Grades: 3-5

Goals: The purpose of this lesson is to introduce students to the characteristics of bed bugs, the reasons why humans consider bed bugs pests, and the ways that humans can prevent and safely handle a bed bug outbreak.

Maine ELA Standards Covered:
- Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

National Science Content Standards Covered:
- Characteristics of organisms
- Organisms and their environment

Content Objectives:
Students will be able to draw an accurate picture of a bed bug.
Students will be able to record three reasons why the bed bug is a pest to humans.
Students will be able to identify ways of safely getting rid of and preventing bed bugs.

Language Objectives:
Students will be able to identify crucial parts of explanatory/informational text.

Content: The content of this lesson is an introduction to bed bugs using the provided hand out and instruction on how to create a wanted poster or news report as an informational/explanatory text.

Logistics: The estimated time for this lesson is 45 minutes with potential follow-up time to finish the writing activity.

Materials: Bed Bug Fact Sheet, Wanted Poster Handout, Pencils, Coloring tools

Introduction:
1. Gather students on the rug or at their desks.
2. Write “bed bugs” on the board. Ask students what they think about when they see these words.
3. Create a list of words that students relate to “bed bugs” to begin tapping into their prior knowledge and to see how much students know about the topic.
4. Present each student with a Bed Bug Fact Sheet and have students take turns reading the information aloud or to themselves.
5. Provide any extra books or resources on bed bugs for further research (a list of potential resources is listed below).
Activity:
1. Place an example of a wanted poster on the board.
2. Ask students to identify different parts of this explanatory text.
3. Make sure that students notice the importance of a clear and bold headline, a detailed picture, and a complete description of the character, where it is found, why it is wanted, and how to take care of it if seen.
4. Explain to students that wanted posters are used to explain to an audience who is being looked for and why. The text must clearly explain the characteristics of the “wanted” individual, why they are looked for, and what to do if they are found.
5. Explain that this type of writing is often used in the field of criminal justice, but it is a great way to practice explanatory/informational writing.
6. Provide students with the “wanted poster” graphic organizer and explain that they are going to use the information that they have learned about bed bugs to inform the public about this issue.
7. Model the steps for filling out the graphic organizer and encourage students to use other resources to help them create an accurate picture and to include detailed information.
8. Assist students as they begin the first draft of their wanted poster and encourage them to move onto a final draft with accurate illustrations and edited text.

Conclusion:
1. Conclude this lesson by having some students share their completed posters.
2. Have others students give constructive feedback on the clarity and content of the poster and whether they think it would be effective in informing the public on this pest.

Assessment:
1. Learning will be assessed through the content on the wanted poster. Teachers will look for the inclusion of a detailed illustration, characteristics of the bed bug, reasons why it is a pest, and ways to prevent and handle a bed bug outbreak.

Follow-up:
- Send students home with their wanted posters and the Pennsylvania IPM Program’s “Got Bed Bugs?” sheet to share what they have learned and to encourage parents to help prevent and get rid of bed bugs. The sheet can be found at: <http://www.maine.gov/agriculture/pesticides/gotpests/bugs/documents/gotbedbugs-pa.pdf> or under the link posted with this lesson.

Possible Classroom Resources:
- www.gotpests.org

References:
2. Picture 1: http://farm1.static.flickr.com/177/439025141_03d3e94de.jpg
3. Picture 2: http://www.bedbugs-pictures.org/wp-content/uploads/2011/05/what_2Ddo_2Dbed_2Dbugs_2Dlook_2Dlike_2D1.jpg
# Don’t Let the Bed Bugs Bite!

<table>
<thead>
<tr>
<th>What are bed bugs?</th>
<th>![Bed Bug Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tiny, reddish-brown insects with oval bodies that feed on human blood</td>
<td></td>
</tr>
<tr>
<td>• Active at night</td>
<td></td>
</tr>
<tr>
<td>• Find places to hide in cracks of walls or furniture during the day</td>
<td></td>
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<tr>
<td>• Insects that can live for many months without food and water</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What does a bed bug bite feel like and look like?</th>
<th>![Bed Bug Bite Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Generally, bed bug bites are painless</td>
<td></td>
</tr>
<tr>
<td>• But later they can turn into a red, itchy spot like a mosquito bite</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Are bed bugs dangerous?</th>
<th>![Bed Bug Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bed bugs do not spread diseases, but they cause people to be itchy and to miss sleep</td>
<td></td>
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<table>
<thead>
<tr>
<th>How do bed bugs get into homes?</th>
<th>![Bed Bug Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Often bed bugs are carried into homes on furniture, luggage, bedding, or clothing</td>
<td></td>
</tr>
<tr>
<td>• Sometimes they can also travel between apartments through crevices in the walls or floors</td>
<td></td>
</tr>
<tr>
<td>• Having bed bugs can happen to anyone and has nothing to do with how clean a home is or where it is located</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>How do you prevent bed bugs?</th>
<th>![Bed Bug Image]</th>
</tr>
</thead>
<tbody>
<tr>
<td>• By washing clothing and bedding after coming home from trips</td>
<td></td>
</tr>
<tr>
<td>• By not bringing used mattresses or other bedding materials into your home</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How do you get rid of bed bugs?</th>
<th>![Bed Bug Image]</th>
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</thead>
<tbody>
<tr>
<td>• Multiple things must be done to get rid of bed bugs, including: vacuuming, washing clothes and bedding in hot water, drying them on high heat, sealing mattresses and box springs with bed bug-proof, zippered covers, and organizing rooms to eliminate hiding places and make it easier to identify and get rid of bugs</td>
<td></td>
</tr>
<tr>
<td>• Parents should call their landlord or a pest control expert about the best ways to get rid of bed bugs</td>
<td></td>
</tr>
</tbody>
</table>

Created on: July 12, 2011
Adapted from: Maine Center for Disease Control and Prevention “Bed Bugs Fact Sheet”
Wanted

Name of Character: ________________________________

Picture of Character

List of Characteristics: ________________________________

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Reasons why it is a pest:

1.  
2.  
3.  

Ways to prevent its presence: ________________________________

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What to do if found: ________________________________

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