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. Why is it important to ask good questions? Helps to better define the problem that will be solved.

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. What are some tools you can use to figure out the meaning of new VOCABULARY? __Using prefixes, suffixes and root words; breaking down compound words; using the context (the words and sentence around the new word); using a student-friendly online dictionary; using cognates_____

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 3 skills that are needed to work successfully with a team? Answers may vary. Possible answers include:
    1. __teamwork_____
    2. __communication_____
    3. __problem solving skills_____