



1. If the same system was used to remove thermal energy from crates A and B, would the temperature in the crate change by the same amount? Why or why not?

No, diff. temps due to dog size (bigger = more thermal)

2. If the same system was used to remove thermal energy from crates C and D, would the temperature in the crate change by the same amount? Why or why not?

No, crate D isn't creating body heat, so it's easier to cool

3. Describe the relationship between the size of the dog and the difficulty to cool the crate.

Large dog = more thermal, more difficulty to cool vs. small

4. Dogs range in mass from about 4 pounds to about 250 pounds. We only have ~2 class periods to test our design, do we have time to test our cooling system AND test how well it cools "dogs" of different sizes?

Day 1 - Sizes

Day 2 - Cooling

5. How could we simplify our system to make it easier to test?

small crate models - strawberry containers