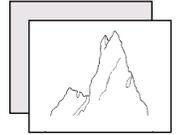
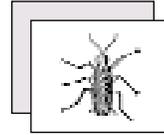


kids' kreation



© 2009 by HIS CREATION

62

AIR PRESSURE

Our sweet dependence on Christ

As you climb a mountain, *air pressure decreases* and the harder it is to breathe. The higher and higher you go, the less oxygen gas there is in the atmosphere.

Air is made up of extremely tiny molecules of oxygen, nitrogen, and carbon dioxide. Gravity pulls on these gas molecules, squeezing them downward toward the surface of Earth. This creates *air pressure*, which increases the closer you get to the ground.



Most of the oxygen we need to breathe is close to the surface of Earth. People can travel into space, but they must bring oxygen with them. The way Jesus has made the atmosphere shows us how wonderfully dependent we are upon Him!



Close to the surface of the earth, there is plenty of oxygen to run and play.

less oxygen

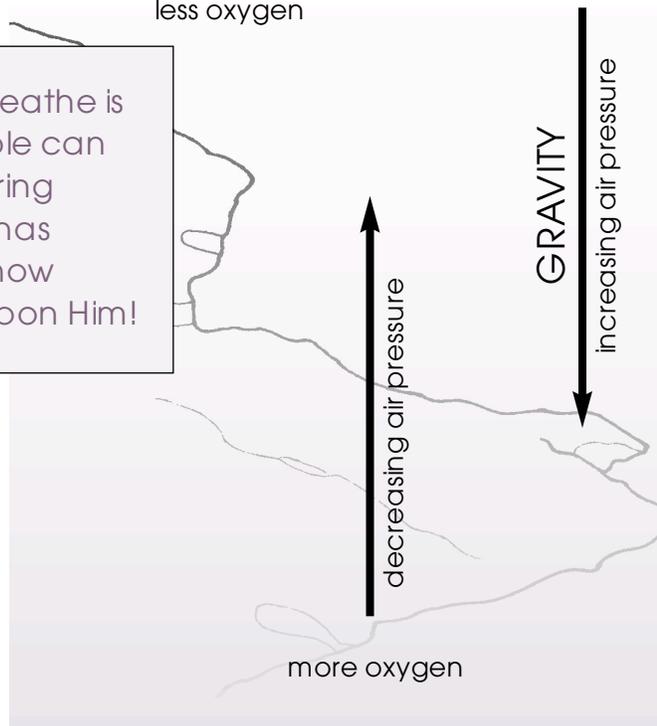


PHOTO CREDIT:

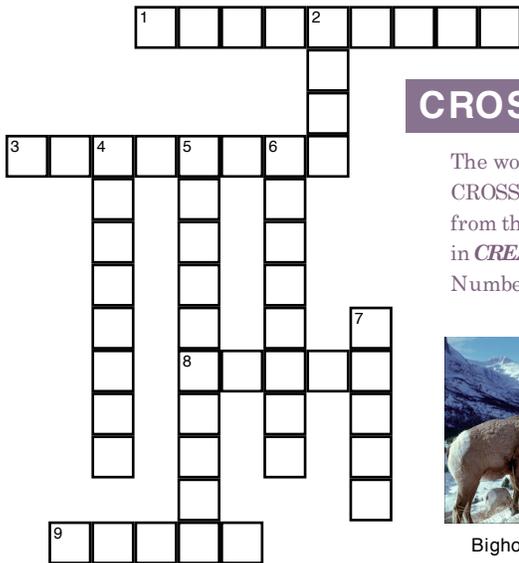
Mountain climbers - © 2009 by Pawel Glogowski

Children playing soccer - © 2009 by poco_bwi.iStockphoto

Answers to CROSSWORD found in
kids' kreation #61

Down: 1. HIMALAYAS 2. ATOMIC 3. SEAMOUNTS
5. GEOLOGISTS 7. OCEANS 9. TEN 10. BLOCK

Across: 4. FAULTING 6. OROGENESIS 8. EVEREST
10. BASIN 11. MOUNTAIN 12. SMOKE



CROSSWORD

The words used in the CROSSWORD are taken from the articles found in *CREATOR* Volume 15 Number 1.



Bighorn sheep USGS

Down

2. True or false: Snowstorms can occur in the tropics?
4. Christ is the Author of our Faith (Hebrews 12:2) **and** the Author of _____ (Hebrews 1:10).
5. Our Lord Jesus layered Mount Kenya with several _____ known as "life zones."
6. Although Mount Kenya is near the equator, its Heath Zone resembles the moors of _____.
7. Mount _____ is the second tallest mountain in Africa.

Across

1. "I will go before you and will level the _____ ... so that you may know that I am the LORD" (Isaiah 45:2, 3 NIV).
3. Wind speeds usually increase or decrease (pick one) with increasing altitude.
8. The temperature difference between the sunshine and the _____ is extreme on mountains.
9. The Bar-headed _____ is the world's highest flying animal.

FAMILY ACTIVITY: Measuring Air Pressure

- Water bottle with screw-on cap
- Food coloring
- Water
- Straw
- Fine permanent marker
- Rubber cement

1) **Ask a parent** to drill a small hole in the top of the screw-on, plastic cap of a 20 ounce bottle—a hole just large enough to insert a thin straw into snugly. 2) Gently push the straw through the hole so that most of the straw hangs below the cap (see photo). 3) Using rubber cement or silicone caulk (purchase at a hardware store), apply a small amount of cement/caulk around the base of the straw where it inserts into the cap to create an airtight seal. 4) Next, fill the bottle one-quarter full of colored water. 5) If you'd like, make several marks on the side of the straw to indicate water level. 6) Carefully screw the cap onto the top of the bottle so that the lower end of the straw is submerged beneath the water. 7) **Carry the bottle only by the cap** or attach a string around the cap and carry the bottle with this string. (This apparatus doubles as a barometer and thermometer—don't touch the bottle because the warmth of your hands will cause the fluid level to rise—**it is extremely sensitive to changes in temperature!**)

If possible carefully transport your bottle up and down several flights of stairs or, better yet, use an elevator to move up and down several floors. **What happens to the level of the colored water in the straw?** If the temperature stays the same, water will move up the straw as the air pressure decreases with height. This sensitive instrument should register **increasing air pressure as you go down the stairs/elevator** and **decreasing air pressure as you go up.** (If you have a chance, also watch what

