



## Literature Elaborate “Club Sizzle”: Teacher Guide

### Heat Energy Module

Use this guide to facilitate a conversation about the science concepts and literacy skills presented in the Literature Elaborate.

This teacher support document can be completed after participation in the online Literature Elaborate.

### **Why Literature?**

The purpose of the Literature Elaborate is to reinforce overarching science concepts using a variety of literary styles familiar to students. Students’ feelings toward a particular writing style are closely tied to their ability to comprehend the selection. Some students can be “turned off” by the idea of reading science text due to the high complexity of the passages that often contain unfamiliar vocabulary. On the other hand, fiction provides a comfortable setting students are familiar with to introduce science concepts, lessening the anxiety students may feel toward fact-based text. Providing exposure to science concepts through a variety of literary styles will instill a fondness for science that grows as students realize that science does tell a story.

In this activity, students watch a two-minute animated music video that describes heat energy and how heat is transferred. Following the song, students draw or write in their Notebooks about different ways they can move to generate heat energy. Reviewing student digital notebooks upon completion of the activity will provide insight to students’ understanding of the concept presented. To conclude this activity, students view examples of different ways people can generate heat.

### **Making the Connection**

Use the following questions to emphasize the scientific connection to this literature activity.

1. Why are Lady Particle’s teeth clacking and her knees shaking?

*As Lady Particle loses heat, her teeth clack and her knees shake because she is trying to generate heat to warm herself.*

2. How do you generate heat?

*You generate heat by moving or through motion.*

3. What tool is shown in the video that tells the temperature?

*The tool shown in the video that tells temperature is a thermometer.*

4. What happens to Lady Particle’s temperature as she gets hotter?

*Her temperature rises to a higher degree as it gets hotter.*

5. What effect do her hot hands have on the ice?

*Her hands melt the ice because they are conducting/transferring heat from her hands to the ice through her glass.*



6. The body can generate heat without you having to think about it. What are two ways that your body tries to warm you up when you are cold?

*Goosebumps (also known as gooseflesh or goosepimples) and shivering are two ways the body tries to warm you up when you are cold without you having to think about it.*