



2012 MoonBots: A Google Lunar X PRIZE LEGO® MINDSTORMS® Challenge

Official Rules

1. Description of the Challenge

The X PRIZE Foundation and Google have created the Google Lunar X PRIZE, a new, private race to the Moon that is engaging and exciting the global public while enabling the commercial exploration of space and dramatically reducing its cost. The Google Lunar X PRIZE is expected to increase the connection that individuals around the world feel to space exploration, science, and education by taking advantage of new tools for the rapid and targeted distribution of information. By reigniting a race to the Moon, the Google Lunar X PRIZE is intended to engage a new generation, making lunar exploration not just a historical accomplishment, but a tangible reality.

To further this purpose, the X PRIZE Foundation and LEGO Group (“LEGO”), hereinafter collectively referred to as the “Sponsors” are administering “MoonBots, a Google Lunar X PRIZE LEGO® MINDSTORMS® Challenge,” hereinafter “MoonBots” or the “Challenge”. MoonBots is designed to challenge teams consisting of two (2) to five (5) members (ages 9 to 17 years old) and one (1) team captain at least 18 years old (collectively, the “Team”) to develop and design an innovative lunar landscape that is capable of having a LEGO MINDSTORMS robot perform a simulated lunar mission. The Challenge is considered a “game of skill” and is designed to help Teams learn about robotics and team building, while also generating excitement about the new Moon race.

There are two (2) phases of the Challenge. To participate in Phase One of the Challenge, each Team must register their Team, turn in a Team biography, Team photograph, provide a Team logo, turn in parental/guardian consent forms for each team member, answer a creative question, answer an outreach question and develop an education video about their interest in space exploration by answering one of the questions in Section 14.F of these Official Rules (the “Rules”). Each Team that is selected as a Phase One winner will advance to Phase Two of the Challenge. The Team will design and build a lunar landscape, build a LEGO MINDSTORMS robot, develop a game for the LEGO MINDSTORMS robot to rove the lunar landscape and complete a live lunar mission demonstration in front of a live audience.

Dexter Industries, Cleantech Open, Pacific International Space Center for Exploration Systems (PISCES), and WIRED Magazine (hereinafter collectively referred to as the “Co-Marketing Partners,”) will promote the Challenge and provide materials to the winning Teams.

2. Binding Agreement

These Rules are a legally binding agreement by and between each Team member (and, if a member is under the age or majority in his/her country of residence, his/her parent or legal guardian) and the Sponsors and govern each Team member's participation in the Challenge. Please read them carefully. Teams may not enter the Challenge nor be eligible for the prizes described in these Rules unless all Team members agree to these Rules. **IF YOU ARE A PARENT OR LEGAL GUARDIAN AGREEING TO THESE RULES FOR THE BENEFIT OF A CHILD, YOU ARE FULLY RESPONSIBLE FOR HIS OR HER ENTRY IN THE CHALLENGE, INCLUDING WITHOUT LIMITATION ANY LEGAL LIABILITY THAT HE OR SHE MAY INCUR.**

The purpose of these Rules is to fully state the binding requirements for competing in the Challenge. Except as expressly set forth in herein, these Rules do not extend beyond activities related to the Challenge. These Rules may be revised at the sole discretion of the Sponsors, effective upon written notice. By participating in this Challenge, each Team member or their parent or guardian in the case of Team members under the age of majority in their country of residence is bound by the interpretations of these Rules by the Sponsors of the Challenge, which are rendered final unless the Sponsors, in their sole discretion, agree to change them.

3. Eligibility

No purchase or payment of any kind is necessary to enter or win the Challenge or to win any Prize. The purchase of any good and/or service will not increase a Team's chance of winning the Challenge.

All Team members must be at least 9 years of age as of the date of the Team's registration in the Challenge in order to participate in the Challenge. The Team Captain must be over the age of majority in the Team Captain's country of residence—the age of majority to enter into a binding contract can differ from country to country. In no case may the Team Captain be younger than 18 years of age. All Team members are required to abide by any legal restrictions, including those regarding age limitations, in the Team member's country of residence.

Minors – Parents and Guardian: The parent(s) or guardian(s) of any Team member under the legal age of majority in his/her country will ensure that the Team member of whom they agree to these Rules will comply with these Rules and warrants that the Team member is capable of agreeing to these Rules and giving the consent contained herein. A Consent Form must be signed by a parent(s) or legal guardian(s) of each Team member below the age of majority in the Team member's country of residence pursuant to Section 11 of these Rules.

The Challenge is international; therefore Teams from all countries and with any background are eligible to participate in the Challenge, except where prohibited by applicable laws. The Challenge is not open to residents of Cuba, Iran, North Korea, Myanmar/Burma, Zimbabwe, Sudan, Syria, Argentina, Quebec, Brazil, any other U.S. sanctioned country and where prohibited or restricted by law. The Challenge is not open to residents in the state of Florida. Prizes however, will be awarded in accordance with U.S. law which may restrict or prohibit awards to Teams within countries subject to U.S. sanctions and may subject international Teams to U.S. taxes.

All Team members must comply with licensing rules and agreements set forth in all design software, online services, and other software products used in the process of competing in the Challenge, including restrictions placed on the age of the user.

The official language of the Challenge is English. All communications with the Sponsors and all competition submissions shall be in English, unless the Team has received prior written permission from the Sponsors to submit communication in another language. Additional copies in other languages are welcomed. Employees and their immediate families (i.e., parents, spouse, children, siblings, grandparents, step parents, step children, and step siblings) of the Sponsors, Google, and Co-Marketing Partners are not eligible to enter the Challenge. Members of Teams competing for the Google Lunar X PRIZE and their immediate families, as defined above, are eligible to compete in the Challenge.

4. Team Members; Team Captain

Each Team must be composed of no less than two (2) members and no more than five (5) members, each of whom must be between the ages of 9 and 17 as of May 15, 2012. In addition to the Team members, one (1) additional person shall be designated by the Team as the "Team Captain" and shall be above the legal age of majority in the Team Captain's country of residence; and in all cases, must be at least 18 years of age as of the date of the Team's registration in the Challenge. The maximum number of members on a Team including the Team Captain is six (6); the minimum number of members on a Team including the Team Captain is three (3). The Team Captain is responsible for uploading all Team information to the Team's competition website. All online submissions of any kind related to the Challenge must be made by the Team Captain.

5. Compliance with Laws and Regulations

All Teams and all Team members must adhere to all local, regional, national, and international laws, orders, directives, ordinances, treaties, rules and regulations for all aspects of the Challenge. Teams are solely responsible for acquiring the appropriate licenses, waivers, or permits from the applicable regulatory bodies or other applicable third parties. All Team members must abide by relevant age restrictions for all software and hardware components used in the process of competing in the Challenge. The Sponsors, and the Co-Marketing Partners shall in no way be responsible for providing to the Teams any advice or counsel, legal or otherwise, with regard thereto.

6. Logo Placements

All videos submitted by the Team shall display a Challenge Logo as provided by the Sponsors. Physical logos provided to the Team may be placed on the robot at the Team's sole discretion.

7. Challenge Period

The Challenge commences on **May 15, 2012 at 12:00:01 AM (Pacific Time)** and ends on **November 15, 2012 at 11:59:59 PM (Pacific Time)** (the "Challenge Period"). The Challenge Period consists of two phases.

Registration and Phase One:

May 15, 2012 12:00:01 AM (Pacific Time) – July 15, 2012 11:59:59 PM (Pacific Time)

Phase Two (applicable to Phase One Winners):

August 1, 2012 12:00:01 AM (Pacific Time) – November 15, 2012 11:59:59 PM (Pacific Time)

8. Announcement of Winners

Teams will complete the activities for each Phase of the Challenge. Phase One Winners will be announced on or **around August 1, 2012**. All Phase One Winners will advance to Phase Two. Phase Two Winners will be announced on or **around December 1, 2012**.

9. Online Hosting

Each Team shall be responsible for all web hosting required for their Challenge entry. Each Team shall abide by the terms of service provided by their web hosting provider or similar service providers as appropriate.

10. How to Enter; Privacy Policy

All registration materials for the Challenge are online at <http://www.moonbots.org> (the “Challenge Site”). The Team Captain must register the Team online at the Challenge Site. A registration package identifying each Team member by name, age, and role must be submitted by the Team Captain online (“Registration Package”). A Team name and geographical location must also be provided. Signed Consent Forms from each parent or guardian of any Team member under the age of majority in their country of residence must be submitted online by the Team Captain and then accepted by the Sponsors in order for the Team to be registered for the Challenge.

Please see the privacy policy located at <http://www.moonbots.org/privacy-policy> as the same may be amended from time to time for details of the policy regarding the use of personal information collected in connection with this Challenge. **AS SET OUT IN THE PRIVACY POLICY, EACH TEAM MEMBER AND WHERE APPLICABLE, THEIR PARENT(S) OR GUARDIAN(S) UNDERSTANDS AND AGREES BY PROCEEDING TO ENTER THIS CHALLENGE THAT THEIR PERSONAL INFORMATION WILL BE TRANSFERRED AND MADE USE OF IN THE UNITED STATES FOR THE PURPOSES OF FACILITATING ALL CHALLENGE RELATED ACTIVITIES REFERRED TO IN THESE RULES AND COMPLYING WITH THE APPLICABLE FOREIGN AND DOMESTIC LAWS.**

11. Consent Form

Any Team member below the legal age of majority in said Team member’s country of residence and/or below the age of 18 must have a parent or legal guardian sign a Consent Form indicating acceptance of these Rules. A Consent Form will be provided to each Team member and is also accessible via the Challenge Site. The Team Captain is responsible for collecting the properly signed Consent Forms and uploading them to the Challenge Site. Failure to comply with this requirement will result in the Team’s disqualification from the Challenge.

12. Approval of Registration

Each Team's Registration Package must be approved by the Sponsors. Registration Packages will be reviewed by the Sponsors for completeness and for compliance with these Rules. The Sponsors will issue an acceptance notice via electronic mail of each Registration Package within five (5) days after receipt. The Sponsors may, at their sole discretion, pose additional questions or requests for clarification to supplement the Registration Package as part of their evaluation. All rejection or acceptance decisions made by the Sponsors shall be final and in their sole and absolute discretion.

13. General Entry Guidelines

Challenge Materials (as defined below) cannot: (A) contain trademarks, logos or trade dress owned by others, or advertise or promote any brand or product of any kind, without permission, or contain any personal identification, such as license plate numbers, personal names, e-mail addresses or street addresses; (B) contain copyrighted materials owned by others (including photographs, sculptures, paintings and other works of art or images published on or in websites, television, movies or other media) without permission; (C) contain materials embodying the names, likenesses, photographs, or other indicia identifying any person, living or dead, without permission; communicate messages or images inconsistent with the positive images and/or goodwill to which the Sponsors, Google and Co-Marketing Partners wish to associate; (D) be unnecessarily violent or derogatory of any ethnic, racial, gender, religious, professional or age group, profane or pornographic; be obscene or offensive, endorse any form of hate or hate group; defame, misrepresent or contain disparaging remarks about the Sponsors, Google, the Co-Marketing Partners, or their products, or other people, products or companies; (E) contain any materially dangerous activity; promote alcohol, illegal drugs, tobacco, firearms/weapons (or the use of any of the foregoing), any activities that may appear unsafe or dangerous, or any particular political agenda or message; and (F) depict, and cannot itself, be in violation of any law.

14. Phase One Requirements

All materials outlined in this Section should be submitted to the Team's website by **July 15, 2012 at 11:59:59 PM (Pacific Time)**.

- A. **Register Team:** The Team must register online at www.moonbots.org, turn in parental/guardian forms and submit a list of relevant URLs for the Team's blog, website, or online video sharing platform.
- B. **Team Biography:** The Team Captain must submit a one (1) paragraph description about the Team. This should include:
 - Level of experience with robotics; and
 - Description of Team members.
- C. **Team Photograph:** The Team Captain must submit one (1) high-resolution creative photograph specified in their Web Location Package. The photograph must show all of the Team members. The minimum resolution of the photographs should be 300 dots per inch (dpi).
- D. **Creative Question:** The Team Captain must submit an answer to the following question:

- If your team could create a lunar landscape for a LEGO MINDSTORMS to rove and complete a challenge, what would the lunar landscape look like? (This can include items like LEGO bricks, sustainable materials and/or items like real sand and rocks.)

E. **Outreach Question:** The Team Captain must submit an answer to the following question:

- If your team was selected to make it into Phase Two, where do you think you would complete a live demonstration of your lunar landscape challenge course and why?

F. **Video Essay:** The Team Captain must submit a video that is no longer than four (4) minutes in length in which the Team members discuss one (1) of the following topics:

- When you go to the Moon, what would you leave on the Moon and why?
- What do you think Google Lunar X PRIZE teams will be able to show and tell us when they visit the heritage artifacts on the moon?
- Why is the Google Lunar X PRIZE important to the future of the Moon?
- What do you think should happen to the heritage artifacts already left on the Moon?

The video shall be uploaded by the Team Captain to the Team's online video sharing platform and must include the MoonBots Challenge Logo. The video must include a title containing: "A Google Lunar X PRIZE LEGO® MINDSTORMS® Challenge", the selected video topic chosen, and the Team's name.

15. Phase Two Requirements

A. Scaled Lunar Landscape Design

The first step in Phase Two will be for the Team to design their lunar landscape. The lunar landscape design requirement can incorporate labeled hand drawn scaled drawings on paper, a cartoon or cardboard or a 3-D CAD designed scaled drawings using software of your choice. Creating a scale drawing means that what you draw should be the layout for the physical lunar landscape that you create. Creating a scale drawing means that what you draw should be the layout for the physical lunar landscape you must create later, and should have the scale comparison of what you intend to make. For instance, scale 1:2, means one measuring unit (for instance, centimeters, inches, etc.) on your drawing will be 2 of those measuring units on your physical Lunar Landscape.

See Section C about 'Lunar Landscape' for details on the size requirements of the physical landscape.

No matter what topic you choose for your Mission, the Lunar Landscape must have the following components:

- Starting Base
- High Ridge
- Mission Area
- Mission Items

This design will be due by September 15, 2012 at 11:59:59 PM (Pacific Time) and must be uploaded onto the Team's website in a preferable easy to view format of your choice:

- a) one single downloadable Document (PDF, MS word DOC, MS word DOCX, MS XLS, MS PPT)
- b) a collection of maximum 12 Pictures with scale indications , (JPG, PNG, BMP, GIF)
- c) a small (youtube linked) movie showing your scale model.

The design documents title should include: “MoonBots 2012 Scaled Drawing.” And the Team name.

B. The Game Idea and Mission

The second step in Phase Two will be for the Team to create a game play around one or more of the following topics:

- Google Lunar X PRIZE Mission
- Heritage Artifacts
- Solar Power on the Moon
- A Night Rover Challenge

The Team can incorporate all of these themes, some, or one. It is the Team’s discretion how they want to make this work. A point system must be identified in their game.

The Team’s game idea will be due by September 15, 2012 at 11:59:59 PM (Pacific Time) and must be uploaded onto the Team’s website in a preferable easy to view format of your choice:

- a) Text (optional with pictures) on your website, clearly describing missions and scores
- b) one single downloadable Document (PDF, MS word DOC, MS word DOCX, MS XLS, MS PPT)

The mission documents title should include: “MoonBots 2012 mission.” And the Team name.

Here is an **EXAMPLE** from last year’s MoonBots Challenge:

SIMULATED LUNAR MISSION TASKS	ELIGIBLE POINTS
Lander Dismount	20 points
Discover Water Ice (4 total)	15 points each (60 points available)
Discover Helium 3 (6 total)	10 points each (60 points available)
Return the Elements to Base for Analysis	Each element x2 (120 points possible)
Photograph the Heritage Artifacts	20 points
Survive the Lunar Night	30 points
Return to Base	20 points
Capture Mission Video	20 points
TOTAL SCIENCE MISSION SCORE POINTS AVAILABLE	350 points
Touch Penalty	-50 points each time

C. Lunar Landscape

The third step in Phase Two will be for the Team to create their lunar landscape at hand. The landscape can be made entirely out of LEGO elements or can incorporate other materials as well. Each Team member (or their parent/legal guardian if the Team member is under the age of majority

in his/her country of residence) and the Team Captain shall hold Sponsors and the Co-Marketing Partners harmless from any personal injury, property damage (real or personal) or death incurred as a result of using the materials or working outdoors to create the Lunar Landscape unless such injury, property damage or death is solely as the result of Sponsors or the Co-Marketing Partners acts or omissions. The Lunar Landscape Design must match the Scaled Lunar Landscape Design.

- **Maximum Size:** The Lunar Landscape must not exceed a square footprint of 25 LEGO 48x48 stud base plates laid out in a square 5 base plates (191 x 191 centimeters or 6' 3" x 6' 3").
- **Minimum Size:** The Lunar Landscape must not be smaller than a square footprint of 16 LEGO 48x48 stud base plates laid out in a square 4 base plates (154 x 154 centimeters or 5' 1" x 5' 1").
- **Area Rounding:** The above minimum size and maximum size may deviate for construction purposes, with 7%.
These base plates will be sent to the teams taking part of Phase Two.

The Lunar Landscape should have the following as basic components in the Layout:

- **The Starting Base:** The Starting Base is a platform placed in one corner of the Lunar Landscape, from where your robot will start its mission. The size of the Starting Base should not exceed 21 x 29 centimeters (8.2 inches x 11.4 inches). It should be raised 7 centimeters (2.8 inches) from the lunar ground.
- **The High Ridge:** The High Ridge is a plateau of at least 32 studs wide (=equivalent to 25 centimeters or 10 inches) and runs the full width (from one side to the other) of the lunar Landscape. It has to be a minimum of 16 bricks (=equivalent to 15 centimeters or 6 inches) raised from the lunar ground. On either side of the plateau a ramp can be made, to drive over the ridge but then whole construction (ramp-ridge-ramp) cannot exceed 3 times a 48 base plates (=equivalent to 105 centimeters or 40,25 inches) in depth. The Rover must drive over the plateau. The plateau can be made with all sorts of materials.
- **The Mission Area:** The area on the opposite side of the High Ridge is called the Mission Area. In the Mission Area you must place at least two (2) objects for your robot to pick up and bring with it back to the Starting Base.
- **The Mission Items:** You must design and build at least two items for your robot to pick up. You can choose to build more than two Mission Items. You decide what the items look like, what they are made of and what they represent. An item could represent Helium3, Water-Ice or another material that can be harvested on the Moon. Or represent extra Solar Power, or a Heritage Artifact. 2 of these items must be placed in the Mission Area. The items should be placed as far from each other as possible.
- **The Mission:** The minimum Mission for your robot is to start off from the Starting Base, move up the first ramp of the High Ridge go across the Plateau and down into the Mission Area. In the Mission Area your robot should pick up two Mission Items, and make it back to the Starting Base, and touch the Starting Base before the Mission is over. You can extend your mission to whatever creative missions you like.

The Lunar Landscape and Game Play will be judged by the date of November 15, 2012 at 11:59:59 PM (Pacific Time).

D. Practical Robot

The fourth step in Phase Two will be for the Team to build their MINDSTORMS robot to complete the game that they have created. The MINDSTORMS robot will be provided to the Team.

- **Size:** The robot must occupy a ground footprint no larger than a single sheet of A4 paper (297 x 210 mm; 11.7 x 8.3 in) at the start of a traverse. The robot may expand in size after starting, but only by adding the size of its own length in any direction from the robot. The robot may use wheels or tracks only if they are constructed from standard LEGO parts.
- **Power:** The robot must be powered by one of the following.
 - 6 AA batteries inside the NXT (not provided by Moonbots)
 - 1 official MINDSTORMS NXT batteries pack (grey or white)
 - 1 Dexter Industries dSolar 4W System solar panel to power the grey NXT battery pack. This is the preferred method of charging and running the Robot. The robot will be required to carry a dSolar 4W solar panel from Dexter Industries, and the footprint of the robot will have to accommodate the solar panel. This means that the solar panel must stay within the size of the robot as described above.
All Teams will receive a Dexter Industries dSolar 4W system Solar Panel.

No other sources of power except the above written are allowed, so LEGO Power Function (PF) battery holders or battery packs on the robot are not allowed.

- **Materials:** The robot must be built entirely out of LEGO elements, optional the robot may contain Hi-Technic, Codatex, Dexter Industries and Rotacaster (wheels) elements. Objects functioning as remote controls are not allowed anywhere, at any time during the mission. Marker may be used for ownership identification, for marks in hidden areas only. Stickers are not allowed, except LEGO stickers, applied per LEGO instructions. Adhesives such as glue, tape, Velcro, or any material that through their use will enhance the structural strength of the assembly through the bonding of two surfaces shall not be permitted.
- **Sensors:** Only one (1) LEGO MINDSTORMS NXT Intelligent Brick is allowed for the robot. An unlimited number of LEGO motors, LEGO Technic or LEGO SYSTEM bricks, and LEGO sensors can be used. Only sensors certified by the LEGO Group, produced by the LEGO Group, produced by HiTechnic, Codatex and Dexter Industries will be allowed.
- **Software and Control:** The robot must be capable of running in an autonomous mode during the Live Mission Webcast. The robot must run on a program downloaded to and executed on the NXT microcontroller. All Robots must be programmed with LEGO MINDSTORMS NXT-G or National Instruments LabVIEW with the LabVIEW NXT Toolkit, or LabVIEW for LEGO MINDSTORMS. Once the mission has begun, no outside interference (touching, light, sound, use of remote controls, etc.) can be used to influence the Robot's

path or programming. It must remain autonomous based on its own programming and sensor readings.

Inquiries related to the products from Hitechnic, Rotacaster, Codatex or Dexter Industries must be made to the respective companies. Visit these sites for more information:

- www.hitechnic.com
- www.rotacaster.com.au
- www.codatex.com
- www.dexterindustries.com

E. Live Lunar STEM Outreach Demonstration

At the conclusion of Phase Two, at a date specified by the Team and in agreement with the Sponsor, the Team must conduct a live webcast using a webcasting service identified by the Sponsors. The Live Lunar STEM Outreach Project must take place at a local venue for the public to participate in. The Team will have the opportunity to demonstrate their Game Idea, their Lunar Landscape and their Practical Robot that they have created. During this webcast, the Team's robot will also perform the simulated game that the Team has created. The Challenge demonstration should not exceed 30 minutes. The Team will be encouraged to show kids and adults how to rove the LEGO MINDSTORMS robot around the lunar landscape and earn points that they have identified in their game. The intent of this lunar mission is not to try to get a perfect score based on the Team's game (would be nice), but rather, to show the public how they came up with their idea for their lunar landscape, how the game works, how the robot works and how to play the game.

16. Judging

This Challenge is a "Game of Skill". Each Team will be judged upon the criteria set forth below. The Sponsors will empanel a group of experts to serve as judges for the Challenge ("Judges"). The Judges may include representatives from some or all of the Sponsors and/or Co-Marketing Partners. Additionally, Judges may include external experts. All decisions made by the Judges shall be considered binding on both the Team and the Sponsors.

A. Selection of Phase One Winners: After the Phase One deadline of August 1, 2012, the Judges will be responsible for selecting a total of thirty (30) teams as winners during Phase One ("Phase One Winners"). The Team Captain of each Phase One Winner must have submitted a complete, Registration Package. The Judges will select Phase One Winners from the Teams that have submitted complete Registration Packages based on the following weighted criteria:

- i. Registration requirements completed as defined in Section 14 of these Rules: Team Biography, Team Picture, and Team Member Consent Forms (yes/no; must be completed or Team will not be judged).
- ii. Video Essay= 50%
- iii. Creative Question= 25%
- iv. Outreach Question= 25%

In the event of a tie in the Phase One judging criteria, the tie breaker will be based upon the highest score in "The Video Essay". Phase One Winners will advance to Phase Two of the Challenge.

B. Selection of Phase Two or Grand Prize Winners: After the Phase Two deadline of November 15, 2012 at 11:59:59 PM (Pacific Time), the Judges will be responsible for selecting one (1) team as winners of the Grand Prize ("Grand Prize Winners"). All participants in Phase Two must have previously been selected as Phase One Winners, and must have completed all of the Phase Two requirements set forth in Section 15 of these Rules. The Grand Prize Winner will be selected based on the following weighted criteria:

- Lunar Landscape Design = 10%
- Lunar Landscape 20%
- The Game Idea and Mission= 20%
- Practical Robot= 25%
- Live Lunar STEM Outreach Demonstration=25%

17. Prizes

A. Phase One Winners: All Phase One Winners (30) will receive one (1) LEGO MINDSTORMS robotic toolkit, mailed to the address specified in the Registration Package. One per winning Team. Approximate retail value ("ARV") for the LEGO MINDSTORMS robotic toolkit is \$280 US Dollars. All Phase One Winners will receive a MoonBots Marketing Kit (one per winning Team) to use for their Lunar Lander STEM Outreach Demonstration; ARV for the MoonBots Marketing Kit is \$100 US Dollars. All Phase One Winners will receive a Gift Card of \$150 to purchase materials for their Lunar Landscape (one per winning Team)

The Phase One Winners will be listed by Team name in official Challenge blogs and promoted by the Sponsors to local media.

B. Grand Prize Winner: One (1) team will each be awarded a Grand Prize. Each Team member, parent or guardian of each Team member and the Team Captain of the Grand Prize Winners will receive round trip economy airfare from any major gateway city airport located closest to a Team member or Team Captain's home for travel to the Pacific International Space Center for Exploration Systems in Hilo, Hawaii. Lodging selected by the Sponsors will be provided for each Team member, his/her parent or guardian and Team Captain for four (4) days and three (3) nights. Three (3) meals on each day of the tours will be provided to each member of the Grand Prize Winners and their parent or legal guardian. ARV for the Grand Prize for the one (1) winning teams is \$20,000 US dollars. Actual value of trip may vary based on point of departure and airfare fluctuations. Any difference between stated ARV and actual value of the Grand Prize will not be awarded. Selection of airline and hotel are solely within the Sponsors' discretion. Each winner or their parent/legal guardian shall book the trip through a travel agent designated by the Sponsors at least one month before trip departure and shall go on the trip on the designated date or otherwise forfeit the Grand Prize. Meals and beverages outside of those listed above, gratuities, luggage fees, parking, incidental hotel charges, in-room charges, phone calls, ground transportation, and any other travel-related expenses not specified herein are the

sole responsibility of each winner. Each winner acknowledges and understands that the maximum amount that the Sponsors will be responsible for paying toward the Grand Prize is \$20,000 (assumes that each winner travels to Hawaii). Each winner is responsible for transportation to and from the major commercial airport. All travel must take place on the specified dates or the Grand Prize will be forfeited; no alternative travel dates are available. Exact travel dates and arrangements subject to availability. Minors must be accompanied at all times by their parent or guardian during trip (including, but not limited to, in-flight, hotel stay and all Grand Prize-related events). Winning team members and their parent(s) or guardian(s) must sign and return a travel waiver and release before any ticketing of travel occurs. Winners and parents/legal guardians must have all necessary identification and/or travel documents (e.g., acceptable photo ID, passport or visa) required for travel (at his/her expense). If one or more of the winners cannot attend, neither they nor the winners attending the trip are entitled to the difference between the ARV of the Grand Prize and the actual cost of the trip. There is no refund value for unused amenities on a trip and no cash value is due if the trip is cancelled or a winner is a no show. All hotels have their own cancellation policy which may result in additional fees to a winner. All destination packages are based on mid-week departures. Additional taxes and fees may apply if travel is booked on different days of the week than mid-week. Each member of the Team must travel together on the same itinerary. Each winner is responsible for inoculations prior to travel, any insurance (travel, health, etc.) and all other forms of insurance that they may wish to obtain (at their own expense), and hereby acknowledge that the Sponsors have not and will not obtain or provide travel insurance or any other form of insurance. All airline tickets are non-refundable and the names of each winner printed on the tickets need to exactly match proof of citizenship. Failure to check in for your flight in an appropriate amount of time may result in denied boarding. No substitution, cash redemption or transfer of the Grand Prize is allowed. The Sponsors and agents of the Sponsors retain sole discretion for the selection of departing airport, destination airport, airline carrier, flight times and destination hotel. Partner Entities (defined below) are not liable for any expenses incurred as a consequent of flight cancellation/delay. The Grand Prize may be forfeited if: (a) proper travel documents for any and all travel are unattainable for any reason within the time required by the Sponsors; or (b) the Team member did not have the unqualified right, at the time of being selected, to re-enter his/her country of origin after leaving the country. Each Team member is solely responsible for determining and complying with all applicable international/domestic travel procedures and restrictions. Each Team member must comply with all hotel check-in requirements, including, but not limited to, presentation of a major credit card.

The Grand Prize Winner's Team name and each Team member's name will be featured on the Challenge Site, and may be included on the Sponsors, Google or Co-Marketing Partners websites and/or in local and national media outreach. The Grand Prize may be terminated or extended at the sole discretion of the Sponsors.

- C. **Runner Ups: Three** (3) Teams will each be awarded a FIRST Robotics registration. The Team Captain of each Team will receive (1) FIRST Tech Challenge (FTC) or FIRST LEGO League (FLL) team registration and robot set for the 2013 season. Value of this prize may only be used for team registration and robot set combined and will not be paid to the team. Event fees may apply. The Runner Ups Team name and each Team member's name will be featured on the Challenge Site, and may be included on the Sponsors, Google or Co-Marketing Partners websites and/or in local and national media outreach. The Prize may be terminated or extended at the sole discretion of the Sponsors.

Prize Conditions for Team members under the Age of Majority: If any winner is not the age of majority in his/her country of residence, the prize will be awarded in the name of his/her parent(s) or guardian(s) who will be responsible for fulfilling all requirements imposed on winners set forth herein; however, the Team member and not his/her parent(s) or guardian(s) will participate in the prize.

18. Odds Governing Victory

There are thirty (30) teams selected as Phase One Winners, one (1) Team selected as a Grand Prize Winner and three (3) Teams selected as Runner Ups. The odds of becoming a Winner depend on the number of eligible entries received by the Sponsors.

19. Prize Winner Notification and Verification

All potential Phase One and Phase Two Winners will be notified via the contact information provided in the Team Registration Package. The Sponsors, Google and Co-Marketing Partners are not responsible for any change in a participant's mailing address, telephone number, and/or email address. Potential winners are subject to verification, including verification of age. If a potential Phase One or Phase Two Winner is found not to be eligible or not in compliance with these Rules, or if prize notification or any prize is returned as undeliverable, the potential Winner will be disqualified and all privileges otherwise due as a Prize Winner shall be terminated. Each Phase One and Phase Two Winner (or their parent(s) or guardian(s), if applicable) must sign upon verification an affidavit of eligibility and release of the Sponsors, Google, and Co-Marketing Partners and their officers, directors, employees, agents, members, affiliated companies, and subsidiaries, from any and all liability, loss, claims, demands, and causes of action for personal injury and/or damage, theft, loss, or any other harm suffered in connection with this Challenge directly or indirectly from acceptance, possession, or misuse of any prize or participation this Challenge to be eligible for a prize. Entry into this Challenge constitutes agreement to sign such affidavit. Each winner must also complete any additional legal documents provided by the Sponsors or Co-Marketing Partners with respect to receiving a prize, including assignment of intellectual property rights, and return them as instructed within the time frame specified by the Sponsors or Co-Marketing Partners or a winner may forfeit his/her prize at the Sponsors' sole discretion. In the event a winner has not reached the age of majority in his or her country of residence, the Sponsors will require the winner's parent or legal guardian to execute such documents on behalf of the winner.

20. General Prize Terms

All costs and expenses not specifically listed above, including, without limitation, sales or use tax and shipping and handling charges to be incurred in connection with redemption of a prize are solely each winner's responsibility. The value of the prizes will be taxable to each winner as income. Each winner must supply his or her social security number for tax purposes, and youth must supply their parent or guardian's social security number for tax purposes. All applicable regional, national, international, federal, state, and/or local taxes, and any other costs not specifically provided for in these Rules are solely each winner's responsibility. The Sponsors, Google and Co-Marketing Partners shall have no responsibility or obligation to the Winners or potential Winners who are unable to accept or utilize the prizes as described herein. Each winner, their parent or guardian (as applicable) is responsible for the reporting and payment of all applicable federal, state, international and local taxes (including income

taxes) associated with the Grand Prize and will and hereby do hold the Sponsors harmless from liability for failure to timely report and/or pay such taxes. An IRS form 1099 will be issued.

21. Rights

- A. **Competition Media Rights:** By entering the Challenge, the Team, Team Captain, and all of the Team's members irrevocably agree to allow the Sponsors, Google and Co-Marketing Partners to reference their names, Team name, and all blogs, videos, and photographs submitted as part of Challenge at the Challenge and/or Challenge Site and to use the Team name, image, likeness, and recordings associated with the Challenge in all media anywhere throughout the world in perpetuity, without additional permission or compensation unless prohibited by law.

Each Team, Team Captain, and Team member, by entering the Challenge, agrees, if chosen as a winner to irrevocably assign to the Sponsors of the Challenge all worldwide rights, titles and interests to the Team's Video Essay, Blog posts, Video Blogs, Team Photograph, and Live Mission Webcast recording from the Challenge, (collectively, "Challenge Materials") including intellectual property rights and moral rights, including by way of example but not limitation, all copyright rights, invention and trademark rights, on an exclusive basis, such exclusive basis to also exclude participant/owner from exercising any rights or interest over the subject matter hereof.

By submitting any Challenge Materials, each Team, Team Captain, and Team member warrants and represents that the Challenge Materials: (i) are the Team's original work, (ii) have not been previously published, (iii) have not won previous awards, (iv) do not infringe upon the copyrights, trademarks, rights of privacy, publicity or other intellectual property or other rights of any person or entity; (v) that the Team has obtained permission from a person whose name, likeness or voice is used in any Challenge Materials; (vi) that publication of any of the Challenge Materials via various media including Web posting, will not infringe on the rights of any third party rights; and (vii) that all rights, licenses and permissions have been obtained in writing from any person who may have helped with or in the participated in the creation of the Challenge Materials (or from parent(s)/guardian(s) if any Team member is considered under the age of majority in their country of residence). Each Team, Team Captain, and Team member will indemnify and hold harmless the Sponsors, Administrator, and Co-Marketing Partners from any claims to the contrary. Each Team whose work includes likenesses of third parties or contains elements not owned by any Team Captain or Team member (such as, but not limited to, depictions of persons, buildings, trademarks or logos) must be able to provide legal releases for such use including the Sponsors' use of such materials, in a form satisfactory to the Sponsors, upon request, prior to award of prize and/or naming of the Team as a winner.

By submitting any Challenge Materials, each Team, Team Captain, and Team member agrees that such submissions are gratuitous and made without restriction, and will not place the Sponsors, Google, Administrators and/or Co-Marketing Partners under any obligation, and that the Sponsors, Administrator, and Co-Marketing Partners are free to disclose or otherwise disclose the ideas contained in any of the Challenge Materials on a non-confidential basis to anyone or otherwise use the ideas without any additional compensation. Each Team, Team Captain, and Team member acknowledges that, by acceptance of such submission, the Sponsors, Google, Administrator, and Co-Marketing Partners do not waive any rights to use

similar or related ideas previously known to said entity, or developed by its employees or obtained from sources other than the Team.

- B. Use of Marks:** Except as expressly set forth in these Rules, the Team shall not use the names, trademarks, copyrights, logos, insignias or similar intellectual property of the Sponsors, Google, Administrator, and/or the Co-Marketing Partners or any other third party entity in any way without such party's prior written permission in each instance, which such party may grant or withhold in its sole discretion. The Sponsors and Co-Marketing Partners grant the Team a limited, non-exclusive, royalty-free, worldwide non-transferable, non-sub licensable, revocable license to use the Challenge logo for the approved purposes set forth in this document.

22. General Provisions

- A. Acceptance and Removal:** The Sponsors reserve the right for any reason to reject the Registration Package of any potential Team, Team Captain, or Team member to participate in the Challenge and to prohibit the participation of any person or any group of persons to participate in the Challenge. Each Team, Team Captain, and Team member agrees to abide by a decision for removal, termination, or disqualification made by the Sponsors or Administrator without challenge, legal recourse, or any other action of protest of the decision.
- B. General Indemnification:** By entering the Challenge, Teams, Team Captain, Team members, and Phase One and Phase 2 Winners agree to hold harmless and indemnify officers, directors, partners, members, shareholders, employees and agents of the Sponsors, Google, and Co-Marketing Partners, and each of their respective parent companies, subsidiaries, affiliates, advertising and promotional agencies (collectively, "Partner Entities") from and against any and all liability, damages or causes of action (however named or described), with respect to or arising out of either (i) the Team's, Team Captain, Team members, or Winner's participation in the Challenge, including, without limitation, the breach or violation of any participant's representations and warranties concerning his or her submissions; (ii) the use of and acts or omissions caused by any materials used in participating in the Challenge; and (iii) the receipt, redemption or use of any prizes awarded in the Challenge, including, without limitation, any related travel or products purchased with redemption of the prizes themselves. The Teams, Team Captain, Team members, and Winners agree to release all rights to bring any claim, action or proceeding against the Sponsors, Google, and Co-Marketing Partners, further covenant not to sue the Sponsors, Google, or Co-Marketing Partners and hereby acknowledge that neither the Sponsors, nor Google, nor the Co-Marketing Partners, nor any Partner Entity has made or is in any manner responsible or liable for any warranty, representation or guarantee, express or implied, in fact or in law, relative to the Challenge or the prizes. Where permitted by law, in consideration for being awarded a prize, each winner hereby agrees and consents, without further authorization, compensation or remuneration of any kind, to the use of their names and/or likenesses in any and all advertising, promotions and other publicity conducted by the Sponsors and Co-Marketing Partners. To the extent permitted by law, the rights to litigate, to seek injunctive relief or to any other recourse to judicial or any other recourse in case of disputes or claims resulting from or in connection with this Challenge are hereby excluded, and each Team, Team Captain, Team member, and winner expressly waives any and all such rights.
- C. Minors – Parent(s) and Guardian(s):** As the parent(s) or guardian(s) of a Team member, you agree to indemnify the Partner Entities for and against: (i) any claims made by you or your family

against the Partner Entities in connection with the Challenge or the prizes awarded herein; and (ii) any losses (including any liability) caused by you, your Team member and/or your or your Team member's conduct.

23. General Terms

Noncompliance with any of these Rules may result in disqualification. ANY VIOLATION OF THESE RULES OR BEHAVIOR BY A TEAM, TEAM CAPTAIN OR WINNER THAT WILL BRING SUCH TEAM, TEAM CAPTAIN, WINNER OR SPONSOR, GOOGLE OR CO-MARKETING PARTNER INTO A DISREPUTE (IN THE SPONSORS' SOLE DISCRETION) WILL RESULT IN THEIR DISQUALIFICATION FROM THE CHALLENGE OR AS A PRIZE WINNER AND ALL PRIVILEGES AS A PRIZE WINNER WILL BE IMMEDIATELY TERMINATED.

The Sponsors, Google, and Co-Marketing Partners assume no responsibility for incorrect or inaccurate information regarding the Challenge or Registration Packages whether caused by any of the equipment or programming associated with or utilized in this Challenge or by any human error which may occur in the processing of the Registration Packages in this Challenge. The Sponsors, Google, and Co-Marketing Partners are not responsible for any problems or technical malfunction of any telephone network or lines, computer online systems, servers, or providers, computer equipment, software, failure of any email or servers on account of technical problems or traffic congestion on the Internet or at any website, or any combination thereof, or any incomplete, lost, late, delayed, misdirected or garbled entries or failure to receive entries, including, without limitation, any injury or damage to entrant's or any other person's computer related to or resulting from participation or uploading or downloading any materials or software or attempts to participate in or upload or download materials or software related to this Challenge. The Sponsors, Google, and Co-Marketing Partners are not responsible for any typographical or other error in the printing of the Challenge, administration of the Challenge, or in the announcement of the prizes and the winners. If, for any reason, the Challenge is not capable of running as planned, or is disrupted or corrupted, including, without limitation, by strikes, acts of war or terrorism, infection by computer virus, bugs, tampering, unauthorized intervention, fraud, technical or system failures, or any other causes beyond the control of the Sponsors, Google, and/or Co-Marketing Partners which corrupts or affects the administration, security, fairness, integrity or proper conduct of this Challenge or for any reason the Sponsors deem it necessary, the Sponsors reserve the right in their sole discretion to cancel, terminate, modify or suspend the Challenge or to determine the winners in their sole discretion. All interpretations of these Rules and decisions by the Sponsors are final. No software-generated, robotic, programmed, script, macro or other online or text message entries are permitted. The Sponsors reserve the right in their sole discretion to disqualify any individual it suspects or finds: (i) to have used a software-generated, robotic, programmed, script, macro or other automated online or text message entry; (ii) to have tampered with the entry process or the operation of this Challenge; (iii) to be acting in violation of these Rules; (iv) to be acting in an unsportsmanlike or disruptive manner, or with intent to annoy, abuse, threaten or harass any other person; or (v) to have provided inaccurate information on any legal documents submitted in connection with this Challenge.

CAUTION: ANY ATTEMPT BY AN INDIVIDUAL TO DELIBERATELY DAMAGE ANY WEBSITE OR UNDERMINE THE LEGITIMATE OPERATION OF THE CHALLENGE IS A VIOLATION OF CRIMINAL AND CIVIL LAWS AND SHOULD SUCH AN ATTEMPT BE MADE, THE SPONSOR, GOOGLE AND CO-MARKETING PARTNERS RESERVE THE RIGHT TO SEEK DAMAGES FROM ANY SUCH INDIVIDUAL TO THE FULLEST EXTENT PERMITTED BY LAW. THE CALIFORNIA COURTS (STATE AND FEDERAL) SHALL HAVE SOLE JURISDICTION OF ANY CONTROVERSIES REGARDING THE CHALLENGE AND THE LAWS OF THE STATE OF CALIFORNIA SHALL GOVERN THE CHALLENGE WITHOUT REFERENCE TO ITS CONFLICTS OF LAW

PRINCIPLES. EACH TEAM, TEAM CAPTAIN, AND TEAM MEMBER WAIVES ANY AND ALL OBJECTIONS TO JURISDICTION AND VENUE IN THESE COURTS AND HEREBY SUBMITS TO THE JURISDICTION OF THOSE COURTS.

All disputes arising out of, related to, or in connection with this Challenge will be finally settled under the Rules of Arbitration of the International Chamber of Commerce by three (3) arbitrators appointed as follows: each party shall select an arbitrator, and such arbitrators will select a third; provided, however, that in all events at least two (2) out of the three (3) arbitrators must be active members of the bar of a U.S. State. The arbitration will be conducted in English in Los Angeles, California.

If any provision(s) of these Rules are held to be invalid or unenforceable, all remaining provisions hereof will remain in full force and effect.

24. Waiver of Requirements

The Sponsors may, at their sole discretion, elect to waive or relax specific requirements if the basic objectives of the Challenge are found to have been satisfied.

25. Winners List

For a list of Winners, visit the MoonBots website at www.moonbots.org after **December 1, 2012**.

26. Choice of Law: The Challenge is governed by United States law and is subject to all applicable federal, state and local laws. Except where prohibited by law, any and all legal actions or claims arising in connection with this Challenge must be brought in a court of competent jurisdiction in the County of Santa Clara, in the State of California, USA.

27. Sponsors

**X PRIZE Foundation
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Playa Vista, CA 90094
USA**

**The LEGO Group
DK-7190 Billund
Denmark**