The University of the State of New York
REGENTS HIGH SCHOOL EXAMINATION

PHYSICAL SETTING
EARTH SCIENCE

Friday, January 25, 2019 — 9:15 a.m. to 12:15 p.m., only

ANSWER BOOKLET

Student .................................................................

Teacher .................................................................

School ................................................................. Grade ............

Record your answers for Part B–2 and Part C in this booklet.
<table>
<thead>
<tr>
<th>New York State Location</th>
<th>Total Solar Eclipse Visible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingston</td>
<td></td>
</tr>
<tr>
<td>Massena</td>
<td></td>
</tr>
<tr>
<td>Niagara Falls</td>
<td></td>
</tr>
<tr>
<td>Riverhead</td>
<td></td>
</tr>
<tr>
<td>Oswego</td>
<td></td>
</tr>
</tbody>
</table>
Moon’s orbit

Sun’s rays

(Not drawn to scale)
Plate A: ____________________________ Plate

Plate B: ____________________________ Plate

54 ________________________________

55 ________________________________
The diagram illustrates the comparison between the depth of Challenger Deep and the height of Mount Everest.

- **Depth of Challenger Deep**: 6.83 mi
- **Height of Mount Everest**:
  - 0 - Sea Level
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7

The depth of Challenger Deep is significantly greater than the height of Mount Everest.
Model of Carbon-14 Radioactive Decay

Key

- Radioactive carbon-14
- Disintegration product
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>61</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>m</td>
</tr>
<tr>
<td>64</td>
<td>m/km</td>
</tr>
<tr>
<td>65</td>
<td></td>
</tr>
</tbody>
</table>
67 Location: __________

   Evidence: ____________________________________________

   ______________________________________________________

68 ______________________________________________________

69 Characteristic 1: ______________________________________

   Characteristic 2: ______________________________________

70 __________
71 ______________________________

72 ______________________________

73 __________ d

74 Circle one: Terrestrial Planet Jovian Planet

Explanation: ______________________________

_______________________________
Ozone Loss and Ultraviolet Radiation

Average Increase in Ultraviolet Radiation Reaching Earth's Surface (%)
76 \[ \text{___________} \% \]

77 \[ \text{____________________________} \]

78

<table>
<thead>
<tr>
<th>Type of Electromagnetic Radiation</th>
<th>All Wavelengths Shorter Than UV</th>
<th>All Wavelengths Longer Than UV</th>
<th>Some Wavelengths Shorter and Some Wavelengths the Same as UV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma Rays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microwaves</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Visible light</td>
<td></td>
<td></td>
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<tr>
<td>X rays</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

79 \[ \text{____________________________} \text{ and } \text{____________________________} \]
December 21: ______________°

June 21: ______________°

82 ___________ h

84 _________________________ Eon

85 _________________________

Oldest → ______________________ → Youngest