

Robot Missions

400 pts





Robot Game Missions

M01: Space Travel

- *Start each Payload clearly rolling down the Space Travel Ramp.
- For each roll, the cart must *be Independent by the time it reaches the first track connection.



Vehicle Payload: 22
Supply Payload: 14
Crew Payload: 10



Robot Game Missions

M02: Solar Panel Array

- Solar Panels need to be angled toward or away from you
- **Co-operative/Competitive Mission**



Solar Panels are:
Both Angled toward the same Field:
 22 for both teams
Angled toward the other team's field:
 18 for your team

Cumulative Scoring and Loophole!





Robot Game Missions

M03: 3D Printing

Eject the 2x4 Brick ✳by placing a Regolith Core Sample into the 3D Printer.

Brick is Ejected and:

- Completely in the NE Planet Area: 22
- Not completely in the NE Planet Area: 18



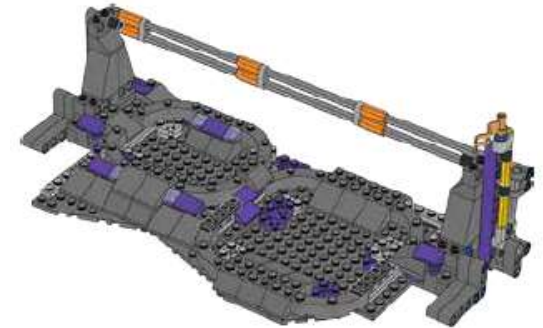


Robot Game Missions

M04: Crater Crossing

Cross the Craters Model

- All weight-bearing features of the crossing equipment must cross *** completely between the towers.**
- Crossing must be *** from east to west, and make it completely past the flattened Gate:**



+20 pts





Robot Game Missions

M05: Extraction

Move all four Core Samples so they are no longer touching the axle that held them in the Core Site Model.



All 4 Core Samples:

- No longer touching axle: **16**

Gas Sample:

- Touching Mat, completely in Lander's Target Circle: **18 OR**

- Completely in Base : **10**

Water Sample:

- Supported only by the Food Growth Chamber: **8**



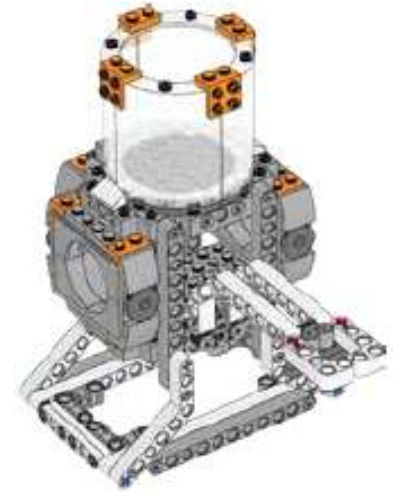


Robot Game Missions

M06: Space Station Modules

Remove and insert Modules along the Habitation Hub's portholes. Inserted Modules must **not be touching anything except the Habitation Hub**.

- Cone Module completely in Base: **16**
- Tube Module into the W Hub port: **16**
- Dock Module into the E Hub port: **14**





Robot Game Missions

M07: Space Walk Emergency

- Move Gerhard so his body is inserted **at least partly into the Habitation Hub's Airlock Chamber.**
- Loop doesn't count as body

- **Completely In: 22**

- **Partly In: 18**



Robot Game Missions

M08: Aerobic Exercise

Advance the Exercise Machine's Pointer along its Dial * by moving one or both of the Handle Assemblies.

Pointer Tip is:

- in Orange: 22
- In White: 20
- In Gray: 18





Robot Game Missions

M09: Strength Exercise

Lift the Strength Bar so the tooth-strip's 4th hole comes at least partly into view.

+16 pts



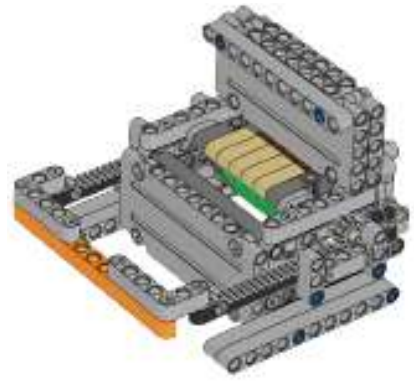


Robot Game Missions

M10: Food Production

Spin the Food Growth Chamber's colours so the grey weight is DROPPED after green, but before tan, * by moving the Push Bar:

+16 pts





Robot Game Missions

M11: Escape Velocity

Get the spacecraft to go so fast and high that it stays up, *
by pressing/hitting the Strike Pad.



+24 pts



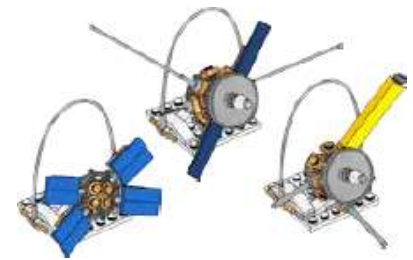


Robot Game Missions

M12: Satellite Orbits

Move any part of a Satellite on or above the area between the two lines of the Outer Orbit

+8 pts per satellite (x3)



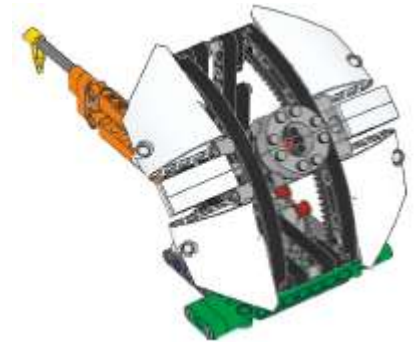
Robot Game Missions

M13: Observatory

Rotate the Observatory to a precise direction

Pointer tip is:

- completely in Orange: **20**
- completely in White: **18**
- completely in Gray: **16**



Robot Game Missions

M14: Meteoroid Deflection

- Send Meteoroids * over the Free-Line to touch the mat in the Meteoroid Catcher.
- The Meteoroids must be hit/released while they are * clearly and completely west of the Free-Line.
- While between hit/release and scoring position, the Meteoroid * must be clearly Independent.



Meteoroids in:
Centre Section: 12 pts each
Side Section: 8 pts each





Robot Game Missions

M14: Lander Touch Down

Get the Lander to one of its targets intact, or at least get it to Base.

Lander Intact, touching the mat and

- **Completely in Target Circle: 22 pts**
- **Completely in NE Planet Area: 20 pts**

OR

- **Move both parts of the Lander completely into Base: 16 pts**





Robot Game Missions

Penalties:

Before the match starts, the Ref removes the six red Penalty discs from the Field, and holds on to them. If you Interrupt the Robot, the Ref places one of the removed Samples in the white triangle, in the southeast, as a permanent/ untouchable Interruption Penalty. You can get up to six such penalties.

-3 pts Each

