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**Curriculum Summary**

Washed Ashore Marine Debris Prevention
Through Outreach and Education
Curriculum Extension Summary

With the purpose of showing that every action counts and everyone can make a difference, this Washed Ashore curriculum endeavors to:

- Connect teachers and students to local environments and pollution issues.
- Use the language of the arts to create positive community change.

Curriculum Topics Include:

- All of us are part of the plastic pollution problem and the solution.
- Resourcefulness and creativity can enable us to find value in items considered worthless.
- Communicating through the language of the arts can help to create positive change.
- Lessons in waste reduction through resourcefulness in order to educate and influence preventative behavior change.
- Use of visual art elements and principles.
- Active collaborative problem solving through artistic mediums as a method for collective behavior change.
- Group science and art activities that illustrate “Every Action Counts”.

This curriculum extension will endeavor to help empower students to create change in their own communities. In order to do so, they will utilize visual art, team work, and public speaking as powerful tools for learning and communicating about marine debris and plastic pollution. Core competencies in science, writing, visual arts and social studies will be linked to all lessons. The culminating event of this extension will involve students using artwork they created to communicate about environmental issues to a local community group in order to help create impactful local change that will reduce marine debris and plastic pollution.

This curriculum extension will endeavor to help empower students to create change in their own communities.
Pre-Lesson Activities:

This curriculum relies heavily on background knowledge of the Washed Ashore Integrated Art Marine Debris Curriculum for both teachers and students.

* In addition to working through the IAMDC lessons, this extension requires classes to complete the following activities before conducting extension lessons:
  * Conduct a cleanup of a local environment and track results.
  * Compile results into a class data set for use in these lessons.
  * Wash, sort, and prepare debris found during the cleanup to be used in this lesson set.

For more details see the “Art for Community Introduction” included in this curriculum extension.

Lesson 1: Let’s Face It

Creation of masks based on students’ faces using recovered materials from marine debris cleanups.

Key Concepts:

* Artists use the language of the arts to communicate.
* Artists make choices about their subject matter and how to work with their materials.
* Artists make choices to give expression to and create emotion with their work.

Activity:

Using the design elements and principles of visual art and the techniques learned in the IAMDC, students will create a mask that will be used to communicate about plastic pollution in this curriculum extension.
Lesson 2: What Can I Say?

Creation of a message about local plastic pollution to deliver using the masks created in lesson one.

Key Concepts:
- Art can be a powerful language to communicate ideas.
- Local issues can be affected through local action.
- Working together, we can make big things happen.

Activity:
Working with students who have similar concerns, students will decide on an issue, a message, and a group to deliver their message to.

Lesson 3: Refining the Message

Student messages are completed and prepared for presentation to the community.

Key concepts:
- Learning how to give and receive constructive criticism can help everyone improve their work.
- Creating an effective message is an interactive process.
- Art evokes feelings and emotions.

Students will continue to compose their ideas into a group message and presentation. Once a message and a method of delivery have been decided upon, students will rehearse in front of the class in order to receive feedback and improve their work. Those listening to presentations will learn how to give useful feedback.

Presentation and Class Discussion:
After creating their masks and their messages, students will present to a local organization or group on how to create changes in their community that reduce plastic pollution in local environments. When all students have completed their presentations, they will discuss the experience in class.
A. A scientific marine debris curriculum informed by the most accurate NOAA science and utilizes the Next Generation Science Standards augmented by the Essential Principles of Ocean Literacy Campaign, Principle 6: The Ocean and Humans are Inextricably Interconnected.

Specific Next Generation Science Standards addressed demonstrate how students, grades 5-8, who understand subject matter, can:

<table>
<thead>
<tr>
<th>Standards correlation</th>
<th>A. Science Standards</th>
<th>B. Art Standards</th>
<th>C. Language Art Standards</th>
<th>D. Social Studies Standards</th>
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<tbody>
<tr>
<td>5-ESS3-1.</td>
<td>Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.</td>
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</tbody>
</table>
| MS-PS1-3.            | Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.  
[Clarification Statement: Emphasis is on natural resources that undergo a chemical process to form the synthetic material. Examples of new materials could include new medicine, foods, and alternative fuels.]  
[Assessment Boundary: Assessment is limited to qualitative information.] |
| MS-LS2-1.            | Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.  
[Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.] |
| MS-ESS3-3.           | Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.*  
[Clarification Statement: Examples of the design process include examining human environmental impacts, assessing the kinds of solutions that are feasible, and designing and evaluating solutions that could reduce that impact. Examples of human impacts can include water usage (such as the withdrawal of water from streams and aquifers or the construction of dams and levees), land usage (such as urban development, agriculture, or the removal of wetlands), and pollution (such as of the air, water, or land).] |
| MS-ESS3-4.           | Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems.  
[Clarification Statement: Examples of evidence include grade-appropriate databases on human populations and the rates of consumption of food and natural resources (such as freshwater, mineral, and energy). Examples of impacts can include changes to the appearance, composition, and structure of Earth’s systems as well as the rates at which they change. The consequences of increases in human populations and consumption of natural resources are described by science, but science does not make the decisions for the actions society takes.] |
B. An arts marine debris curriculum that implements The National Core Arts Standards in order to provide a unified quality arts education for students.

Creating:
Conceiving and developing new artistic ideas and work.
- Anchor Standard #1: Generate and conceptualize artistic ideas and work.
- Anchor Standard #2: Organize and develop artistic ideas and work.
- Anchor Standard #3: Refine and complete artistic work.

Presenting:
(visual arts): Interpreting and sharing artistic work.

Producing:
(media arts): Realizing and presenting artistic ideas and work.
- Anchor Standard #4: Analyze, interpret, and select artistic work for presentation.
- Anchor Standard #5: Develop and refine artistic work for presentation.
- Anchor Standard #6: Convey meaning through the presentation.

Responding:
Understanding and evaluating how the arts convey meaning.
- Anchor Standard #7: Perceive and analyze artistic work.
- Anchor Standard #8: Interpret intent and meaning in artistic work.
- Anchor Standard #9: Apply criteria to evaluate artistic work.

Connecting:
Relating artistic ideas and work with personal meaning and external context.
- Anchor Standard #10: Synthesize and relate knowledge and personal experiences to make art.
- Anchor Standard #11: Relate artistic ideas and works with societal, cultural and historical context to deepen understanding.

C. A language arts marine debris curriculum that implements the following Common Core Language Arts Standards:

- **CCSS.ELS-LITERACY.W.6.3:**
  Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

- **CCSS.ELA-LITERACY.W.6.5:**
  With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
D. A social studies marine debris curriculum that implements the following National Curriculum Standards for Social Studies:

• **Thematic Standard #1** Culture: Include experiences that provide for the study of culture and cultural diversity.

• **Thematic Standard #2** Time, Continuity, and Change: Include experiences that provide for the study of the past and its legacy.

• **Thematic Standard #3** People, Places and Environments: Include experiences that provide for the study of people places and environments.

• **Thematic Standard #7** Production, Distribution, and Consumption: Include experiences that provide for the study of how people organize for the production, distribution and consumption of goods and services.

• **Thematic Standard #8** Science, Technology, and Society: Include experiences that provide for the study of relationships among science, technology, and society.

• **Thematic Standard #9** Global Connections: Include experiences that provide for the study of global connections and interdependence.

• **Thematic Standard #10** Civic Ideals and Practices: Include experiences that provide for the study of the ideals, principles and practices of citizenship in a Democratic Republic.