Activity: *Spellbound* Episode 2 Kristala L. Jones Prather Video Questions

**FOR THE TEACHER**

**Summary**
In this activity, students will answer questions while watching a video from the *Spellbound* series produced by ACS. Each episode focuses on a different notable scientist, recounting how their interest in science was sparked in their childhood and how they went on to make great contributions to the scientific community. This second episode focuses on the childhood of Kristala L. Jones Prather, who went on to become a chemical engineer and award-winning professor.

**Grade Level**
Middle School, High School

**Objectives**
By the end of this activity, students should be able to:
- Explain how childhood experiences can contribute to an individual’s scientific development.
- Describe Prather’s path to chemical engineering.
- Reflect on who encourages and supports them in their educational and personal pursuits.

**Chemistry Topics**
This activity supports students’ understanding of:
- History of chemistry
- Chemical engineering

**Time**
**Teacher Preparation:** minimal
**Lesson:** 10-20 minutes

**Materials**
- *Spellbound* Episode 2 Video
- Student Handout
- Computer and projector with volume

**Safety**
- No specific safety precautions need to be observed for this activity.

**Teacher Notes**
- The *Spellbound* series of videos is about the childhood experiences that inspired important scientists to become scientists. They can help students understand that anyone at any age, anywhere in the world can be inspired by science. These videos would be appropriate at any point in the year and, as they are publically available, could easily be used as part of an emergency sub plan.
- The running time of this video is about five minutes. As it is a short video and it moves pretty quickly, you may want to show it twice to ensure students can complete all the questions.
- The student questions/answers are presented in sequential order in the video.
- An answer key has also been provided for teacher reference.
- The last three questions ask for students to reflect on the content of the video as it applies to their life. It could be interesting to have students share answers with a partner or with the class after they have had a few minutes to answer those questions.
FOR THE STUDENT
Lesson

Spellbound Episode 2 Kristala L. Jones Prather: Video Questions

Instructions
While watching the video, answer the following questions:

1. Where did Kristala L. Jones Prather grow up?
2. What did Kristala have an aptitude for as a child?
3. Who helped Kristala figure out what she wanted to study?
4. Where did Kristala go to college?
5. What company did Kristala work for before becoming a professor?
6. What does Kristala’s research involve?
7. What special interests does Kristala have as a professor?

After you watch the video, reflect on the following questions:

8. Kristala indicated that frustration is a normal part of studying science in graduate school, but she encourages her students not to give up. Describe a time when you encountered something difficult but pushed through and finished. Who encouraged you to keep trying? How did you feel when you finally achieved your goal or finished your project?
9. List at least three possible careers you might enjoy. Then list at least two adults in your life you could ask for guidance (family member, teacher or school administrator, neighbor, etc.) and why you chose those people.
10. If you had the opportunity to ask Kristala one question (about anything – her work, her life, etc.), what would it be?