

Look Who Lives in the Desert!
Vulture Science Projects
(for young classes)

Vultures are known for some very gross behaviors! Nevertheless, they are interesting and important animals. Besides, even their yuckiest behaviors are done for good purpose. Here are two simple science projects to help students understand why vultures do what they do:

Evaporative Cooling

Have you ever noticed how cold you get when you come out of a swimming pool? Or how your body sweats when you are hot?

These are examples of evaporative cooling—as moisture evaporates into the air, energy is lost and temperature drops.

Since the desert is so hot and vultures cannot sweat, they have a unique but effective way to cool off: they let pee dribble down their legs. The scientific word is ureohydrosis but it's really just evaporative cooling.

Go outside and roll up both of your sleeves. Dip one arm in water (or spritz some on with a spray bottle). How does the temperature of the wet arm compare to the dry arm? Discuss the results.

Weight vs. Lift

Have you ever noticed how a rock falls to the ground fast than a feather?

It's because gravity—the pull of the Earth—makes a heavier object harder to keep in the air.

When it comes to flying, every bit of weight can affect how quickly a vulture gets off the ground. If a vulture is eating a big meal and a predator approaches, the bird simply regurgitates (throws up) the food to make itself lighter for flight. Of course it can always come back and eat it again later.... Gross!

Place several pebbles in one deflated balloon. Then fill that balloon plus one that is empty with equal amounts of helium. Attach a string to each. Make two copies of a vulture photo and tape them on the balloons. Hold the balloons down by the strings so they are touching a flat surface. Release them at the same time. How quickly does the empty balloon rise compared to the balloon with pebbles in it? Discuss the results.