How Hot Air Balloons Work

Propane gas burners, mounted \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the balloon, heat the air inside the balloon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Heat causes air molecules to become more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and expand. Because hot air is less dense than cold air, it becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and causes the balloon to rise. To keep the balloon aloft, a blast from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is given every thirty seconds. To lower the balloon, the pilot opens the parachute valve at the top of the balloon allowing hot air to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. To maneuver the balloon horizontally, the pilot ascends or descends in altitude, catching different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



|  |  |
| --- | --- |
| **Cold Air** | **Hot Air** |
| More dense (air molecules are close together)HeavierSinkscold-hot-air.jpg | Less dense (air molecules are spread out)Lightercold-hot-air.jpgRises |