Task:

use the gas law to explain
why a car with tightly closed windows will
occasionally have a window blow out or crack
when exposed to the sun on a hot day.

Explanation:

If you look at the ideal gas law equation

$$\frac{P\,V}{T} = const;$$

The air in car with tightly closed windows without air exchange with atmosphere obeys the ideal gas law, so if the temperature rises $T \uparrow$, the PV should rise too. The volume of air in car is constant because the car frame is rigid.

So then the pressure will be rising $P \uparrow$. If pressure on the window in car rises and not changing on the other side (it is 1 atmospher) the car window under influence of pressure difference will crack or blow out.