

Materials

- *Our School Garden* by Rick Swann & Illustrated by Christy Hale (*Pill Bugs* poem, pages 13-14)
- *Pill Bugs Should Be Seen as a Beneficial Garden Guest*, article by Kyle Valentini
- *Micro Life in Soil* by Natalie Hyde (*Waste-Providers*, pages 24-25)
- Pill Bug Cam [video](#)
- [Google Drawings Want Ad Template](#) - This link will “make a copy” for each student to add to their Google Drive & edit

Engage & Explore

- Share with the students *Our School Garden*, “Pill Bugs” on pages 13-14. In the poem, many different names are introduced for the Pill Bug.
- Next read the excerpt from the article “Pill Bugs Should Be Seen as a Beneficial Garden Guest” by Kyle Valentini. The article discusses the benefits to having Pill Bugs in your garden and common misconceptions, such as, a Pill Bug is not really a bug. After reading the first two paragraphs, turn and talk with a partner about what a Pill Bug looks like and the confusion with it living in the dirt and actually being a crustacean.
- Continue reading paragraphs three and four. Turn and talk with a partner about the job that Pill Bugs do in our gardens.
- More evidence of their benefits can be found in *Micro Life in Soil*, “Waste-Providers” on pages 24-25. Guide students to turn and talk about the benefits of having these crustaceans, aka Waste-Providers in your garden. Does this evidence continue to

Grade Level: 4

Subject Area: ELA / Science / Technology

Standards:

4.RL.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

4.RL.4 Determine the meaning of words and phrases as they are used in a text, including words that affect meaning and tone.

4.L.1 Understand the effects of environment changes, adaptations and behaviors that enable animals (including humans) to survive in changing habitats.

4.IN.1 Apply appropriate strategies when reading for enjoyment and for information.

4.TT.1 Use technology tools and skills to reinforce classroom concepts and activities.

Collaborators:

Susan Frazier

Whitney McSwain

support the need, value and importance of the Pill Bug?

- Let's see what they look like in action. Watch Pill Bug Cam video.

Activity

- Students will create a Pill Bug Job Advertisement using Google Drawings.
- Show students the rubric.
- Use the link for the Google Drawing Want Ad Template to make a copy of the template for each student; each student will create their own Pill Bug help wanted ad.
- The template includes requirements (to the left) and the rubric (to the right).

Your Notes & Ideas

Pill bugs should be seen as a beneficial garden guest



The pill bug is not the rock star of the garden. Rarely mentioned at all, the pill bug is not a bug at all but rather a crustacean. Pill bugs are the only crustacean that can live outside of water. Different gardeners have varied opinions of this small gill-breathing creature known to the scientific community as an isopod.

The pill bug has three body parts, the head, thorax and the abdomen. Pill bugs have a prominent pair of antennae and seven pairs of legs. Male and female pill bugs can be distinguished by the leaf-like pouches found on the underside of females. These are used to carry eggs and developing embryos.

Pill bugs are often mistaken for sow bugs. Sow bugs can't roll themselves up in a perfect little ball like pill bugs can.

Pill bugs can do some damage in the garden, specifically to young, newly planted transplants, but are rarely a problem where well-established plants are concerned. Pill bugs spend most of their time eating dead and decaying material in the garden. This is usually considered a good thing. My garden is full of them and my compost pile even more so.



Kyle Valentini
Columnist