



# Scholastic Motivation Ministries Robotics Ministry



## Robot Judging Sheet:

### Research Project: Essay

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

Judge: \_\_\_\_\_ Company/Church Affiliation: \_\_\_\_\_

Jurisdiction of Judge (if applicable): \_\_\_\_\_

Judges Instructions: Circle the Level 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 requirements for essay submission

Requirements:

a. Cover Sheet, b. 3-4 pages, c. 12-pt font size & Double spaced, d. references

Only 1 of the 4 required components <b>1</b>	2 of the 4 required components <b>2</b>	3 of the 4 required components <b>3</b>	All 4 required components <b>4</b>
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Comments:

#### 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 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 Recommendations not well-thought nor researched properly <b>1</b>	Minimal review; shows some effort in describing recommendations <b>2</b>	Sufficient review; demonstrates some effort in describing Recommendations <b>3</b>	Extensive review; details and demonstrates extensive knowledge and Recommendations convey a new application of existing ideas/application with the potential to <u>add significant value</u> <b>4</b>
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Comments:

TOTAL POINTS Level 1	TOTAL POINTS Level 2	TOTAL POINTS Level 3	TOTAL POINTS Level 4
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Total Points for **Research Project-Essay**: \_\_\_\_\_



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



**Research Project: Poster Board**

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

Judge: \_\_\_\_\_ Company/Church Affiliation: \_\_\_\_\_

Jurisdiction of Judge (if applicable): \_\_\_\_\_

Judges Instructions: Circle the Level of performance. Calculate the totals at the bottom of the page.

Name of Church that Team represents: \_\_\_\_\_

City \_\_\_\_\_ State: \_\_\_\_\_ Team Jurisdiction: \_\_\_\_\_

<b>Poster Board Submission</b>			
<b>Creativity</b> Imagination used to develop and effective and content-rich Poster Board			
minimally engaging OR unimaginative <b>1</b>	engaging OR imaginative <b>2</b>	engaging AND imaginative <b>3</b>	very engaging AND exceptionally imaginative <b>4</b>
Comments:			
<p align="center"><b>Research Question: How Do We Generate Energy for Human Outposts?</b></p> <p>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?</p> <p align="center"><b>Topics to Be Covered</b></p> <p align="center">Energy production   Energy transfer   Energy consumption   Designing energy-efficient systems Types of energy</p>			
Minimal review Recommendations not well-thought nor researched properly <b>1</b>	Minimal review; shows some effort in describing recommendations <b>2</b>	Minimal review; shows some effort in describing recommendations <b>3</b>	Recommendations are original by improving existing options, develops a new application of existing ideas/application with the potential to add significant value <b>4</b>
Comments:			
TOTAL POINTS Level 1	TOTAL POINTS Level 2	TOTAL POINTS Level 3	TOTAL POINTS Level 4

**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?**

Judge: \_\_\_\_\_ Company/Church Affiliation: \_\_\_\_\_

Jurisdiction of Judge (if applicable): \_\_\_\_\_

Judges Instructions: Circle the Level of performance. Calculate the totals at the bottom of the page.

Name of Church that Team represents: \_\_\_\_\_

City \_\_\_\_\_ State: \_\_\_\_\_ Team Jurisdiction: \_\_\_\_\_

<b>Creativity</b> Imagination used to develop and effective and content-rich Digital Video			
minimally engaging OR unimaginative <b>1</b>	engaging OR imaginative <b>2</b>	engaging AND imaginative <b>3</b>	very engaging AND exceptionally imaginative <b>4</b>
Comments:			
<b>Research Question: How Do We Generate Energy for Human Outposts?</b> 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? <b>Topics to Be Covered</b> Energy production Energy transfer Energy consumption Designing energy-efficient systems Types of energy			
Minimal review Recommendations not well-thought nor researched properly <b>1</b>	Minimal review; shows some effort in describing recommendations <b>2</b>	Minimal review; shows some effort in describing recommendations <b>3</b>	Recommendations are original by improving existing options, develops a new application of existing ideas/application with the potential to add significant value <b>4</b>
Comments:			
TOTAL POINTS Level 1	TOTAL POINTS Level 2	TOTAL POINTS Level 3	TOTAL POINTS Level 4

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