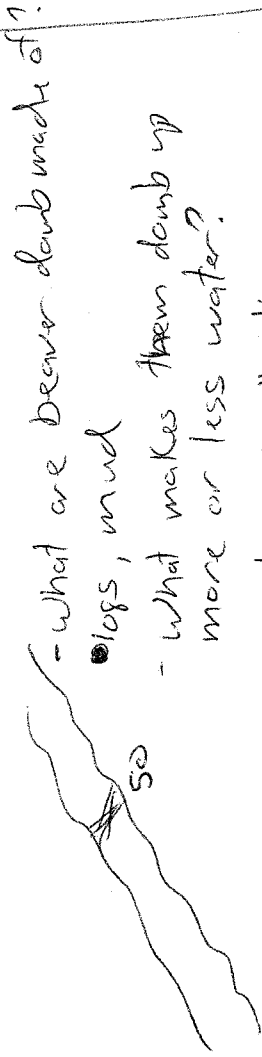
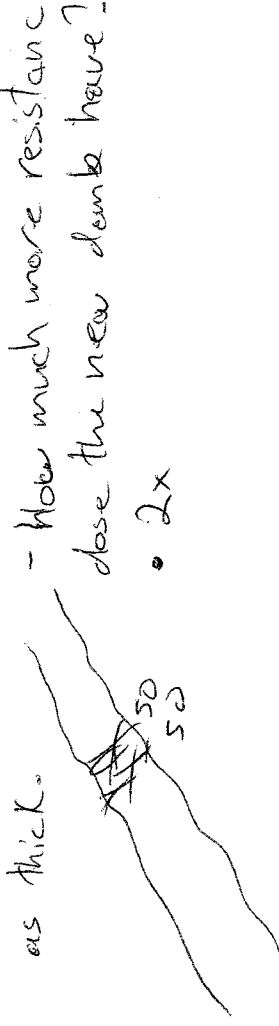


Resistors in Serp

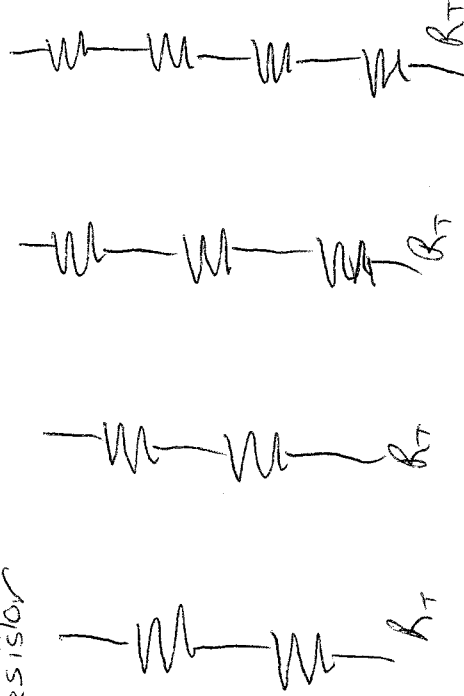
① Ask the students to pretend they are forest rangers. Draw a river and a beaver dam.



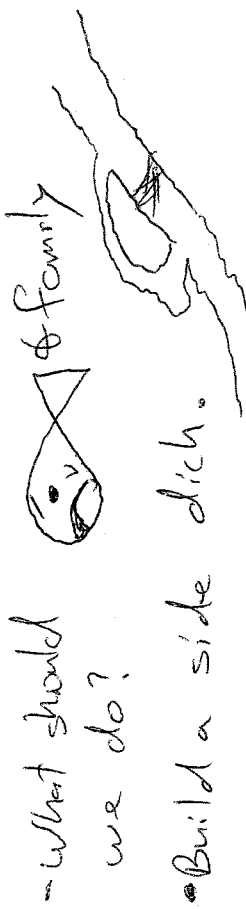
You as a ~~stranger~~ come back next year to the same dam but you find it twice as thick.



- what is a Beaver dam like in Electronics?
 • Resistor



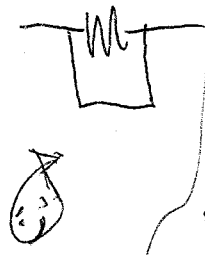
② How that the dam is so thick Nemo is upset and is complaining to you.



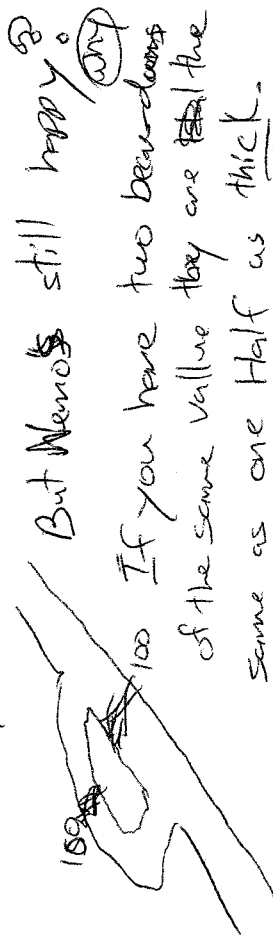
- How much resistance does Nemo have to swim up & down the stream?

• Zero

Nemo's happy



③ Next year you find...



Because there are twice as many ways for Nemo's family to swim through.

So these dams = 50

But you didn't tell your assistant, so he goes and makes a new ditch for Nemo.



Now New's really happy
 What do you think the resistance
 is Now?

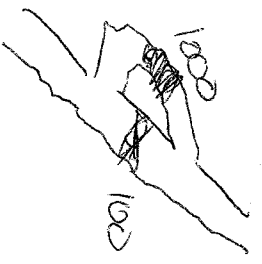
33



and Now?

25

So the more path way the less
 the total resistance will be.



Now what will New's resistance be?
 You Had 100 the you add more
 path ways. Will the total resistance
 be More or less?

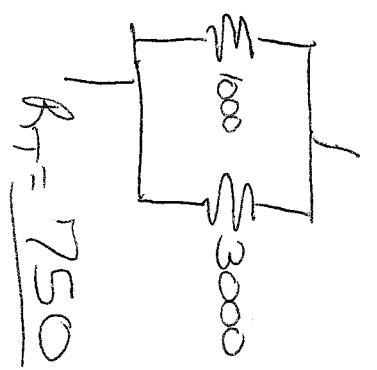
90

Here is the Formula:

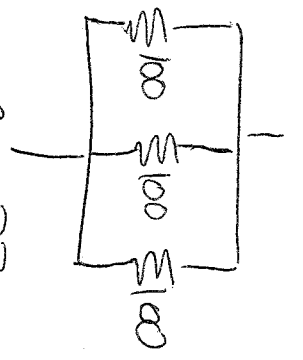
$$\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} \dots$$

~~Find~~ resistors.

Assignment: _____



$R_T = 750$



$R_T = 33$



twist 3 resistor together in Parallel
 calculate R_T
 Measure R_T

Make 4 sets
 Tape them to a paper
 Right your answers next to each set
 Hand it in