**Plates On The Move**

**I. Introduction**

 Earth’s thin outer shell is broken into big pieces called tectonic plates. These plates fit together like a puzzle, but they’re not stuck in one place. They are floating on Earth’s mantle, a really thick layer of hot flowing rock. The flow of the mantle causes tectonic plates to move in different directions. When the edges of the plates meet, four things can happen : 1) Slip Movement : two plates slide past each other, 2) Collision Movement : two plates crash and fold up, 3) Spreading Movement : two plates move apart from each other, 4) Subduction : one plate sinks below the other. Even though plates move very slowly, their motion, called plate tectonics, has a huge impact on our planet. Plate tectonics from the oceans, continents, and mountains. It also helps us understand why and where events like earthquakes occur and volcanoes erupt.

**II. Procedure**

 1. Start the activity by going to the following website :

<https://www.amnh.org/explore/ology/earth/plates-on-the-move2> .

 2. Click the “Play” button to view animations of each type of plate boundary movement : Slip,

 Collision, Spreading, and Subduction.

 3. Click the “Play The Game” button.

 4. Click on the “See Plate Names” button.

 5. Click on each orange marker to explore tectonic activity on the map.

 6. Record the following in the Location Tables below.

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| **Alaska Earthquake 1964** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Great Chilean Earthquake 1960** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |
| **Mount Etna** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Mount Everest** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Mount Fuji** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **The Hawaiian Islands** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **The Island Of Iceland** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Izmut Earthquake 1999** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Mount Kilimanjaro** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Krakatau Eruption 1883** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **San Francisco Earthquake 1906** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |

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| **Mt. St. Helens Eruption 1980** |
| **Plate Interaction** |  |
| **Event** |  |
| **Magnitude or Size** |  |
| **Motion** |  |