Geology 12 – Unit 4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Major Factors Controlling Weathering Rates**

**Weathering Rate**

**SLOW FAST**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parent Rock Properties** |  |  |  |
| Mineral Solubility |  |  |  |
| Rock Structure |  |  |  |
| **Climate** |  |  |  |
| Rainfall |  |  |  |
| Temperature |  |  |  |
| **Soil Conditions** |  |  |  |
| Thickness |  |  |  |
| Plants & Animals |  |  |  |
| Exposure Time |  |  |  |

**Place each of these items into the correct space in the chart above**

Mineral Solubility

* Low (e.g. quartz)
* High (e.g. calcite)
* Moderate (e.g. pyroxene, feldspar)

Rock Structure

* Fractured or thin bedded
* Massive
* Some weakness zones

Rainfall

* Moderate
* Heavy
* Low

Temperature

* Hot
* Cold
* Temperate

Soil Thickness

* None - bare rock
* Thick
* Thin to moderate

Plants & Animals

* Abundant
* Few
* Moderate

Exposure Time

* Short
* Long
* Moderate