

## *Cleaner Air with Plants*

Today, many buildings are made with modern materials. However, these materials, such as plastic, release small amounts of dangerous chemicals into the air. When air stays inside the buildings, the amount of chemicals slowly increases. As a result, the people who work or live in them begin to feel sick. This is called “sick building syndrome.” One solution to this problem came from scientists who study space.

NASA, the United States space agency, asked a scientist named Bill Wolverton to study ways to keep the air clean inside spaceships. There is no air in space, so spaceships cannot get air from the outside. Wolverton wanted to keep the air in spaceships clean because they were made of modern materials that released chemicals. To do this, Wolverton created a special building made only of materials such as plastic. When people went into the building, their eyes would hurt, and they would find it difficult to breathe. Wolverton tried growing different kinds of plants inside the building to solve the problem. He learned that most plants were good at helping to clean the air.

According to Wolverton, when plants clean chemicals from the air, the chemicals become food for the plants. He wrote several books explaining which plants are best at cleaning the chemicals found in the air inside buildings. He also developed a container that makes plants even better at removing chemicals. Thanks to Wolverton, many buildings now keep their air clean by using plants.

A study using plants was also done inside elementary school classrooms to learn if cleaner air could help students study better. The students were divided into two groups, one with indoor plants and the other without plants. Interestingly, after a few months, the students in the first group performed better in their studies than the students in the second group. Much like Wolverton, the researchers showed that cleaner indoor air could have positive effects on people.

- (27) “Sick building syndrome” is caused by
- 1 unhealthy things that can grow on modern materials.
  - 2 dangerous chemicals that come from materials in buildings.
  - 3 not enough air for people inside buildings.
  - 4 many people living together in the same space.

- (28) Why did Bill Wolverton create a special building?
- 1 To give NASA a place to keep its plants.
  - 2 To discover what chemicals modern materials create.
  - 3 To learn about plants that grow well in space.
  - 4 To find ways to clean the air in spaceships.

- (29) What was created thanks to Wolverton?
- 1 A spaceship that was made with modern materials.
  - 2 A plant that could remove chemicals from the air.
  - 3 A book that recommended the safest building materials.
  - 4 A container that helped plants reduce dangerous chemicals.

- (30) A study done inside elementary school classrooms
- 1 proved that young students could learn to grow plants.
  - 2 showed that clean air could help students’ performance.
  - 3 showed that some schools had cleaner air than others.
  - 4 asked teachers to help students study better.

- (31) What do we learn from the passage?
- 1 Modern building materials have no benefits for people.
  - 2 Plants get food for themselves when they clean the air.
  - 3 Most elementary school classrooms now have plants.
  - 4 Scientists hurt their eyes when they study space.