

Name _____ Date _____

Mars Rover Celebration Assessment Answer Key

1. How would you describe the size of our solar system (size of the sun and planets and the distance away from Earth) to a friend? Answers may vary. Possible answers include a description of how large the solar system is or the distances between the planets
2. Why is it important to have a clear PURPOSE before beginning research? Helps you stay on task, keeps you from getting lost in the details
3. Name three characteristics of the terrain on Mars. **Answers may vary. Possible answers include:**
 1. dry, cold wasteland
 2. pitted by craters
 3. layered with dust
4. What does it mean to SCAN text while conducting research? To skim (read quickly) text looking for key words
5. What are three things to consider when designing a successful mission to Mars? **Answers may vary. Possible answers include:**
 1. what problem to solve
 2. what features the rover should have to solve the problem
 3. how to collect data that will solve the problem
6. Name three organizational tools/aids that can help you find the information you need when conducting research. **Answers may vary. Possible answers include:**
 1. Table of Contents/ Navigation Bar
 2. Index, Glossary, Preface, Appendix
 3. Search and Find Feature
7. What are three features of a good scientific or technological question? **Answers may vary.**
 1. It is reasonable
 2. It is measurable
 3. It is clear and specific

8. How are math, science and reading skills important when conducting a research project?
Helps us to collect important information and to read and understand what we have found; helps us to learn and use skills that real scientists and engineers use
9. How can you tell what is IMPORTANT from what is INTERESTING as you conduct research?
Keeping your purpose in mind; knowing that authors often put important information in the first sentence; knowing that important information is often repeated; using text features
10. Why is it important to consider different solutions to a problem? Different solutions help us to figure out which one(s) best meet the criteria and constraints of a problem.
11. Why is the Engineering Design process important to scientists and engineers? Helps define a process for designing, building and refining a product that will solve a problem
12. When writing a persuasive essay, what are the two KEY CONSIDERATIONS in deciding which of your ideas make the best arguments? Your audience—which arguments will convince the people you need to convince; including your strongest (best) arguments
13. Why is creating a prototype useful? Answers may vary. Possible answers include: helps us to see what works and what doesn't; helps improve design
14. What are the KEY FEATURES of a FORMAL (professional) presentation? Using academic language; writing/speaking in complete sentences; using good grammar; using accurate information
15. What are three skills that are needed to work successfully with a team? Answers may vary. Possible answers include:
1. teamwork
 2. communication
 3. problem solving skills