Writing Activity: What causes some earthquakes to have more destructive power than others? How do you know?

<table>
<thead>
<tr>
<th>Location of Earthquake</th>
<th>Destructive Power at the Epicenter (center of the earthquake) (Scale: 0 to 12)</th>
<th>Average Yearly Crust Temperature 1 mile Below Surface (°F)</th>
<th>Hardness of Ground Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake A</td>
<td>8</td>
<td>77</td>
<td>Soft</td>
</tr>
<tr>
<td>Earthquake B</td>
<td>8</td>
<td>65</td>
<td>Soft</td>
</tr>
<tr>
<td>Earthquake C</td>
<td>7</td>
<td>59</td>
<td>Hard</td>
</tr>
<tr>
<td>Earthquake D</td>
<td>6</td>
<td>53</td>
<td>Hard</td>
</tr>
<tr>
<td>Earthquake E</td>
<td>5</td>
<td>51</td>
<td>Very Hard</td>
</tr>
</tbody>
</table>
Item 19.

Maleek and Sidney need your help. Using the information Maleek and Sidney learned about earthquakes, write an argument that answers the question:

What causes some earthquakes to have more destructive power than others?

How do you know?

When it’s hot out and the yearly average temperature 1 mile below surface it softens up the earth so it’s easier for the earthquake to move through when the average yearly temperature 1 mile below the surface it hardens the ground therefore making it harder for the earthquake to travel the earth’s surface.
Item 19.

Maleek and Sidney need your help. Using the information Maleek and Sidney learned about earthquakes, write an argument that answers the question:

What causes some earthquakes to have more destructive power than others?

How do you know?

The hardness of ground material causes some earthquakes to have more destructive power than others.

I know because on the table Maleek found it says for Earthquake A & B that the hardness of ground material was soft and the destructive power at the epicenter was 8 and for Earthquake E the hardness of ground material was very hard, the destructive power at the epicenter was 5.
Item 19.
Maleek and Sidney need your help. Using the information Maleek and Sidney learned about earthquakes, write an argument that answers the question:

What causes some earthquakes to have more destructive power than others?
How do you know?

I think that the hardness of the ground is a great part in earthquakes. On the chart I noticed that the harder the ground, the lower the power. This is because the waves that the earthquake travels in can't travel through harder ground. The softer ground is easier to let the earthquake waves travel through. In conclusion, hardness of the ground is a great part of the earthquake.
Item 10.

Maleek and Sidney need your help. Using the information Maleek and Sidney learned about earthquakes, write an argument that answers the question:

What causes some earthquakes to have more destructive power than others? How do you know?

The things that causes some earthquakes to have more destructive power than others is that earthquakes travel through the Earth in waves, and the waves are largest at the epicenter (center of the earthquakes) when the waves move through the Earth more easily. They have more destructive power.