

# Scholastic Motivation Ministries Robotics Ministry Robot Judging Sheet:



**Research Project: Essay** 

| Research Question:   |   | •  | •   |  |  |  |  |
|--|---|--|---|--|--|--|--|
|  | (if applicable):  |  |   |  |  |  |  |
| udges Instructions: Circle the L   | evel of performance. Calculate  | the totals at the bottom   | of the page.  |  |  |  |  |
| Name of Church that Team represents:                                     |   |  |   |  |  |  |  |
| City   | State:  | Team Jurisdiction:   |   |  |  |  |  |
| Essay Format:  | Ability to follow requ  | irements for essa  | ay submission   |  |  |  |  |
| a. Cover Shee  | Requireme<br>t, b. 3-4 pages, c. 12-pt font   | ents:<br>size & Double spaced, (   | d. references   |  |  |  |  |
| Only 1 of the 4 required components                                      | 2 of the 4 required components  | 3 of the 4 required components   | All 4 required components   |  |  |  |  |
| Comments:  | Comments:   |  |   |  |  |  |  |
| As humans begin to plan r<br>be used economically to su                  | Research Question: How Do We Generate Energy for Human Outposts?  As humans begin to plan missions to Mars or even to nearby asteroids, we need to work out how power can e used economically to support life. The solar arrays used on the ISS are still very fragile and may not work so well as we travel farther away from the Sun. What are our options?  Topics to Be Covered |  |   |  |  |  |  |
| Energy production  | Energy production Energy transfer Energy consumption Designing energy-efficient systems  Types of energy  |  |   |  |  |  |  |
|  |   |  | Extensive review; details and demonstrates extensive knowledge  |  |  |  |  |
| Minimal review Recommendations not well- thought nor researched properly | Minimal review; shows some effort in describing recommendations   | Sufficient review;<br>demonstrates some effort<br>in describing<br>Recommendations | and Recommendations convey a<br>new application of existing<br>ideas/application with the<br>potential to |  |  |  |  |
| 1  | 2   | 3  | add significant value<br>4  |  |  |  |  |
| Comments:  |   |  |   |  |  |  |  |
| TOTAL POINTS<br>Level 1  | TOTAL POINTS<br>Level 2   | TOTAL POINTS<br>Level 3  | TOTAL POINTS<br>Level 4   |  |  |  |  |



# Scholastic Motivation Ministries Robotics Ministry Robot Judging Sheet:



### **Research Project: Poster Board**

| esearch Questi   | Co   | mpany/Church Affiliation:   |  |  |  |  |
|--|--|---|--|--|--|--|
| Jurisdiction of Judge  | (if applicable):   |   |  |  |  |  |
| Judges Instructions:   | Circle the Level of performance  | e. Calculate the totals at th   | ne bottom of the page.   |  |  |  |
| e of Church that Team rep  | resents:   |   |  |  |  |  |
| State:   |  | Team Jurisdiction:  |  |  |  |  |
| <b>Creativity</b> Ima  | Poster Board Submission Creativity Imagination used to develop and effective and content-rich Poster Board   |   |  |  |  |  |
| minimally engaging OR  | engaging OR imaginative  | engaging AND imaginative  | very engaging AND  |  |  |  |
| unimaginative $oldsymbol{1}$   | 2  | 3   | exceptionally imaginative <b>4</b>   |  |  |  |
| As humans begin to plan to be used economically to su  | on: How Do We Gene<br>missions to Mars or even to ne<br>apport life. The solar arrays use<br>as we travel farther away from  | arby asteroids, we need to  | o work out how power car<br>fragile and may not work s   |  |  |  |
| Research Question As humans begin to plant to be used economically to sue well a   | missions to Mars or even to ne<br>apport life. The solar arrays use  | arby asteroids, we need to<br>ed on the ISS are still very<br>the Sun. What are our op<br>Covered<br>sumption Designing ener  | o work out how power car<br>fragile and may not work s<br>tions?   |  |  |  |
| Research Question As humans begin to plant to be used economically to sue well a   | missions to Mars or even to ne<br>apport life. The solar arrays use<br>as we travel farther away from<br><b>Topics to Be</b><br>Energy transfer Energy cons  | arby asteroids, we need to<br>ed on the ISS are still very<br>the Sun. What are our op<br>Covered<br>sumption Designing ener  | o work out how power car<br>fragile and may not work s<br>tions?<br>gy-efficient systems  Recommendations are original by<br>improving existing options,<br>develops a new application of<br>existing ideas/application with the |  |  |  |
| Research Question  As humans begin to plant to be used economically to sure well at the second to th | missions to Mars or even to neupport life. The solar arrays use as we travel farther away from Topics to Be Energy transfer Energy constypes of 6  Minimal review; shows some effort in describing | arby asteroids, we need to do not he ISS are still very the Sun. What are our op Covered sumption Designing energy  Minimal review; shows some effort in describing                 | o work out how power car<br>fragile and may not work s<br>tions?<br>gy-efficient systems  Recommendations are original by<br>improving existing options,<br>develops a new application of  |  |  |  |
| Research Question  As humans begin to plant to be used economically to sure well at the second to th | missions to Mars or even to neupport life. The solar arrays use as we travel farther away from Topics to Be Energy transfer Energy constypes of e  | arby asteroids, we need to do not he ISS are still very the Sun. What are our op Covered sumption Designing energy  Minimal review; shows some effort in describing recommendations | ragile and may not work stions?  gy-efficient systems  Recommendations are original by improving existing options, develops a new application of existing ideas/application with the potential to add significant value          |  |  |  |

Total Points for Research Project-Poster Board:\_\_\_\_\_



### Scholastic Motivation Ministries Robotics Ministry Robot Judging Sheet:



**Research Project: Digital Video** 

#### **Research Question:** How Do We Generate Energy for Human Outposts?

| dge  | e:  | Сог   | Company/Church Affiliation:   |  |  |  |  |  |
|------|---|---|---|--|--|--|--|--|
|      | Jurisdiction of Judge (   | Jurisdiction of Judge (if applicable):                                  |   |  |  |  |  |  |
|      | Judges Instructions: Circle the Level of performance. Calculate the totals at the bottom of the page.   |   |   |  |  |  |  |  |
| am   | e of Church that Team repr  | esents:   |   |  |  |  |  |  |
| ity_ |   | State:  | Team Jurisdiction:  |  |  |  |  |  |
|      | <b>Creativity</b> Ima   | magination used to develop and effective and content-rich Digital Video |   |  |  |  |  |  |
|      | minimally engaging OR<br>unimaginative<br><b>1</b>  | engaging OR imaginative   | engaging AND imaginative  | very engaging AND<br>exceptionally imaginative<br><b>4</b>   |  |  |  |  |
|      | Comments:   |   |   |  |  |  |  |  |
|      | As humans begin to plan missions to Mars or even to nearby asteroids, we need to work out how power can be used economically to support life. The solar arrays used on the ISS are still very fragile and may not work so well as we travel farther away from the Sun. What are our options?  Topics to Be Covered  Energy production Energy transfer Energy consumption Designing energy-efficient systems |   |   |  |  |  |  |  |
|      |   | Types of energy   |   |  |  |  |  |  |
|      | Minimal review<br>Recommendations not well-<br>thought nor researched<br>properly   | Minimal review; shows some<br>effort in describing<br>recommendations   | Minimal review; shows<br>some effort in describing<br>recommendations | Recommendations are original by improving existing options, develops a new application of existing ideas/application with the potential to add significant value |  |  |  |  |
|      | 1   | 2   | 3   | 4  |  |  |  |  |
|      | Comments:   |   |   |  |  |  |  |  |
| Í    | TOTAL POINTS<br>Level 1   | TOTAL POINTS<br>Level 2   | TOTAL POINTS<br>Level 3   | TOTAL POINTS<br>Level 4  |  |  |  |  |

Total Points for Research Project-Digital Video:\_\_\_\_\_