

## Icy-Worlds Mini-mission Materials List:

### MM 1: Communication in Complex Projects

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Lego pieces <input type="checkbox"/> Paper/pencils for documentation <input type="checkbox"/> Cameras (optional)	None

### MM 2: Mission Development Log

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Access to computers, one per group <input type="checkbox"/> OR notebook and pencils to document	None

### MM3: Explaining Europa's Surface

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Access to computers, one per group or instructor with projection <input type="checkbox"/> OR notebook and pencils to document	None

### MM4: Map Development

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Print out of challenge map <input type="checkbox"/> Rulers, one per team <input type="checkbox"/> Calculators, one per team <input type="checkbox"/> Meter stick or tape measure, one per team <input type="checkbox"/> Large-scale paper (or sheets of paper taped together) and art supplies	None

MM5: Limits of Life

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Printouts of extremophile cards, one per team <input type="checkbox"/> Sugar, salt, yeast, vinegar, tums, etc. <input type="checkbox"/> Hot water heater and/or ice cubes <input type="checkbox"/> Digital camera <input type="checkbox"/> Timer	<input type="checkbox"/> Foldscopes, one per team <input type="checkbox"/> Beakers/test tubes, one per team <input type="checkbox"/> Thermometers, one per team <input type="checkbox"/> Ph Paper, one per team <input type="checkbox"/> Balloons, one per team

MM6: Remote Sensing

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Box with holes cut out and covers over holes, one per team <input type="checkbox"/> Cameras	<input type="checkbox"/> Foam half-spheres, one per team <input type="checkbox"/> Clay, one per team <input type="checkbox"/> Colored lights or filters

MM7: Drone Development and Landing Site Selection

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Phone or tablet to run drone app to take picture (optional)	<input type="checkbox"/> Drone, one per team

MM8/MM9: Rover build/Programming and Robotics

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Computers or laptops, one per team <input type="checkbox"/> Materials to make sample (can use legos or paper cubes or ping pong balls) <input type="checkbox"/> Masking tape for testing, one per group <input type="checkbox"/> Rulers for testing, one per group	<input type="checkbox"/> LEGO Robot (EV3 Mindstorm or Spike), one per team <input type="checkbox"/> <b>Note:</b> Since this camp involves programming robots, it is essential that teams of students have access to computers or tablets. If this is an issue for your camp, please contact NESSP at <a href="mailto:info@nwessp.org">info@nwessp.org</a> and we may be able to accommodate.

MM10: Team Mission Patch

Provided by instructor:	Provided by NESSP
<input type="checkbox"/> Art supplies and paper <input type="checkbox"/> OR easy to use graphic design program <input type="checkbox"/> Digital camera	None

Additional Supplies provided by NESSP:

- Lanyards, one per student
- Tie-Dye Supplies, one per ~10 students
- T-shirts, one per student
- Name tag and Certificate Templates