

Name: _____



Subject: Science/Physics

Key Concepts: air pressure, force, compression

Try this at Home: Book Blowing Experiment

Watch this Wonderama Video about air pressure on YouTube: [Air Pressure and Bed of Nails! With That Physics Show](#)

(If needed, use the video title to search for this video.)

Words to Learn

Pressure: the force that a gas, liquid or solid exerts on another

Air Pressure: the weight of air

Force: something that causes a change in the motion of an object

Compressed Air: a gas, or a combination of gases, that has been put under greater pressure than the air in the general environment

What You Need:

- 3 books
- A large plastic bag that's airtight
- A table

What to Do:

1. Stack three books on top of one another on the table.
2. Try to move the books by blowing towards them. (Is it possible?)
3. Take the plastic bag and put the 3 books on top of it. Make sure the bag's opened end hangs over the edge of the table.
4. Blow as hard you can to try and make the books move.
5. Watch what happens to the books!

What You Learned:

1. What happened to the books when you blew them the first time?

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2. What happened to the books when you blew them the second time?

3. The second time the books were blown, the **compressed air** inside the bag forced them to move. What do you think would happen if you made a hole in the bag and tried to blow the books again? Explain why you think this.

4. What surprised you most about this experiment?
