Warm-Up: 2/19/2010

On one half-sheet of paper, answer the following question in detail.

Peter LaRue, a famous lichenologist, is doing a WITRB study on lichens. His question is "what is the relationship between the temperature of the air and the number of species of lichens on a tree?". He has about 45 minutes to collect his data. Can he collect the data he needs to answer his question? Why or why not?
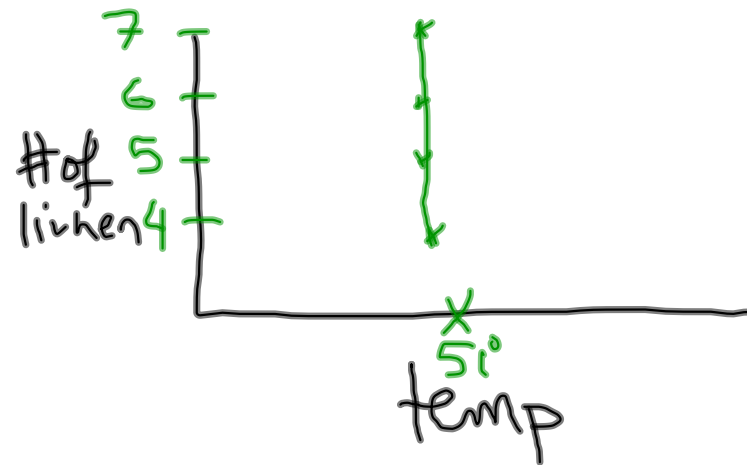
→ It's unlikely that he'll get more than one value for temperature.
→ Even if he could — he'll only get one value for # of lichens

	Average Yearly Temp	# of lichens
Alaska	41°F	27
California	72°F	17
Ecuador	86°F	6

# of lichens vs temp graph showing points at (41, 27), (72, 17), (86, 6) with a line through them
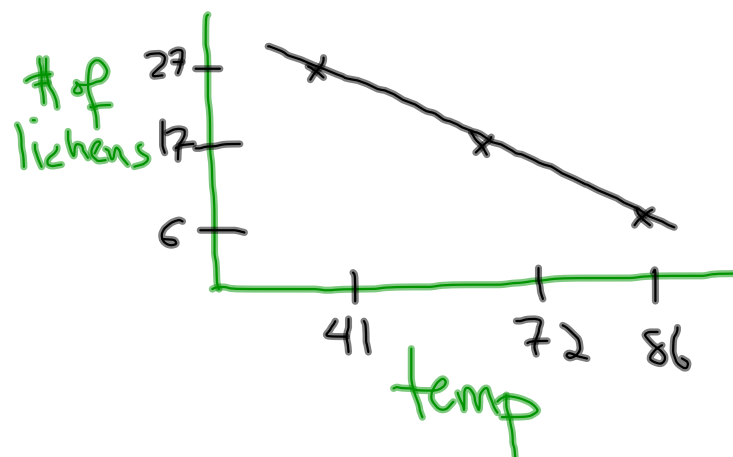
	temp	# of lichens
9:00	51°	7
	51°	6
9:45	51°	4
	51°	5
	⋮	

average: 51°   4.8

#of
lichen
7
6
5
4

X
51°

temp

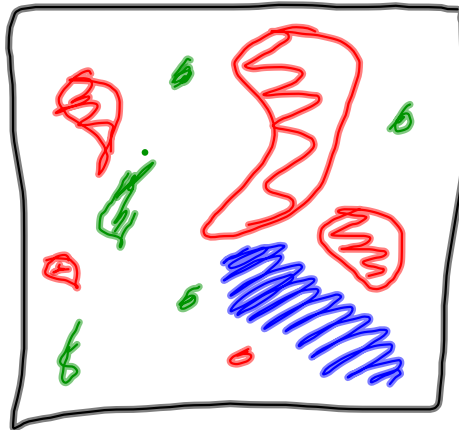| time	temp	# of lichens
9:00	51°F	4
9:00	51°F	5
9:00	51°F	6
9:45	63°F	4
9:45	63°F	5
9:45	63°F	6

# of lichens

6 — x   x

5 — x ———— x

4 — x   x

51   63

temp
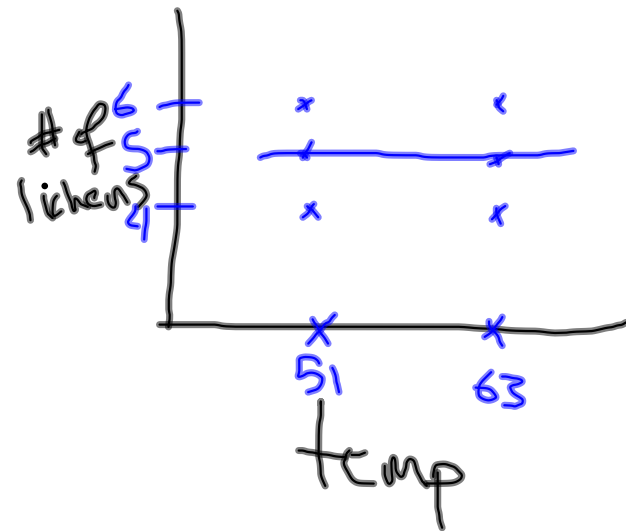
Pick factors & measuring words
that you think are likely to
have some variation within a 1 hour
time period in our location (CV)

Lichen measurements:

- # of species

- Numerical abundance of each species

- % area coverage (cm^2)

time

quick

long
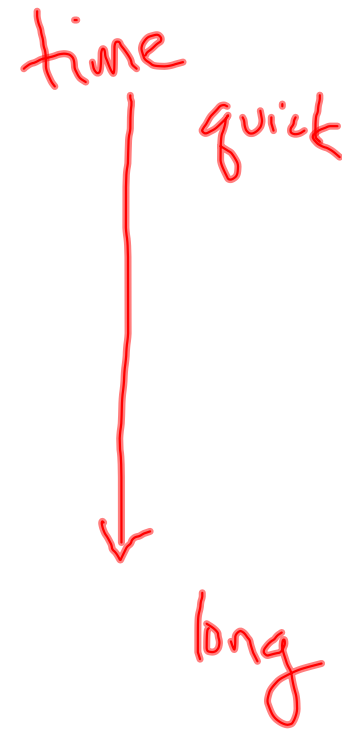
3 species

5 reds — $46 cm^2$

6 greens — $8 cm^2$

1 blue — $25 cm^2$

Lichen herbarium — due TODAY

Proposal for lichen project — due TODAY

Introduction and methods
for lichen project   — due TODAY