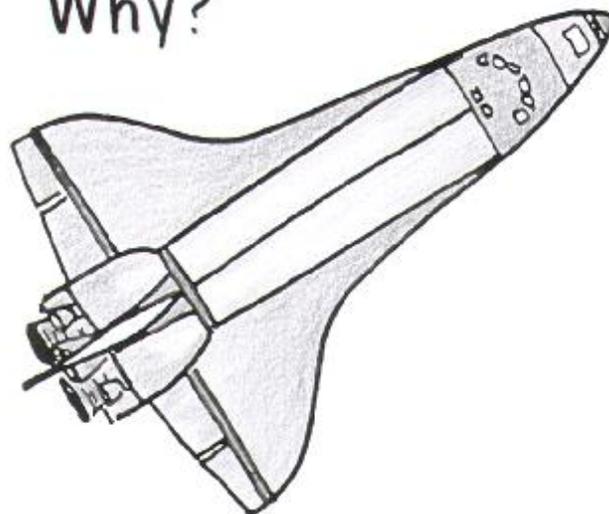


NEXT-TIME QUESTION



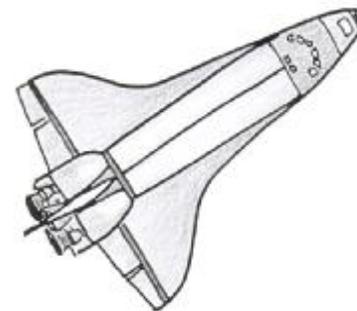
A candle will stay lit inside the space shuttle when it is on the launch pad, but not when it is in orbit. Why?



NEXT-TIME QUESTION



A candle will stay lit inside the space shuttle when it is on the launch pad, but not when it is in orbit. Why?



Answer:

When a candle ordinarily burns, the warmed carbon dioxide produced in the flame rises by convection, and oxygen comes in from below to keep the process going. But when in orbit, there is no effect of gravity inside the cabin and convection cannot occur. The warmed exhaust gases do not "rise," and instead suffocate the flame.



CONVECTION



NO CONVECTION