Allen Brewster, an inquisitive fourth grade student, turns himself into a human plant as part of a project for the Science Fair.

**Topics:** Plants, Misc./Other; READNOW - Demco Media Turtleback Books, Demco Media - Read Now Grades 6-8

**Main Characters**

**Allen Brewster** an imaginative nine-year-old boy who is determined to prove that he can create human photosynthesis; he is forbidden to share his knowledge after the government discovers he is telling the truth

**Barry Cramer** the bully who likes to antagonize Allen; Allen repeatedly outsmarts him

**Dr. Wedemeyer** the psychiatrist who tells Allen that his plant-like condition is the result of a psychosomatic disorder

**Grandpop** Allen's grandfather, who encourages Allen in his experiment

**men in the brown car** government men who take Miss Green away when she is about to reveal a government secret; they spy on Allen after his discovery is declared top secret

**Miss Green** Allen's science teacher, who wants to win a teacher's award at the Science Fair; she ridicules Allen's ideas

**Mr. Brewster** Allen's father, who is angry that Allen keeps insisting he is a plant

**Mr. Kirby** an advisor to the President; he oversees the experiments conducted to see if Allen is telling the truth; he insists Allen's discovery be kept secret

**Mrs. Brewster** Allen's mother, who is upset when Allen says he has turned into a plant

**Mrs. Snodgrass** the librarian who helps Allen find books for his research and expels Barry from the library after Barry reads Allen's notes aloud

**Peggy Applegate** a classmate of Allen whom Miss Green ridicules when she decides to do her science project on ants

**President of the United States** the man who gives a speech in Allen's hometown about finding a solution to world hunger but then orders Allen's discovery to be kept top secret because a free food source would ruin the economy

**Vocabulary**

**chlorophyll** the green matter in plants that enables them to convert sunshine into useable energy

**hemoglobin** a protein in red blood cells containing iron

**podium** a stand that holds notes and/or a microphone for speakers

**psychosomatic** pertaining to a physical condition caused by a person's thoughts or emotions

**transparent** clear enough to be seen through

**visualize** to see something in the imagination

**Synopsis**

The story opens with a prologue in which nine-year-old Allen Brewster is hiding under the covers in his room writing in a notebook by flashlight. In his notebook he begins a report about the events of the past few months. The lights in his room are out because he is hiding from some government men who know he has made an important scientific discovery that can have an enormous impact on the world.

Chapter one begins a flashback in which he reveals the events that led to his hiding in his room. It all starts in Miss Green's classroom.

Miss Green, Allen's fourth-grade teacher, takes the annual Science Fair seriously, so when Allen announces that his project is to make humans photosynthesize like plants, Miss Green thinks Allen has not planned his project. She orders Allen to do...
his project on lipstick. On the way home from school, Barry Cramer, the class bully, tries to write on Allen with lipstick, and Allen gets Barry kicked off the bus.

At home Allen tells his parents that Miss Green accused him of not properly planning for the Science Fair. His parents agree with Miss Green that Allen will not be able to make humans photosynthesize. Grandpop disagrees, however, and the next day he tells Allen that discoveries are made by finding enough pieces to see the whole picture. Grandpop says the most important tools are the five senses and the brain.

After breakfast Allen's father makes Allen read about lipstick in the encyclopedia before he can go to the library. Allen is still insistent on researching his own idea, though, so he goes to the library to look for books about photosynthesis. The librarian, Mrs. Snodgrass, helps Allen find books, but Barry reads Allen's notes out loud. Allen encourages him to read louder, and Mrs. Snodgrass expels Barry from the library.

The next day Grandpop advises Allen to "think crazy" in order to stretch his imagination. Allen reviews his notes and realizes the main difference between hemoglobin in blood and chlorophyll in plants is that hemoglobin has iron, while chlorophyll contains magnesium. He mixes up a drink with high magnesium foods, including a bit of liver. That night Allen is not hungry, but when morning comes he is ravenous. He mixes a new drink with more liver and is able to skip three meals before he is hungry because the chlorophyll in his system is beginning to produce food for him.

Finally, Allen mixes a drink with a large amount of liver. That night he is not hungry and feels light-headed. The next morning he wakes up green. His parents rush him to the hospital, but the doctor says Allen just has allergies. Allen gets sick when his parents make him eat breakfast. When Allen goes to Miss Green's class, she tells him to leave until he washes off his green paint. Since Allen cannot wash it off, he leaves school. He wanders until he thinks of going to the newspaper, where the features editor writes about him. When his parents see the newspaper article, they are mortified because it has been published as a sensational story. Allen's father tells Allen to stop saying he is a plant.

After this, Allen takes to his bed, which he moves to the window so he can get enough light. When several days of rain come, Allen begins losing strength. He finally asks his mother to turn a lamp on him. Grandpop comes to watch television with Allen and realizes Allen has aphids. After Grandpop uses a garden sprayer to rid Allen of the aphids, the two discuss ways to convince people that Allen really is a plant. Grandpop suggests finding someone respected for telling the truth. Just then a story airs about the President of the United States giving a speech at the local City Hall about solving world hunger.

The next day Allen writes a letter to the President saying he has the solution to world hunger. Later he goes into the garden and stands in the mud. His father calls him in, and as he is washing his feet, he realizes he has started growing roots. In the living room Allen is introduced to Dr. Wedemeyer, a psychiatrist. Allen tries to prove he is a plant, but Dr. Wedemeyer discounts all of Allen's physical proof as psychosomatic. Just then a telegram for Allen arrives from the President stating that a car will pick him up that afternoon. Several hours later, the car comes to pick up Allen and take him to the President's hotel.

At the hotel Allen meets Mr. Kirby, a presidential advisor, and tells about his discovery of human photosynthesis. Mr. Kirby agrees to test Allen to see if he can survive without eating. After ten days of testing, Mr. Kirby is convinced and calls off the research. He gives Allen a pill to reverse the effects of Allen's formula and tells Allen that human photosynthesis is a threat to the economy because it will end the need for food production and consumption. Allen is forced to agree to keep his discovery a secret.
Several days before the Science Fair, the President sends Allen a sophisticated project on lipstick to compensate Allen for not revealing his discovery. Allen complains to Grandpop that no one will ever know the truth, but then Allen has an idea. On the day of the Science Fair, Allen wins a blue ribbon, and Miss Green congratulates him. Allen persuades Miss Green to try a lipstick and is pleased to see her lick her lips.

During the award ceremony, Allen tricks Miss Green into leaving by telling her that she left her car lights on. He follows her out to the parking lot and tells her he has turned her into a plant. He reveals that the lipstick he gave her contains a highly concentrated dose of the formula he developed and that she ingested it when she licked her lips. Miss Green is finally convinced when she finds herself unable to eat a cookie, but she refuses to take the antidote Allen offers her. Against Allen's advice, Miss Green insists on telling the world about his discovery. She is on her way back to the auditorium to announce the discovery when two government men take her away.

In the epilogue of the story, Allen states in his diary that his grandfather thinks something bad has happened to Miss Green. He closes with a warning that since the readers now know the secret, they had better watch out!

**Open-Ended Questions**

Use these open-ended questions as the basis for class discussions, student presentations, or extended writing assignments.

**Initial Understanding**

Why do Allen's parents have a psychiatrist talk to Allen?

Allen's parents are very worried about him. They know he has not been eating, and his skin has a strange green color. They are also very upset that Allen keeps insisting he is a plant. Like the psychiatrist, they believe that Allen's condition is mainly psychological. Allen's father obviously hopes the psychiatrist will be able to convince Allen that his problem is all in his head so that Allen will stop "pretending" he is a plant.

**Literary Analysis**

What actions do the government people take that create a problem?

Mr. Kirby and the President think it is necessary, and therefore acceptable, for the government to steal Allen's ideas and research and force Allen to promise not to talk about his discovery. They kidnap Allen's teacher when she threatens to tell Allen's secret, and they spy on Allen. Finally, they ignore a development that may bring an end to world hunger because it would keep the government from receiving tax money.

**Inferential Comprehension**

How does Allen's life change in this story?

In the beginning of the story, Allen seems to have a great deal of trust in people. First, he trusts that Miss Green will respect his ideas. Then, he expects that his parents will defend him when Miss Green ridicules his theories. He even believes that the government will help him if he can prove his discovery. But by the end of the story, however, Allen is less trusting and is cowering in his room fearing what the men in the brown car will do next. Also, at the beginning of the story, Allen does not know the tools and methods of experimentation, but by the end of the story, he has learned how to use his five senses and his powers of reason to solve complex problems.
Constructing Meaning
Was Miss Green fair to her students? Would you want Miss Green as your teacher? Why or why not?

Answers will vary among students, but most students will probably feel, as Allen did, that Miss Green was not fair to her students. Most students will probably say they would not want to be in her class because she makes fun of her students' ideas, is too focused on winning awards at the Science Fair, and does not listen to what her students have to say.

Teachable Skills

Describing Actions or Events  Most scientists keep a journal of their scientific procedures that records all of their experiments and documents results of those experiments. Have the students pretend that they are Allen. Instruct them to create a daily journal of twenty-five to thirty entries incorporating the scientific principles he used in his discovery. Assign students to read more about plants, photosynthesis, and human blood to make the journals even more of a learning experience.

Responding to Literature  The preparation for the Science Fair sets the plot in action. Have students practice "thinking crazy" and brainstorm a wacky idea for an invention. Have them write a summary of their invention and describe how it works, making every effort to create a believable explanation. Have students present their ideas to the rest of the class in a competition and arrange for a panel of impartial judges (perhaps other teachers) to vote on and award prizes to the most original and convincing presentations.

Identifying Persuasive Language  When Miss Green is taken away by the men in the brown car, she probably tries to defend her actions. Have the students write a dialogue between Miss Green and the men, in which Miss Green tries to persuade them to let her go.

Recognizing Plot  Allen devises an ingenious plan to convince Miss Green that his discovery actually works. Have students try to create alternate methods Allen could have used to convince others that human photosynthesis is possible.