

## Killer Heat in Florida Quiz

1. Which of the following is true of the Union for Concerned Scientists *Killer Heat in the US* report?
  - a. The analysis includes four different heat index thresholds (above 90°F, above 100°F, above 105°F, and "off the charts.")
  - b. The report features three time frames (historical, midcentury 2036-2065, and late century 2070-2099)
  - c. The report features three different scenarios of climate action (no action, slow action, and rapid action.
  - d. All the above
  - e. None of the above
2. True or False: Historically, Charlotte County has experienced an average of 3 days per year with a heat index above 105°F
3. Which of the following is to be expected with no action to reduce heat trapping gasses?
  - a. We will all benefit economically
  - b. By midcentury Charlotte County would experience an average of 78 days per year with a heat index above 105°F. This includes 1 day with an off-the-charts heat index.
  - c. By late century Charlotte County would experience an average of 130 days per year with a heat index above 105°F. This includes 17 days with an off-the-charts heat index
  - d. All the above
  - e. b. and c.
4. True or false? If we take rapid (bold and aggressive) action now, we can limit the increase in extreme heat in Charlotte County to an average of 50 days per year with a heat index above 105°F.
5. Which of the following statements are valid?
  - a. *Adaptation* is the process of adjusting to actual or expected climate change.
  - b. *Mitigation* is a human intervention to reduce heat-trapping emissions or remove carbon already in the atmosphere.
  - c. *Adaptation* is trying to manage what you cannot avoid, and *mitigation* is trying to avoid what you cannot manage.
  - d. Communities that embrace "*adaptive mitigation*" (those that help their residents adapt to a changing climate while also reducing emissions and sequestering more carbon) are better positioned to remain livable in the years ahead.
  - e. All the above
6. True or false: We cannot focus exclusively on adaptation (resiliency), because the climate will continue to change and the long-term impact of global warming will be too severe to manage. We must mitigate!

7. Rapid (“Bold and aggressive”) climate action would include
  - a. Reducing emissions of heat trapping gasses 70-100% by 2030 (almost 8% annually).
  - b. Conservation, so we consume less energy.
  - c. Replacing fossil fuels with zero emission sources of energy (solar, wind, nuclear, hydro, geothermal).
  - d. Taking resident carbon from the atmosphere thru reforestation, soil management, and emerging technologies
  - e. All the above.
8. Match the Level of Government with the Policy it should implement to achieve maximum results

Level of Government	Policies that give the <i>most leverage</i>
Local _____	A. National price on carbon that returns all revenues to households. Pandemic recovery response that creates millions of new jobs in zero emission and carbon sequestration industries meanwhile establishing a sustainable (finite earth) economy.
State _____	B. Energy conservation, sequestration of atmospheric carbon, and transition to zero emission fuels via building codes, landscape and farming rules. Adaptive mitigation in comprehensive plan for 2021- protects residents from global warming (adaptation, resiliency) while at the same time strives to reduces emissions to near zero by 2030, and takes carbon from the atmosphere by reforestation and soil management (mitigation).
Federal _____	C. Low carbon energy portfolio standards, change utility business models to require conservation and focus on service and reducing emission instead of selling more electricity. Virtual net metering.

9. Which of the following are true about the economics of climate mitigation?
  - a. Zero-emission energy is already cost competitive if not outright cheaper (with prices falling dramatically) than fossil fuels
  - b. Solar and wind energy are returning a healthy return on investment while stimulating the economy and creating jobs
  - c. Health benefits from reduced pollution (no smokestacks, no tailpipes) translates to dollars and lives saved.
  - d. Doing nothing or doing too little to mitigate climate threatens the whole economy with collapse.
  - e. All the above
10. Concerning the uncertainty of others taking/not taking action to on climate
  - a. Among our choices are taking no action and taking rapid action
  - b. What others do is an uncertainty
  - c. The best case may be achieved and the worst case avoided by choosing to take bold and aggressive action
  - d. All the above
  - e. None of the above

Answers: 1d, 2 True, 3e, 4 True, 5e, 6 True, 7e, 8 Local B State C Federal A, 9e, 10d