



Proficient | Exemplar Essay

## The Making of a Scientist

### Life's Important Lessons



#### Clarity and Focus

The essay contains a mostly clear central idea ("His most important lessons from his dad weren't just about science because really he taught him that it's better to observe and understand than to just know"). The writing is focused on the main idea ("sometimes things aren't what they seem, so you have to ask questions and observe to truly know something").



#### Development

Relevant quotes from the source text are used throughout the essay to enhance the audience's understanding of the central idea ("But when Feynman went to his father, he helped him understand that there's a 'difference between knowing the name of something and knowing something"). Explanations follow each example to further connect them to the central idea.



#### Organization

The essay is organized to include a definite introduction, detailed body paragraphs, and a conclusion that follows from the information given ("The lessons Feynman's dad taught him influenced him as he got older. It taught him to observe, understand, and not just know"). Appropriate transitions help to show relationships between and among the ideas ("so," "at first," and "another example").



#### Language and Style

There is an established formal style that is maintained throughout ("Richard was only a young boy in a highchair when he learned about patterns"). Sentence structure is varied, and the language is domain-specific and mostly engages the reader ("Mathematics," "observing," "understanding"). There are some errors, but they do not affect meaning ("pecking at it's feathers").



### Using Exemplars in Your Lessons

Exemplar essays are tools to take abstract descriptions and make them more concrete for students. One way to use them is to print the clean copies of the essays and allow students to use the rubric to make notes or even find examples of important elements of an essay - thesis statements, introductions, evidence, conclusions, transitions, etc. Teachers can also use exemplars to illustrate what each score point within a trait 'looks like' in an authentic student essay. For additional ideas, please see "25 Ways to Use Exemplar Essays" by visiting the Curriculum Resources page in Help.

# The Making of a Scientist



## Life's Important Lessons

What are life's most important lessons? Richard Feynman shares what he learned from his dad in his essay "The Making of a Scientist." Feynman's father taught him many things, from how to make patterns to science and animals. His most important lessons from his dad weren't just about science because really he taught him that it's better to observe and understand than to just know. His dad showed him that if you know something, but don't understand what it means then the information is useless. The essay has many examples of how Feynman's most important lessons were deeper than he first thought.

One of the life lessons his father taught him was about patterns. His father came home one day with a bunch of tiles. At first they didn't arrange the tiles in any particular order, they just stood the tiles up vertically like dominos and Richard would knock them down. But, slowly over time his father taught him to arrange them in a pattern. The pattern was two white tiles, then one blue tile. His father felt that teaching him about basic elementary mathematics like patterns was important and would help him to be more observant of the world around him. Richard was only a young boy in a highchair when he learned about patterns.

Another example of one of Feynman's lessons is while he was at Catskill Mountain and a boy there knew the name of a bird and Feynman didn't. "Your father doesn't teach you anything!" the other boy said to Feynman. But when Feynman went to his father, he helped him understand that there's a "difference between knowing the name of something and knowing something." So, they watched the birds for awhile. Something Feynman noticed



while his dad was teaching him was the bird pecking at it's feathers.

He asked his dad why, and together they made a guess about it fixing feathers after flying. As the two continued observing the bird they noticed even after not flying for a while the bird would still peck at it's feathers. Feynman's dad then told him the reason why the bird pecked at it's feathers was because it was eating lice out of its feathers. Feynman then understood that sometimes things aren't what they seem, so you have to ask questions and observe to truly know something.

The lessons Feynman's dad taught him influenced him as he got older. It taught him to observe, understand, and not just know. The lessons taught Feynman to be interested in science but mostly physics. Due to Feynman being interested in science it caused him to pursue science and become a scientist. And to think that by just observing and understanding he became a scientist.