



Seeing the implications

Construct the two combinations of coffee straws as shown in the figure below. Fill your lungs with air and blow as hard as you can through each one.



A.



B.

Which do you think will emptied your lungs faster?

1. Arrangement A.
2. Arrangement B.
3. Both will be the same.



Seeing the implications

Construct the two combinations of coffee straws as shown in the figure below. Fill your lungs with air and blow as hard as you can through each one.



A.



B.

Which did you find?

1. Arrangement A was faster.
2. Arrangement B was faster.
3. Both were the same.

Critical Experiment 1

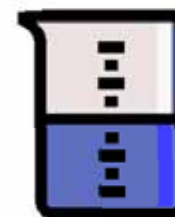


If we have equal amounts
of the same kinds
of materials at different
temperatures
and put them together,
what happens?

1. pretty close to 50 C
2. pretty close to 80 C
3. pretty close to 20 C
4. greater than 80 C
5. less than 20 C



200 g of
water
at 80 °C



200 g of
water
at 20 °C

Critical Experiment 2

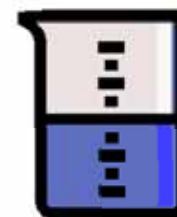


If we have unequal amounts of the same kinds of materials at different temperatures and put them together, what happens?

1. pretty close to 40 C
2. pretty close to 80 C
3. pretty close to 20 C
4. greater than 60 C
5. something else



100 g of
water
at 80 °C

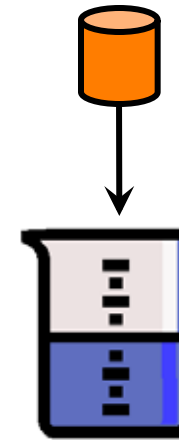


200 g of
water
at 20 °C

Critical Experiment 3



If we have equal amounts of different kinds of materials at different temperatures and put them together, what happens?



200 g of
copper
at 80 °C

200 g of
water
at 20 °C

1. pretty close to 50 C
2. pretty close to 80 C
3. pretty close to 20 C
4. greater than 80 C
5. less than 20 C