



KVSOP Bertini / Knox
STEAM ... Mars Scape
Mapping the Terrain with Mars Bots

Name_____

Date_____

References (3 video clips)

[https://www.](https://www.nationalgeographic.com/science/space/solar-system/mars/National-Geographic-Mars-101)

[nationalgeographic.com/science/space/solar-system/mars/National
Geographic Mars 101](https://www.nationalgeographic.com/science/space/solar-system/mars/National-Geographic-Mars-101)

Youtube:

[https://www](https://www.youtube.com/watch?v=...) Inside NASA InSight Landing on Mars/ Watch This
Space

[https://www](https://www.youtube.com/watch?v=...) Sounds of Mars Listen To Martian Wind Through NASA
Insight Senses Martian Wind

Focus Questions: (after watching the above clips answer the following
questions)

1. In the past how was Mars similar to Earth?

2. How did the solar wind negatively affect the atmosphere on
Mars?

3. What are some physical features on Mars' surface?

4. What is the weather like on Mars?

5. What is the overall purpose of sending InSight to Mars?

6. What are some of the safety devices on InSight that prevent it from crashing into the surface of Mars?

7. Why was there " 7 minutes of terror" during the InSight mission?

8. What technology does InSight use to detect how close it is to the Mars's surface?

9. What instrument was used to record the Martian wind?

10. What did the seismometer actually record on Mars that caused the Martian wind?

WHAT IS YOUR CHALLENGE:

Create a Mars Bot that will allow you to make a Marscape. Your Marscape must include the following Mars features:

Simple Impact Craters (single ring craters)

Complex Impact Craters (Multi-ring craters)

Volcano

Large Mountain

Dried water basins

Different layer of sediments (colors to be used orange, red, brown,tan & green)

MATERIALS FOR Mars Bot

- Electric toothbrush
- Pool noodle
- Scissors & xto knife
- Rubberbands
- Markers & Crayons (multicultural crayons)
- Paper

DIRECTIONS

1. Cut pool noodle to approx 5" length with a knife.
2. Insert electric toothbrush into opening until the bottom is flush.
3. Wrap two rubber bands around the sides so they are tight.
4. Insert three markers so they are level on surface of paper.
5. Turn on the tooth brush, set it on a sheet of paper and watch what your Mars Bot can do.
6. Using the Mars Bot create a Marscape with the above features.