Activity: *Spellbound* Episode 6 Nancy Jackson 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 sixth episode focuses on the childhood of Nancy Jackson, who was the 2011 president of ACS. She worked for the U.S. Department of State to create the Chemical Security Engagement Program and has been involved in research, scientific policy, and mentoring and advocacy for underrepresented minorities and women in science.

**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.
- Reflect on their own interests and role models.
- Make connections between chemistry and other career fields.

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

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

**Materials**
- *Spellbound* Episode 6 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.
Instructions
While watching the video, answer the following questions:

1. What was unusual about Nancy’s grandmothers that influenced her education?
2. What was Nancy’s original major in college?
3. What convinced Nancy to change her major to chemistry?
4. What did Nancy like about being in the lab?
5. What class challenged Nancy in college?
6. Who was Nancy’s mentor while she worked at the American Chemical Society and how did he influence her career?
7. What work did Nancy do with the Department of State?
8. How does Nancy encourage young scientists from minority backgrounds?

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

9. Nancy thought she had to choose between political science and chemistry, and she ended up choosing to study chemistry in college. However, she was able to use her scientific knowledge to influence policy later in life. Think of two of your interests that seem very different and come up with a way to connect them – be creative!

10. Nancy was so shaken by her poor performance in a math class that she dropped out of college for a while. However, she went back to school, retook the class and ultimately got her Ph.D. in chemistry. Think of a time when you experienced a setback (in school, your personal life, in a job, etc.) – how did you respond to it? How might you respond differently now?

11. If you had the opportunity to ask Nancy one question (about anything – her work, her life, etc.), what would it be?