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| **Cornell Notes**  **Topic: Terrestrial Planets: The Inner Planets**  **Essential Question: How are the terrestrial planets similar and how are they different?**  **Questions/Main Ideas:** | **Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**Block:** \_\_\_\_\_\_\_\_  **Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Notes:** |
| **The Terrestrial Planets** | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Mercury |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Venus |  |
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|  |  |
|  |  |
|  |  |
| Mars |  |
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|  |  |
|  |  |
| Earth |  |
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| Terrestrial Planet Overview | In this chapter we will examine each Terrestrial planet, and use the knowledge to better understand the Earth. |
| **Mercury** | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Surface Features | 1. |
|  |  |
|  | 2. |
|  |  |
| Scarps | 1. |
|  |  |
|  | 2. |
|  |  |
| Caloris Basin | 1. |
|  | 2 |
|  | 3.  4. |
| Chaotic Terrain |  |
|  |  |
| Topo Map of Mercury |  |
|  |  |
| Mercury Temperature | 1. |
|  |  |
|  | 2. |
|  |  |
| Mercury Atmosphere | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Ice on Mercury | 1. |
|  | 2. |
|  | 3. |
| Mercury has the highest core size to planet size radius in the solar system! | Mercury Interior |
| Mercury’s Magnetic Field | 1.  2. |
| Mercury’s Rotation | 1. |
|  |  |
|  | 2. |
| Resonance | 1. |
|  |  |
|  | 2. |
|  | 3. |
| **Venus** | 1. |
|  | 2. |
| Venus Atmosphere |  |
|  |  |
|  |  |
| Clouds of H2SO4 |  |
|  |  |
|  |  |
|  |  |
| Polar Vortex | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
|  | 4. |
|  |  |
| Atmospheric Pressure | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
| Greenhouse Effect | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
| Surface of Venus |  |
|  |  |
| Ishtar and Aphrodite |  |
|  |  |
| Surface Features | 1. |
|  |  |
|  | 2. |
|  | 3. |
|  |  |
|  | 4. |
|  |  |
| Active Surface | 1. |
|  |  |
|  | 2. |
|  |  |
| Young Surface | 1. |
|  |  |
|  | 2. |
|  |  |
| Venus not a Twin | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| The interior of Venus is similar to the Earths.  While there are no seismic wave detectors on the surface, measurements of Venus's gravitational field provide data to inform our models. | Venus Interior  1.  2.  3. |
| Venus Rotation | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  | 4. |
| **Mars** | 1. |
|  |  |
|  | 2. |
|  |  |
| More Like Earth | 1. |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Vallis Marineris | 1. |
|  |  |
|  | 2. |
|  |  |
| Tharsis Bulge | 1. |
|  |  |
|  | 2. |
|  | 3. |
|  | 4. |
| Largest Mountain | Olympus Mons is the largest volcano in the Solar System, higher than Mount Everest and mauna Kea (in Hawaii) combined! |
| S. Polar Ice Cap | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| N. Polar Ice Cap |  |
|  |  |
|  |  |
| Dune Fields |  |
|  |  |
|  |  |
| Water on Mars | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Terrace-like structures appear within a series of canyons on Mars.  These structures are evidence of water on a young Mars. | Lake Sediments |
| Present Day Water  Sketch Image to show where water is located |  |
| Curiosity Rover | 1. |
|  | 2. |
|  | 3. |
| Mars Atmosphere | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Mars Temperature | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  | 4. |
|  |  |
| Martian Wind | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| No Rain | 1. |
|  | 2. |
|  | 3. |
|  | 4. |
| Ancient Atmosphere | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Where did the atm. go? | 1. |
|  |  |
|  | 2. |
|  |  |
|  |  |
| Martian Interior | 1. |
|  | 2. |
|  | 3. |
|  | 4. |
| Martian Moons | 1. |
|  | 2. |
|  | 3. |
| Life on Mars | 1. |
|  |  |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Martin Fossils? | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Why are Terrestrial Planets Different? | In the Summary Section draw the comparative chart. |
| Role of Mass and Radius | 1. |
|  | 2. |
|  | 3. |
|  | 4. |
| Role of Internal Activity | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
| Role of Sunlight | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
|  | 4. |
|  |  |
| Role of Water | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
|  | 4. |
|  |  |
| Role of Bio Processes | 1. |
|  |  |
|  | 2. |
|  |  |
|  | 3. |
|  |  |
|  | 4. |
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|  | 5. |
|  |  |
|  | 6. |
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|  | 7. |
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| Summary: | |