An informative and persuasive magazine will include **ALL** of the following:

1. **Ocean Plastics Movement Model**
   ______ a) An *Ocean Plastics Movement Model* showing how plastics reach the ocean and what happens to them in the ocean

2. **Evidence of Ecosystem Impacts**
   ______ a) A *Featured Marine Organism Profile*, showing how plastics impact that organism specifically
   ______ b) A *Food Web Infographic* explaining the process of biomagnification in an ocean ecosystem

3. **Evidence-Based Argument**
   ______ a) A *Letter from the Editors* that explains how human actions related to plastics can harm or help our planet
   ______ b) A *Call To Action*, directed at the target audience, describing what they can do to address the plastics crisis

4. **Evaluating competing design solutions**
   ______ a) A featured profile of the winner, as chosen by your team, of the Ocean Plastic Pollution Solutions Contest

5. **General magazine features**
   ______ a) A compelling, informative, and artistically original front cover that catches readers’ attention
   ______ b) A back cover with information about your publishing team
   ______ c) A glossary of related vocabulary used in the magazine
### Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Award-Winning Science Writers</th>
<th>Apprentice Science Writers</th>
<th>Emerging Science Writers</th>
<th>Feedback</th>
</tr>
</thead>
</table>
| **Ocean Plastics Movement Model** MS-ESS2-6   | The model uses class readings and activities to create a complete picture of the complex forces that affect the movement of plastic into and throughout the oceans, including visual and written descriptions of all of the following:  
  - Landmasses  
  - The Coriolis effect  
  - Wind  
  - Photo-degradation  
  - The role of organisms, including humans | The model uses class readings and activities to create a complete picture of some of the most important forces that affect the movement of plastic into and throughout the oceans, including visual and written descriptions of some of the following:  
  - Landmasses  
  - The Coriolis effect  
  - Wind  
  - Photo-degradation  
  - The role of organisms, including humans | The model tells the story of plastics as they travel through the ocean, but without describing many of the important forces that affect the movement of plastic into and throughout the oceans. |
### Letter from the Editors
**MS-LS2-4**

**Engaging in Argument from Evidence**

Write a *Letter from the Editors* with a claim, supported by evidence, that the way humans produce, use, and dispose of plastics on land can affect ocean ecosystems positively as well as negatively.

- The evidence for claims comes from many different reliable sources, including reading material and students’ own observations. Changes in ecosystems include both physical and biological changes. Impacts on organisms are specific and detailed, and include chain-reaction impacts.

- The evidence for claims comes from reliable sources, including reading material and students’ own observations. Changes in ecosystems include either physical or biological changes. Impacts on organisms are specific and detailed, but do not include chain-reaction impacts.

- The evidence from reliable sources does not effectively support the claims. Changes in ecosystems include either physical or biological changes. Impacts on organisms are vague and general.

### Food Web Infographic
**MS-LS2-3**

Create an infographic to explain how biomagnification occurs in a food web.

- The model clearly explains the biomagnification of plastics, both visually and verbally. The food web includes all trophic levels:
  - Producers
  - Primary consumers
  - Secondary/tertiary consumers
  - Apex predators
  - Decomposers

- The model clearly explains the biomagnification of plastics, either visually or verbally. The food web includes several trophic levels:
  - Producers
  - Primary consumers
  - Secondary/tertiary consumers
  - Apex predators
  - Decomposers

- The biomagnification of plastics is not clearly explained visually or verbally. The food web does not represent diversity of trophic levels in an ocean ecosystem.
| Feature Profile: Marine Organism  
MS-LS2-4 | The profile clearly shows multiple impacts that ocean plastics can have on the focal organism. The impacts are supported by background information about the organism, including anatomy, habitat, diet, behavior, and reproduction. Multiple reliable sources are cited. | The profile clearly shows one or more impacts that ocean plastics can have on the focal organism. The background information is included, but does not directly support information about plastic's impacts. At least one reliable source is cited. | The profile does not explain how plastics impact the focal organism specifically. The background information, if included, is unrelated to plastic’s impacts. Citations are absent, or point to unreliable sources. |
| --- | --- | --- | --- |
| Feature Profile: Ocean Plastic Pollution Solutions Winner  
Engaging in Argument from Evidence  
Justify your choice of the winner for the 2019 Ocean Plastic Innovation Challenge. | The profile selects a winner, explains their solution, and describes the criteria and method used to select the winner. The justification compares the winner to other finalists showing why they won. Strengths, as well as weaknesses, of the winning solution are included. | The profile selects a winner, explains their solution, and gives reasonable justification for why they were chosen above all other finalists. The method for choosing a winner is not explained in detail, and possible weaknesses of the winning solution are not mentioned. | The profile selects a winner and explains their solution, but does not give reasonable justification for why they were chosen above all other finalists. |
| **Call to Action**  
**Engaging in Argument from Evidence**  
CCSS.ELA-LITERACY.WHST.6-8.1  
Write a Call to Action for readers describing actions they can take to address the plastic pollution crisis. | The Call to Action describes a wide variety of ways that readers can engage with the problem of plastic pollution in their personal lives, in their communities, and as citizens of the world. Solutions focus on the complete life cycle of plastics, from production to disposal. The writing is well-organized, including claims, evidence, and reasoning. | The Call to Action describes several ways that readers can engage with the problem of plastic pollution, as individuals and as members of a community. The writing is organized, including claims, evidence, and reasoning. | The Call to Action includes personal lifestyle changes but does not address communities or the global environment. Solutions focus on cleaning up pollution from the environment, but not on the complete life cycle of plastics. The writing lacks structure. |

| **Glossary**  
CCSS.ELA-LITERACY.W.7.2.D  
Choose the most important vocabulary words and write a student-friendly definition and example sentence for each. | The glossary includes 20-30 of the most important and meaningful words in the unit. Definitions are student-friendly, but scientifically rigorous. Sentences are original and show meaning. | The glossary includes 10-20 of the most important and meaningful words in the unit. Definitions are student-friendly. Sentences are original and show meaning. | Glossary entries have not been selected on the basis of which words are most important or meaningful. Definitions are not student-friendly. Sentences are plagiarized and/or do not show the relevant meaning of the words. |
<table>
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<tr>
<th>Magazine Features</th>
<th>The cover includes a title, image, and brief explanatory text. The overall appearance is well-designed. All elements of the cover support a coherent theme and demonstrate creativity. Explanatory text makes readers want to know more.</th>
<th>The cover includes a title, image, and brief explanatory text that all support a coherent theme. The overall appearance is neat.</th>
<th>The cover is missing important major elements such as a title, image, or explanatory text; or, all elements are included, but they do not fit together in support of a coherent theme. The overall appearance is disorganized.</th>
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<tr>
<td>CCSS.ELA-LITERACY.SL.7.5</td>
<td>The magazine contains: - A compelling and informative cover that catches readers’ attention - A back cover with information about the publishing team</td>
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<td></td>
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