

Experiment 4

Air Pressure



WHAT YOU NEED

Newspaper
Yardstick
Table

PROCEDURE:

1. Make sure an adult is with you and that it is OK to break the yardstick.
2. Place the yardstick on the table with a little less than half of it hanging off the edge.
3. Place an open sheet of newspaper flat against the table on top of the yardstick.
4. Swiftly hit the end of the yardstick that is not on the table. The stick should break near the edge of the table.

WHY THIS HAPPENS

The weight of 15 pounds of air pressure per square inch means that many hundreds of pounds of air are pressing on the open newspaper. When you quickly hit the yardstick you are fighting against all that weight, so the stick breaks.

What would happen if you had tons of weight pressing down on your body? Believe it or not, you do! The air around you is heavier than a bunch of elephants, and it pushes against you all the time. So why aren't you crushed by all that pressure? It's because you

ship headed for Rome. He was going to be put on trial for preaching the gospel. On the way, God showed Paul there would be trouble ahead. Paul warned the ship's crew to change travel plans. But no one listened. (See Acts 27.)

by Christina Quick

Out at sea, a terrible storm arose. It looked like the ship would break apart. Some men tried to escape in a lifeboat. But Paul had another message from the Lord. He told them to stay with the ship. He said everyone would survive as long as they followed God's instructions.

This time, the crew listened. They chose to obey God. When the ship

Under Pressure

All Mixed Up

Use your Bible to help you unscramble key words from the Acts 27 story of Paul's shipwreck. (Words are taken from the New International Version.)

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|----------------------|----------------------|
| 1. lauP | 9. treCe |
| 2. oricentun | 10. rancho |
| 3. rosterthane | 11. druedrs |
| 4. primleal gentiRem | 12. sardanb |
| 5. idtairAc eSa | 13. winmings |
| 6. lassoir | 14. daleniAnrax phis |
| 7. doirless | 15. barroh |
| 8. fetailob | 16. cogar |

Be sure to read the whole story in Acts 27.

have air inside your body too. God designed you so that everything is in balance. With equal forces inside and out, you stay nice and comfortable under pressure.

We can measure air pressure using an instrument called a barometer. Changes in air pressure help us predict changes in weather. High air pressure goes with clear skies. But when a weather forecaster says a low-pressure system is coming, watch out for storms.

The Bible tells about a time when Paul, an apostle and missionary, didn't need a barometer to know storms were brewing. Paul was on a

finally ran aground, even those who couldn't swim made it to shore safely. All the people were saved, just as God had promised.

Weather forecasters can be wrong. But God's Word is always right. When others pressure you to disobey God, don't go along with the crowd. Follow God's instructions instead.

"Blessed is the man who does not walk in the counsel of the wicked or stand in the way of sinners or sit in the seat of mockers. But his delight is in the law of the Lord, and on his law he meditates day and night" (Psalm 1:1,2, NIV). **e**

E-mail your comments to pe@ag.org.