

Student Name _____ Date _____

AREOLOGY – THE STUDY OF MARS

THIS ACTIVITY IS ADAPTED FROM *Mission to Mars MATERIALS FROM THE PACIFIC SCIENCE CENTER IN SEATTLE, WA AND ADLER PLANETARIUM. SUMMITTED TO LIVE FROM MARS BY APRIL WHITT AND AMY SINGEL, ADLER PLANETARIUM. TEACHER EDITION CREATED BY ASU MARS K -12 EDUCATION OUTREACH PROGRAM.*

DIRECTIONS. You have just received a Martian surface sample. DO NOT SHOW YOUR SAMPLE TO ANYONE ELSE. Unwrap your sample and record observations about its surface: color, texture, composition by answering questions 1-4 below. Next, take a "core sample" by carefully and steadily drilling a straw into their candy bar. Complete questions 5-6 below. Use knives to cut candy in two, so the layers can be viewed more easily in a cross-section. Complete question 7 below. Make a second core sample using the other straw. Two students then exchange core samples. Complete questions 8-9 below. When finished, complete questions 10-12.

1. Describe the color of your Mars sample:

2. Describe the surface features of your Mars sample:

3. Draw a picture of any surface features you see on your Mars sample:

4. What is your hypothesis (science guess) about the cause of any texture that you see on your Mars sample?

5. How many layers does your Martian core sample contain?

6. Draw a picture showing the layers of your Martian core sample.

Student Name _____ Date _____

AREOLOGY – THE STUDY OF MARS

THIS ACTIVITY IS ADAPTED FROM *Mission to Mars MATERIALS FROM THE PACIFIC SCIENCE CENTER IN SEATTLE, WA AND ADLER PLANETARIUM. SUMMITTED TO LIVE FROM MARS BY APRIL WHITT AND AMY SINGEL, ADLER PLANETARIUM. TEACHER EDITION CREATED BY ASU MARS K -12 EDUCATION OUTREACH PROGRAM.*

7. Which layers were made first, and why?

8. Draw a picture of the second core sample showing any layers and surface features.

9. Compare the two core samples and list any similarities or differences from your first Martian core sample.

10. Would a core sample from Mars be important to the study of Mars? Why?

11. Where would be the best place to study a Martian core sample...on Earth or on Mars? Why?

12. What would account for the samples being different if they were both from Mars?