3. Study the diagram below.

(1) Draw an arrow to this source of energy and fill in the reason for your answer.
(2) Name 2 advantages of the energy source above.
(3) Write 2 disadvantages of the energy source mentioned above.
(4) Is the source of energy mentioned in the article renewable or non-renewable?

<table>
<thead>
<tr>
<th>Source</th>
<th>Energy Source</th>
<th>Reason for Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>renewable</td>
<td>sunlight</td>
</tr>
<tr>
<td>Wind</td>
<td>renewable</td>
<td>wind</td>
</tr>
<tr>
<td>Coal</td>
<td>non-renewable</td>
<td>fossil fuels</td>
</tr>
<tr>
<td>Nuclear</td>
<td>non-renewable</td>
<td>nuclear reactions</td>
</tr>
</tbody>
</table>

3.2 Law of Conservation of Energy
- Law of conservation of energy states that energy cannot be created or destroyed, it can only be changed from one form to another.
- A. 356 days
- B. Chose one or more:
  - C. Energy cannot be made of
  - D. Energy comes in a number of
  - E. The moment of time it lasts for Earth
  - F. The Sun
  - G. Energy exists in a change of
  - H. Energy from the Sun and Eart's body
  - I. Sunlight

3.3 The Sun
- The Sun is a hot, white star located at the center of our solar system.
- It is the source of energy that powers all living things on Earth.
- The Sun is about 93 million miles from the Earth.

3.4 The Mass of the Earth
- The mass of the Earth is about 5.97 x 10^24 kg.
- It is the largest object in the solar system.
4. Label the following diagram to indicate where conduction, convection and radiation occur.

5. Explain why we place air conditioners in the ceiling and heaters on the floor. 

6. The two diagrams below show two houses. Use your knowledge on the transfer of heat and insulation to answer the following questions.

6.1. Which house would be the coolest in summer? Give a reason for your answer. 

6.2. Give an example of a traditional building technique that can be used to insulate floors and walls during winter time.

7. What is the function of a transformer in an electric power station?

Section C: Planet Earth and Beyond

1. Explain how the Earth moves in two ways. 

2. Using the following words explain how the Earth’s axis creates the 4 seasons.

   23.5°, anticlockwise, northern hemisphere, southern hemisphere, obliquely.

3. What would happen if the Earth’s axis was not tilted? 

4. The pull of gravity depends on mass and distance. Explain this statement.

5. Tides are caused by the pull of gravity from the Moon. In the following image indicate using AB and CD where it would be low tide and where it would be high tide.

6. Explain the position of the Sun and the Moon during spring tide and explain the effect that this has on the tides.

7. During which 2 Moon phases will we experience spring tide?
In order to sustain our ongoing conservation measures, we need to put these in place in the

This is the last paragraph of the text, which is discussing the importance of sustainable practices and the need for international cooperation. It highlights the challenges faced in the conservation efforts and the necessity for collaboration on a global scale. The text emphasizes the need for action and collaboration, pointing out the critical role that governments, organizations, and individuals play in addressing these issues. It calls for a proactive approach and the implementation of effective strategies to protect and conserve the natural resources for future generations.

The text concludes by urging readers to take action and support conservation initiatives, emphasizing the importance of unity and collective responsibility in the fight against environmental degradation.