

Stomata Demo

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Students have a difficult time understanding the use of turgor pressure to open and close stomata. This can be demonstrated using two long balloons.

Blow up the two balloons ahead of time and deflate so they blow up easily. Tie the nipple ends together. Blow up the balloons about 50%, twist the ends together. This represents the stomata being closed. Add more air (water) to the two balloons, twist ends and hold together. The balloons should expand outward. There should be a space between the two balloons-this is the stomata in the open state. Allow the balloons to release some air (water) and the space between disappears.

Adapted from www.woodrow.org/teachers/bi/1998/teachers/stomata