o ic s n o o

- Data collection syste
- Tape or adhesive covers
-

Why do you think that it is necessary to sit still?

Stop data recording after 6 minutes.

Name data run 1, "Still air".

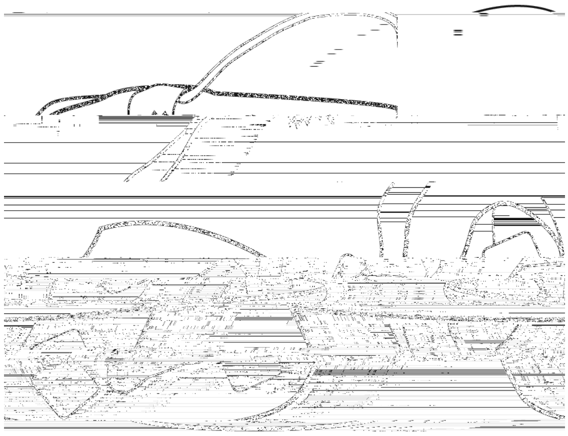
What is the skin temperature of your hand in still air?

Why is the temperature recorded for still air called the "control"?

o c

o C

Put ice and water into a large bowl or similar container. Leave enough room in the container so that you can put your hand into the ice water, as instructed, without causing any to spill.



Place the right hand so that the palm and fingers are completely in the ice water, leaving the back of hand and the probe above water.

Start data recording. Adjust the scale of the graph to show all data.

Remind the person being measured to sit, relax, and not look at the data as it is recorded.

Remove the hand from the ice water after 2 minutes.

Note: Tell the su ject that it is O to re ove the hand fro the ice water efore two inutes if it is too unco forta le

Continue recording data for 4 more minutes.

Stop data recording.

Name data run 4, "Ice water".

How does the skin temperature in the ice water compare with the temperature in still air?

Save your experiment and clean up according to your teacher's instructions.

- **Use available tools on your data collection system**

[illegible]

Select the best answer or completion to each of the questions or incomplete statements below.

[illegible] Animals capable of maintaining a constant body temperature are called:

- **[illegible] Poikilothermic**
- **[illegible] Endothermic**
- **[illegible] Cold-blooded**
- **[illegible] Ectothermic**

[illegible] How does your body produce heat?

- **[illegible] Metabolism**
- **[illegible] Cell division**
- **[illegible] Metamorphosis**
- **[illegible] Conduction**

[illegible] During perspiration how does the body lose heat?

- **[illegible] Conduction**
- **[illegible] Radiation**
- **[illegible] Convection**
- **[illegible] Metabolism**

[illegible] How is temperature regulated in the human body?

- **[illegible] Perspiration**
- **[illegible] Shivering**
- **[illegible] Fever**
- **[illegible] All of the above**

[illegible]

Fill in the blanks from the list of randomly ordered words in the Key Term Challenge Word Bank.

[illegible] Humans and other mammals are _____. That is, they maintain a relatively constant body temperature despite widely ranging environmental temperatures. Although the average human body temperature is _____ degrees Celsius (_____ degrees Fahrenheit), this temperature varies depending on individual differences, time of day, the stage of sleep, and

□□ Heat flows from _____ temperature to l_____ temperature. _____ is the transfer of heat between objects that are in direct contact with each other. For instance, if a person sits on the cold ground, heat moves from the body to the cold ground. _____ is the transfer of heat by the movement of air or liquid moving past the body. This explains why a

ctn td d t c tn

ctn vctn

	conduction	
	convection	
	evaporation	
	r ng	T

conduction

endother ic

ho eostasis