

# SAMPLE – NOT FOR CONTEST ENTRY

## Genes in Space 2018 Judging Rubric

**Question 1** - Describe your project in tweetable form.

- This question is not relevant to judging

**Question 2** - Describe the scientific problem that you propose to address. What is the question you are trying to answer? What makes it significant, relevant, or interesting?

- Question is relevant to space exploration
- Question is creative and original
- Demonstrates accurate understanding of problem
- Describes problem and relevance to an appropriate level of detail
- Compellingly written and shows nuance

**Question 3** - State your hypothesis. What are your objectives?

- Hypothesis and objectives are creative and original
- Hypothesis demonstrates accurate understanding of topic
- Hypothesis can be addressed with PCR
- Hypothesis is focused, can be tested by a single experiment
- Clearly justifies hypothesis and objectives

**Question 4** - Explain how the unique environment aboard the International Space Station is required to test your hypothesis. What conditions of the space station are essential for your research?

- Conditions required are only available on ISS
- Requires PCR to be conducted on ISS
- Clearly defines conditions required
- Justifies why conditions on Earth are insufficient

**Question 5** - Outline your experimental plan. How will you use PCR to test your hypothesis? Specify for example: the samples you will analyze, controls that you will use, and the possible experimental outcomes.

- Clear and detailed experimental plan (controls, system, samples, etc)
- PCR is properly used
- PCR is essential to experimental plan
- Discusses post-PCR analysis and possible outcomes

**Question 7** - References.

- Team adequately acknowledges pre-existing work.