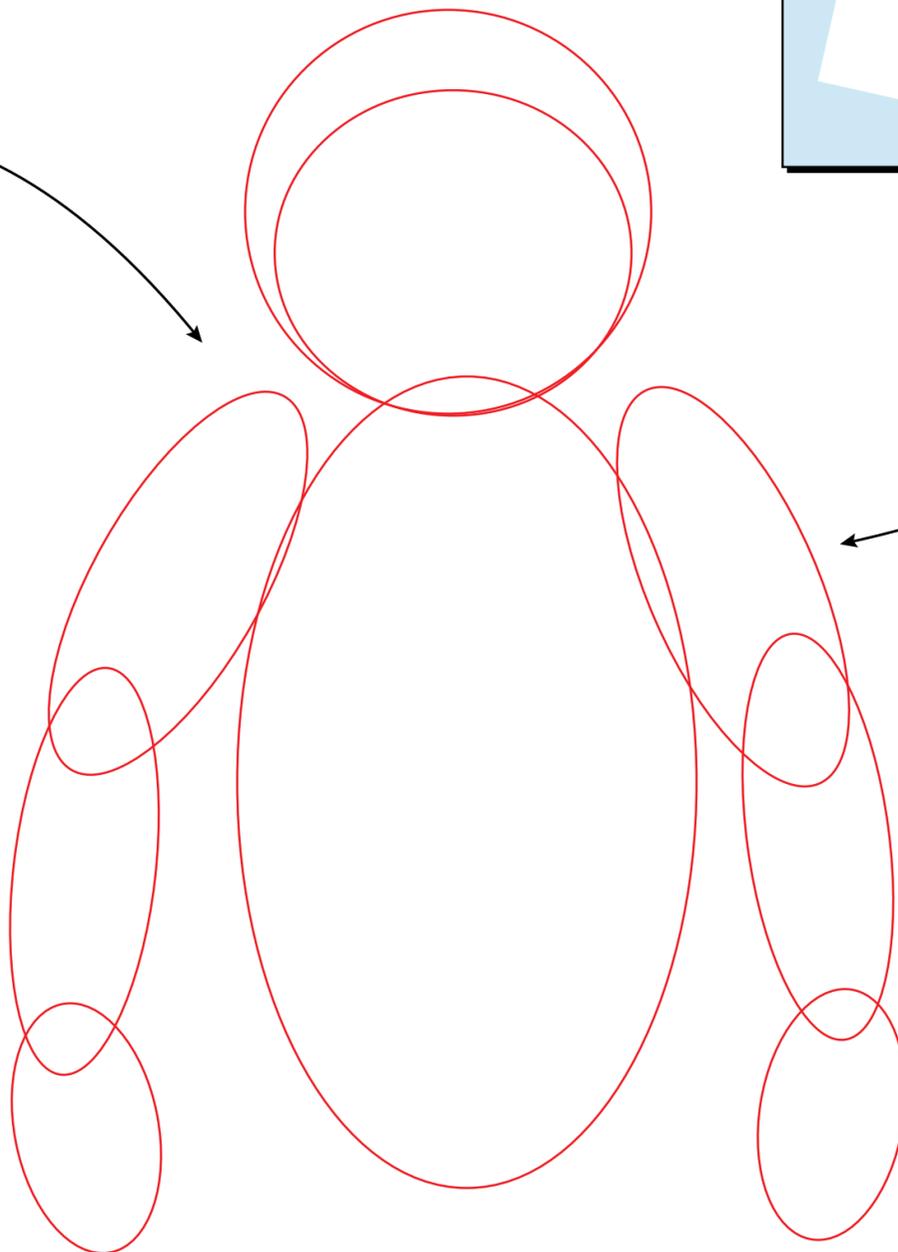
- PENCIL WITH ERASER
- BLACK PEN OR MARKER
- SHEET OF PAPER



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.



DRAW THESE SHAPES USING A PENCIL

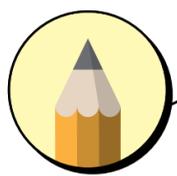
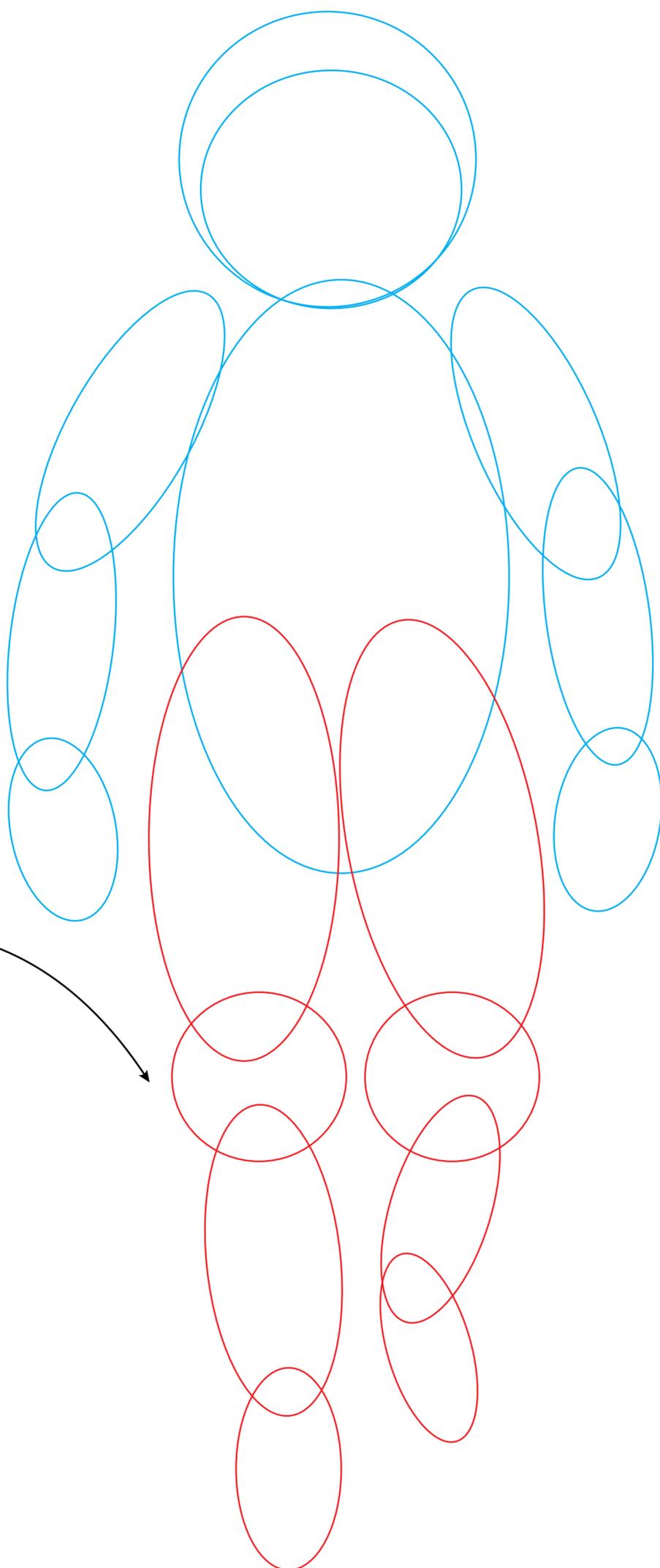


FUN FACT

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.

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.



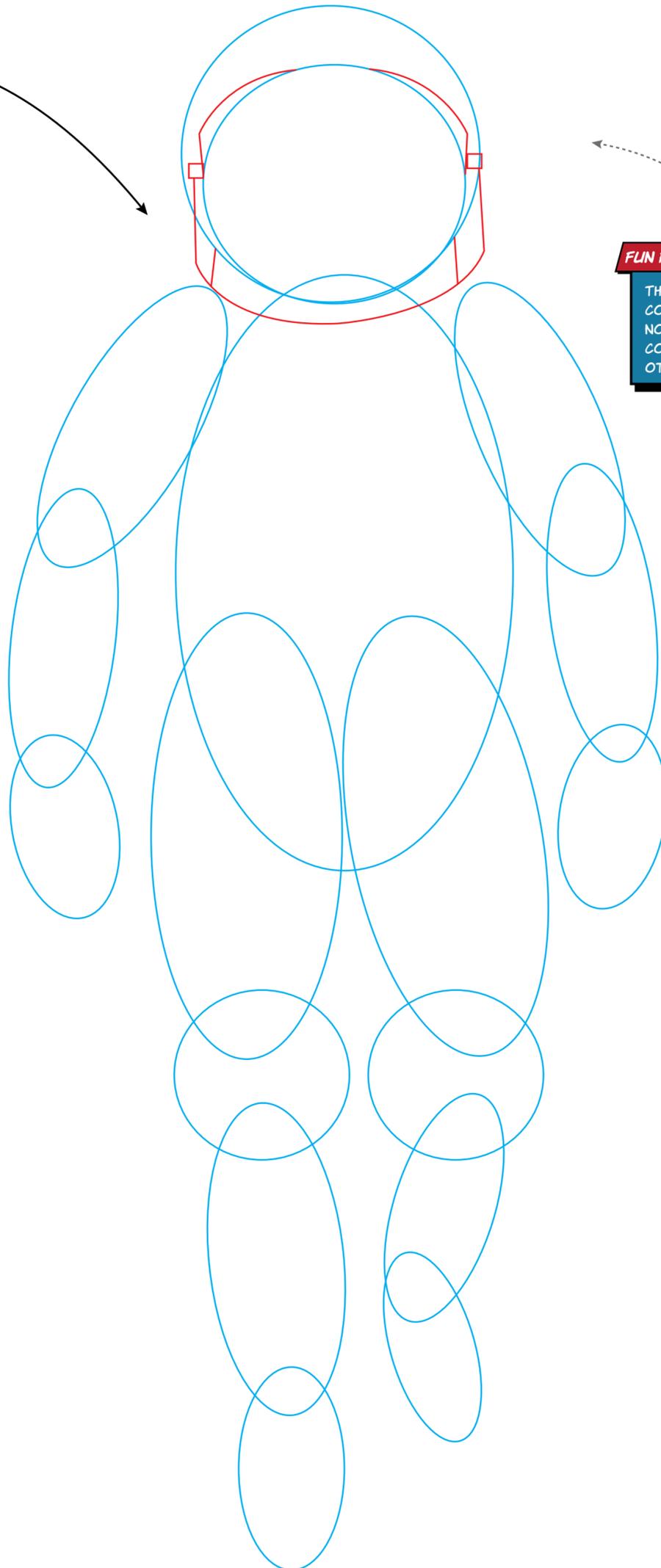
DRAW THESE SHAPES
USING A PENCIL

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.

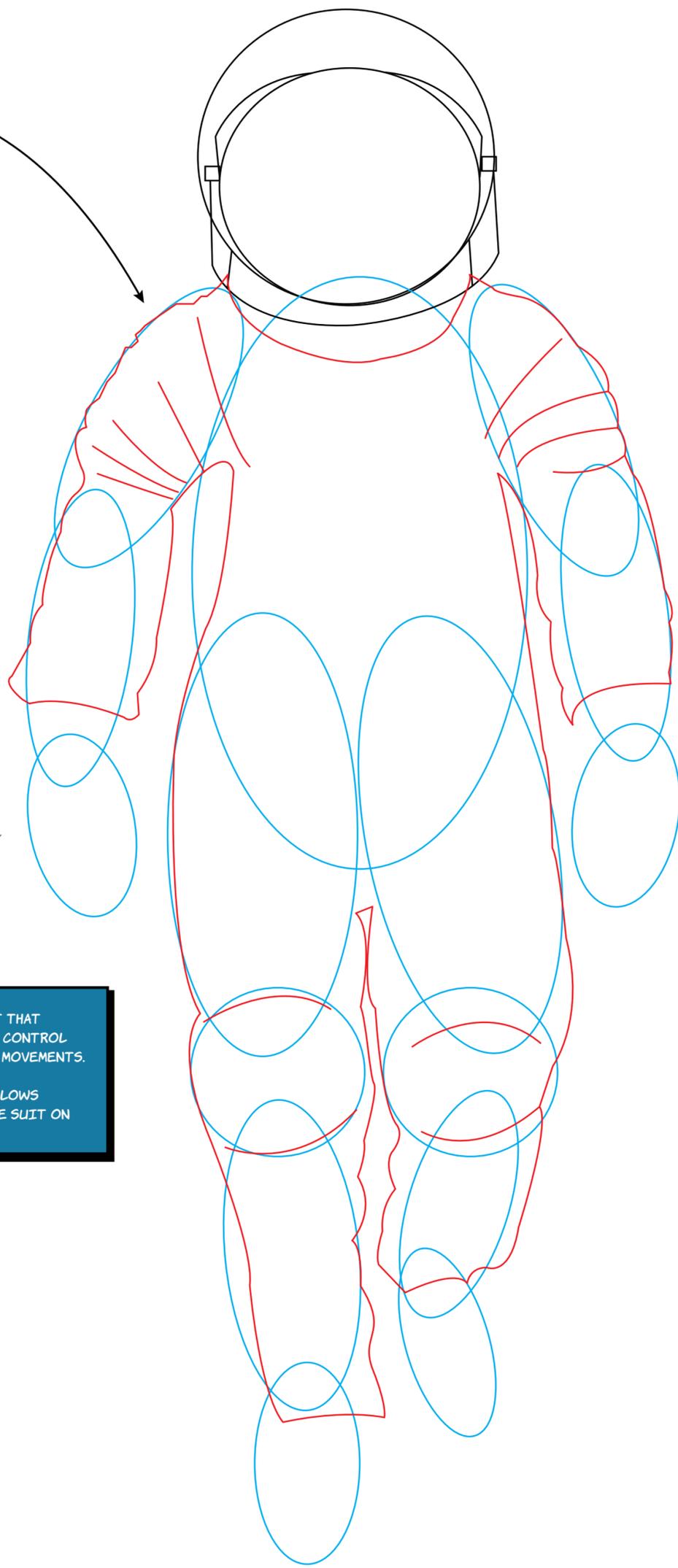
4. DRAW THE BODY OF THE SPACESUIT

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 SUIT USING A **BLACK PEN**

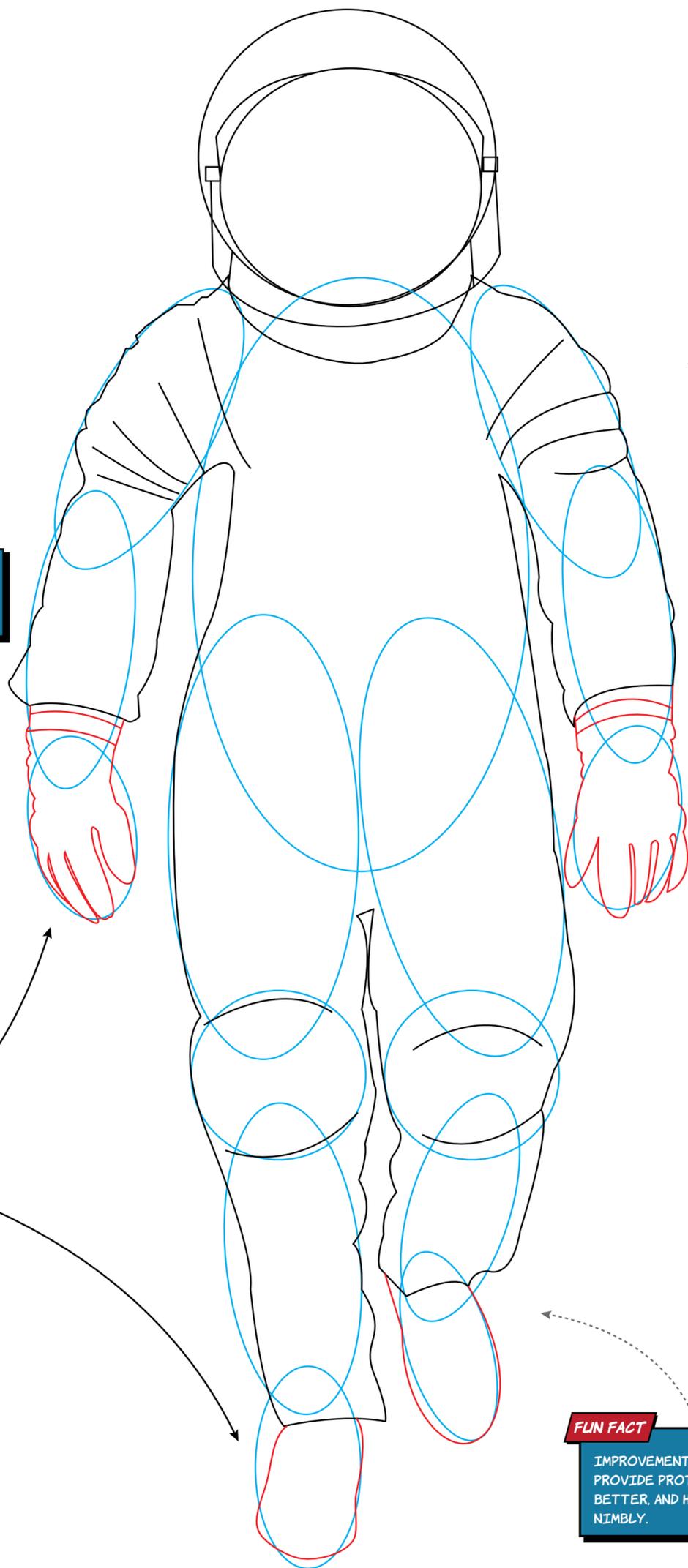


FUN FACT
WHILE SHUTTLE-ERA SPACESUITS CAME IN OFF-THE-SHELF SIZES LIKE SMALL, MEDIUM AND LARGE, THE ORION CREW SURVIVAL SYSTEM SUITS WILL BE CUSTOM FIT FOR EACH CREW MEMBER AND ACCOMMODATE ASTRONAUTS OF ALL SIZES.

FUN FACT
THE SUIT IS A PRESSURE GARMENT THAT INCLUDES A RESTRAINT LAYER TO CONTROL THE SHAPE AND EASE ASTRONAUTS' MOVEMENTS.
A RE-ENGINEERED ZIPPER ALSO ALLOWS ASTRONAUTS TO QUICKLY PUT THE SUIT ON AND HAS INCREASED STRENGTH.

5. DRAW THE GLOVES AND BOOTS

USE THE CIRCLE GUIDES AT THE HANDS AND FEET TO CREATE THE ASTRONAUT GLOVES AND BOOTS.



FUN FACT
THE SUITS' GLOVES, THE PART OF A SPACESUIT THAT RECEIVES THE MOST WEAR AND TEAR, ARE MORE DURABLE AND TOUCH-SCREEN COMPATIBLE.

FUN FACT
ASTRONAUTS COULD SURVIVE INSIDE THE SUIT FOR UP TO SIX DAYS AS THEY MAKE THEIR WAY BACK TO EARTH.



DRAW THESE SHAPES USING A **BLACK PEN**

FUN FACT
IMPROVEMENTS TO THE BOOTS DESIGN PROVIDE PROTECTION IN CASE OF FIRE, FIT BETTER, AND HELP AN ASTRONAUT MOVE MORE NIMBLY.

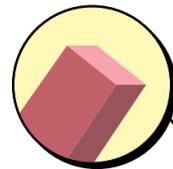
6. DRAW THE SURVIVAL ACCESSORIES

THE OCSS SUIT HAS SEVERAL POCKETS, POUCHES, STRAPS, PORTS, AND OTHER ACCESSORIES FOR CREW MEMBER SURVIVAL.

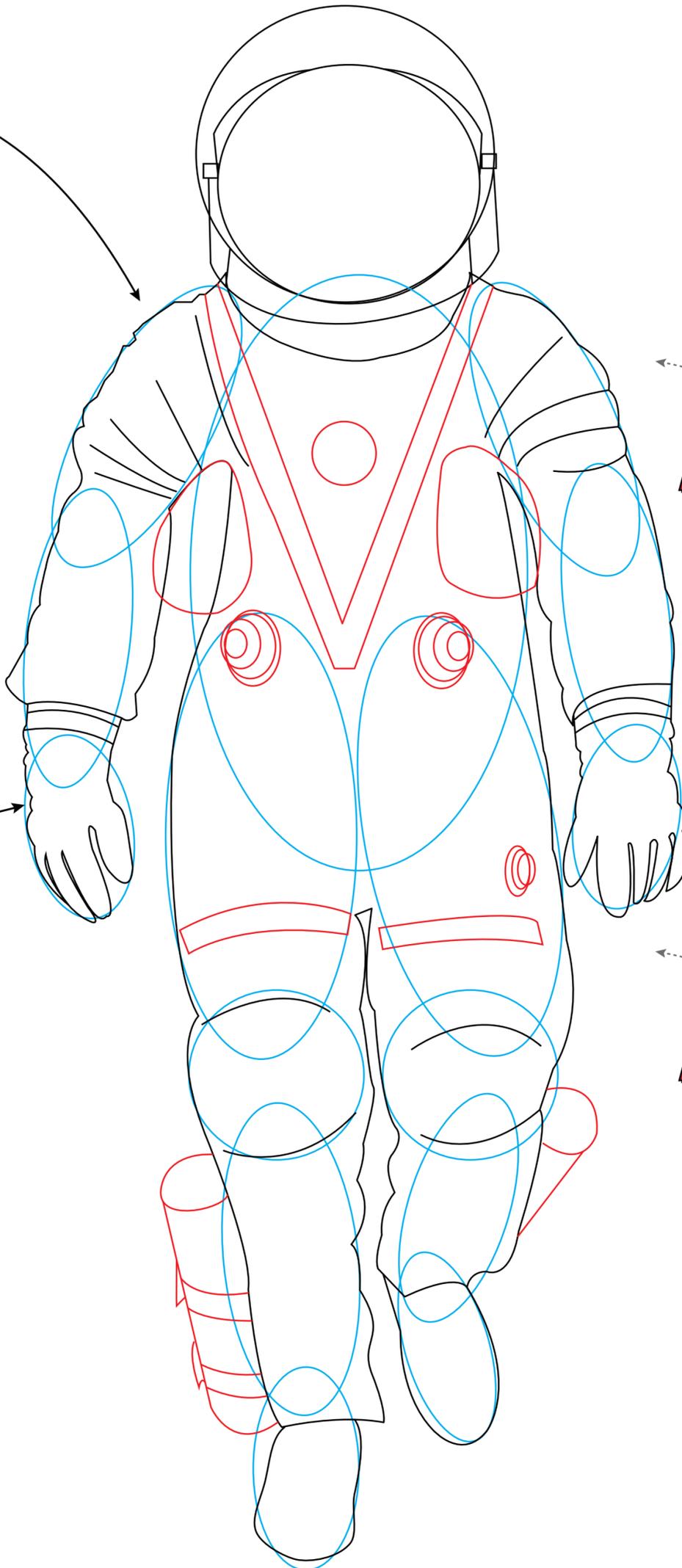
THESE ATTACHMENTS ARE NECESSARY FOR ASTRONAUTS TO CARRY TOOLS, STORE ITEMS, AND CONNECT TO THE ORION SPACECRAFT IF NECESSARY.



DRAW THESE SHAPES USING A **BLACK PEN**



ERASE THE **PENCIL** LINES IN BLUE



FUN FACT
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.

FUN FACT
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!

INSTEAD OF A DARK VISOR, CONSIDER DRAWING YOUR FACE IN THE HELMET!

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.



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

