Mission Report

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| To: | Mission Director |
| From: | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Planetary Science Analyst  *Name* |
| Subject: | Scale-Based Analysis for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Planet/Moon* |
| Purpose: | As planetary scientists at NASA, our team is planning a mission to explore a planet or moon in our solar system. Our team will analyze and interpret scale properties—such as size, distance, and surface gravity—using scientific notation to recommend a destination for the mission. |

# Initial Findings

After researching the following properties for our selected object, we found the following values and represented them both in standard notation and scientific notation. Use the appropriate units.

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| Property | **Standard Notation** | **Scientific Notation** |
| Diameter |  |  |
| Distance from Earth |  |  |
| Surface Gravity |  |  |

# Scale Comparisons

Below we compared at least two properties with those of Earth. We used scientific notation and explained the difference in scale.

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| Property | **Explanation** |
| *Example* | Jupiter’s diameter is approximately 1.4 × 105 km, which is about 11 times the diameter of Earth. |
| Comparison 1 |  |
| Comparison 2 |  |

# Mission Proposal

Below I have used our data to answer the following questions.

* How does the distance of your chosen planet impact space exploration efforts?
* Why should we choose your destination for the mission?

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| **My 4–5 Sentences:** |
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