

## In-Class Paper Assignment for “My Mother, the Scientist”

**Choice One:** Science teachers at Adrian High School want their students to become more interested in science. Therefore, they are planning to offer a class called *Science for Everyone*. But, the teachers disagree about what the students should read during the first week of class. One group wants students to read an essay called, “Madame Curie, Heroine in the Laboratory.” Another group prefers “My Mother, the Scientist.”

You have not read the essay about Marie Curie, but you do have a very good knowledge of “My Mother, the Scientist.” Based on the knowledge you have, write a letter to the teachers at the Adrian High School telling them why “My Mother, the Scientist” is the appropriate text for a class called *Science for Everyone*.

In your letter, be sure to clearly establish your position, persuade your readers by offering thorough and compelling evidence for your reasons, and organize your ideas such that your letter has a beginning, middle, and end, and paragraph breaks wherever they are needed. Cite specific text to support your argument.

**Choice Two:** Following these instructions are three separate passages from “My Mother, the Scientist.” Choose one and write a thorough, organized essay explaining how the passage develops one or more ideas that are central to the text as a whole.

Be sure to plan your essay in advance so your ideas are organized, establish the main idea or ideas you will discuss, cite specific evidence from the passage. Include discussion of other parts of the text where appropriate.

### Three Passages:

#### Passage One

My introduction to chemistry came in 1970, on a day when my mom was baking challah bread for the Jewish New Year. I was about 10, and though I felt cooking was unmanly for a guy who played shortstop for Village Host Pizza in the Menlo Park, California, Little League, she had persuaded me to help. When the bread was in the oven, she gave me a plastic pill bottle and a cork. She told me to sprinkle a little baking soda into the bottle, then a little vinegar, and cork the bottle as fast as I could. There followed a violent and completely unexpected pop as the cork flew off and walloped me in the forehead. Exploding food: I was ecstatic! "That's called a chemical reaction," she said, rubbing my shirt clean. "The vinegar is an acid and the soda is a base, and that's what happens when you mix the two."

After that, I never understood what other kids meant when they said that science was boring.

### Passage Two

One of my mother's earliest memories is of standing in her crib at the age of about 2, yanking on her 11-year-old brother's hair. This brother, her only sibling, was none other than Richard Feynman, destined to become one of the greatest theoretical physicists of his generation: enfant terrible of the Manhattan Project, pioneer of quantum electrodynamics, father of nanotechnology, winner of the Nobel Prize, and so on. At the time, he was training his sister to solve simple math problems and rewarding each correct answer by letting her tug on his hair while he made faces. When he wasn't doing that, he was often seen wandering around Far Rockaway, New York, with a screwdriver in his pocket, repairing radios-at age 11, mind you.

My mother worshipped her brother, and there was never any doubt about what he would become. By the time she was 5, Richard had hired her for 2 cents a week to assist him in the electronics lab he'd built in his room. "My job was to throw certain switches on command," she recalls. "I had to climb up on a box to reach them. Also, sometimes I'd stick my finger in a spark gap for the edification of his friends." At night, when she called out for a glass of water, Riddy, as he was called, would demonstrate centrifugal force by whirling it around in the air so that the glass was upside down during part of the arc. "Until, one night," my mother recalls, "the glass slipped out of his hand and flew across the room."

Richard explained the miraculous fact that the family dog, the waffle iron, and Joan herself were all made out of atoms. He would run her hand over the corner of a picture frame, describe a right triangle and make her repeat that the sum of the square of the sides was equal to the square of the hypotenuse. "I had no idea what it meant," she says, "but he recited it like a poem, so I loved to recite it too." One night, he roused her from her bed and led her outside, down the street, and onto a nearby golf course. He pointed out washes of magnificent light that were streaking across the sky. It was the aurora borealis. My mother had discovered her destiny.

### Passage Three

I cannot pretend that, as a boy, I liked everything about having a scientist for a mother. When I saw the likes of Mrs. Brady on TV, I sometimes wished I had what I thought of as a mom with an apron. And then, abruptly, I got one.

It was 1971 and my mother was working for NASA at Ames Research Center in California. She had just made an important discovery concerning the solar wind, which has two states, steady and transient. The latter consists of puffs of material, also known as coronal mass ejections, which, though long known about, were notoriously hard to find. My mother showed they could be recognized by the large amount of helium in the solar wind. Her career was flourishing. But the economy was in recession and NASA's budget was slashed. My mother was a housewife again. For months, as she looked for work, the severe depression that had haunted her years before began to return.

Mom had been taught to turn to the synagogue in times of trouble, and it seemed to make especially good sense in this case, because our synagogue had more scientists in it than most Ivy League universities. Our rabbi, a celebrated civil rights activist, was arranging networking parties for unemployed eggheads. But when my mother asked for an invitation to one of these affairs, he accused her of being selfish. "After all-there are men out of work just now."

"But Rabbi," she said, "it's my life."

I remember her coming home that night, stuffing food into the refrigerator, then pulling out the vacuum cleaner. She switched it on, pushed it back and forth across the floor a few times, then switched it off and burst into tears. In a moment, I was crying too and my mother was comforting me. We sat there a long time.

"I know you want me here," she told me. "But I can either be a part-time mama, or a full-time madwoman."