ISS FASTLab Materials

Please Note:

* This list is preliminary and is not comprehensive. If experiments can be improved with materials not included in this list, that should be described. *All materials will undergo a final review and approval process.*
* Dedicated research hardware cannot be used for this program.
* Allotted astronaut time may not exceed 30 minutes.
* Earth observations are possible from the Cupola windows and other locations on Station. If the experiment requires specific geographic locations or specific day/night timing this should be specified.

Examples of Available Materials:

Tools and Lab Equipment

Assortment of shop tools

Pipettes and syringes of various sizes

Repeater pipette

Plastic tubing and tube clamps

Lab equipment: test tubes, forceps, agar plates, filters

Digital multimeter

Wires, batteries, some electronics components

Temperature sensors

Heat sources, thermocouples

Light sources, measurement tools

Sound sources, measurement tools

Suction device

Low tension spring

Centrifuge

Ultrasound device

Scientific freezers

Microscope

Environmental and Measurement Instruments

Air temperature, humidity, and CO2 measurements

Velocicalc meter (measures airflow, relative humidity, pressure, temperature, air speed)

Remote sensing devices

Radiation sensors

Computer and Electronics

Laptop computers with standard office software

iPad Pro 3rd Generation (includes Sensor Play application for data logging)

Arduinos

Imaging

Still cameras

Video cameras

Lenses and Filters

Infrared camera

Containment and Attachment Items

Ziplock bags

Tethers, bungees

Rope, string, Velcro, clips, tape

Office and Paper Products

Paper products and writing implements

Office supplies

Foam and padding

Hygiene and Consumables

Hygiene products

Water, some lubricants

Water filtration

Liquid salt (kitchen)

Olive oil

Food and drink items

Crew Exercise Equipment

Bike

Treadmill

Resistance bands

Exercise tubing assembly

Misc. Experimental Materials

Waste leaf and plant trimmings from ongoing vegetation experiments

Objects of various masses

Various locations inside ISS, including cupola

Cold blocks (metal)

Crew ISSNL Educational Toy List

Exercise and Grip Tools:

Purple Dyna band (6)

Thera band (2)

Superband ½ inch (2)

Superband ¾ inch "medium"

Superband ¾ inch "heavy"

French hook (S, L, XL)

Grip Mastre

Grip Strength Dynamometer

Hand Grip

Pinch Gauge

Box with Lid

Hollow Aluminum Ball

Loop Ball

Loop Track

“Eggsercizer”

Steel Hollow Sphere

Travel Scrabble Kit

Plastic Slinky

Nerf Vortex

Mini Basketball Hoop

Trivia Cards

Inflatable Earth, Moon, Sun, Soccer Ball

Hand Pumps