E. Jefferson Ingersoll, III, was born with neurofibromatosis, a neurological disorder sometimes known as elephant man’s disease. Jefferson’s disease has affected his appearance; his head is a bit larger than usual, and many internal lesions have left discolored patches of skin on his arms and legs. The disease has affected his behavior as well: he walks a little off-center, and his movement is almost invariably awkward and unbalanced.

Unfortunately, Jefferson’s doctors have been unable to determine the severity of his condition. They have warned his mother that neurofibromatosis often becomes progressively debilitating as the years go by and that Jefferson may not live to adulthood. Ms. Ingersoll has responded by trying to give her son a lifetime’s worth of gifts and attention in the few short years that she may have him. The result is that when Jefferson begins third grade in Ms. Stanton’s classroom, he is an overindulged boy who seems completely unable to regulate his own behavior.

From the first day of school, it is clear that Jefferson wants nothing more than to be liked by his teacher and classmates. At the same time, he seems to do everything possible to undermine his chances of gaining anyone else’s affection. For example, he often interrupts the flow of small-group and whole-class lessons with inappropriate comments, irrelevant questions, or unprovoked laughter. During any single independent activity, he sharpens his pencil at least five or six times, always taking the most indirect route possible to the pencil sharpener; as he does so, he often bumps into someone else, necessitating either an excessively loud apology or a denial that he is in any way responsible for the mishap. And throughout the day, Jefferson makes frequent trips to the drinking fountain and the restroom, always managing to disrupt classroom activities in the process.

At first, Ms. Stanton tries to ignore Jefferson’s inappropriate responses, thinking that such responses will gradually decrease if she refuses to reinforce them with her attention. But when she sees no improvement in his behavior, she tries other, more assertive strategies. For example, she praises him for on-task behavior while also reprimanding him for behaviors such as getting out of his seat, making inappropriate remarks, or in other ways disrupting classroom activities. On several occasions, Ms. Stanton meets with Jefferson and his mother to discuss the seriousness of the misbehaviors and to stress the importance of staying on task and allowing other students to do likewise. At one point, Ms. Stanton even develops a contingency contract for Jefferson, specifying desired behaviors in concrete terms and identifying the rewards that would follow such behaviors. Despite all her efforts, Jefferson’s disruptive behaviors continue unabated.

This case is derived from an unpublished case study written by Barbara Day.

While her class is at physical education class one afternoon, Ms. Stanton seeks the advice of Mr. Manzini, the school psychologist. Together they decide that, of all Jefferson’s misbehaviors, his continual movement around the classroom is the most disruptive of all and so must be dealt with first. Mr. Manzini suggests that Ms. Stanton give Jefferson seven plastic poker chips at the beginning of school each day. Whenever Jefferson gets out of his seat without permission, he must “pay” for this behavior with a chip. Once he’s used all seven chips, he must remain in his seat for the rest of the morning; a single out-of-seat behavior at this point will result in his having to spend the next lunch and recess alone in a small room just off the main office.

The following morning, Ms. Stanton describes the new procedure to Jefferson and gives him his first daily supply of chips. After that, whenever she sees him moving about the classroom without permission, she gets his attention and holds out her hand, and he obligingly gives her a chip. In the weeks that follow, Jefferson always limits his out-of-seat behaviors to the magic number seven. In fact, some
days he doesn’t even spend all the chips that he has. Ms. Stanton collects any extras at the end of each day, and then gives him a new pencil every time she’s accumulated 25 of them.

Jefferson soon learns that if he gets out of his seat quietly and without disturbing his classmates, Ms. Stanton doesn’t ask him for a chip. In fact, at one point, not only does she not request a chip, she also tells him, “I’m so pleased to see you moving quietly around the classroom, Jefferson.”

Jefferson is immediately on the defensive. ‘It’s okay for me to be out of my seat, Ms. Stanton. I still have a chip.”

On one occasion, Jefferson is working at the back of the classroom with Ms. Zhang, the speech pathologist. When Ms. Zhang asks him to speak more softly, he asks her what she means.

“Talk like you do when you’re doing independent work,” Ms. Zhang responds.

“You know...whisper!”

Jefferson laughs. “I only do that so Ms. Stanton won’t take a chip,” he exclaims loudly. Only when Ms. Zhang assures him that she, too, can take a chip does he lower the volume of his voice.

As the school year draws to a close, Jefferson still doesn’t seem to be able to regulate his own classroom behavior. The seven daily chips work wonders in helping him keep his behavior under control. But when he receives no chips first thing in the morning—for example, when Ms. Stanton is suddenly called out of town and doesn’t have a chance to brief the substitute teacher—he reverts back to his loud and disruptive actions. And when Jefferson enters Mr. Quinton’s fourth-grade classroom the following year, it’s as if he had never seen a poker chip in his life.

Possible questions for “Seven Chips”:

1. Characterize Ms. Fenwick’s chip strategy using concepts and principles from behaviorism.

2. What evidence do we see that Ms. Fenwick’s strategy, although leading to a temporary improvement in Jefferson’s behavior, is unlikely to have long-term effects?

3. A contingency contract is a formal agreement between a teacher and student that specifies acceptable behaviors the student must demonstrate and the reinforcers that will follow those behaviors. When Ms. Fenwick develops a contingency contract for Jefferson, she violates one of the basic guidelines for such contracts. What mistake does Ms. Fenwick make?

4. What other strategies might a teacher use with a student like Jefferson?