

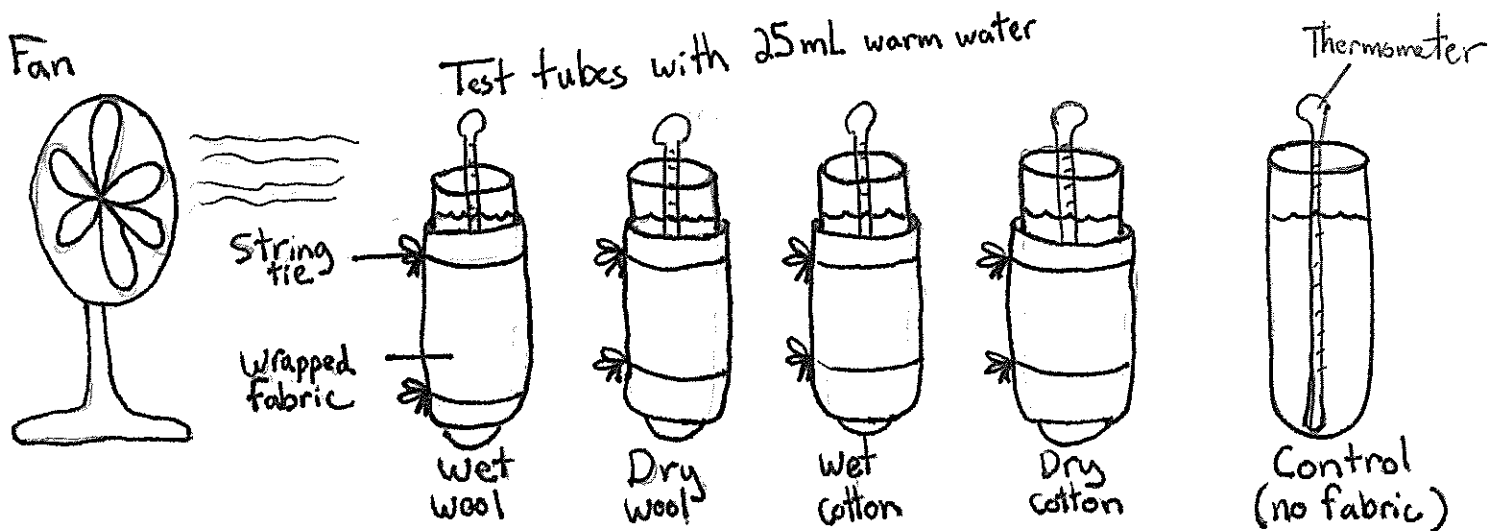
Experimental Design

Name: _____

Per: _____

Compare your experimental design to the one that follows:
(Examine the diagram then read the details.)

Experimental Set-Up



Procedures:

1. Wrap 1 test tube with wool and tie the wool around the tube in 2 places.
2. Wrap 1 test tube with cotton and tie in 2 places.
3. One person at the table take a thermometer and a beaker to the side table and fill the beaker about 3/4 full of 20 °C tap water.
4. Submerge 1 one piece of wool and 1 piece of cotton in the water for a few minutes until both fabrics have absorbed the water.
5. Squeeze all the water out of the two wet pieces of wool and cotton and then tie them to two test tubes of water as done previously.
6. A different person now take a thermometer and a beaker to the side table and fill the beaker half-full of warm water so the water is 50° C.

Data:

Dry wool

Time (minutes)	Temperature (°C)
0	
2	
4	
6	
8	
10	

Wet wool

Time (minutes)	Temperature (°C)
0	
2	
4	
6	
8	
10	

Dry cotton

Time (minutes)	Temperature (°C)
0	
2	
4	
6	
8	
10	

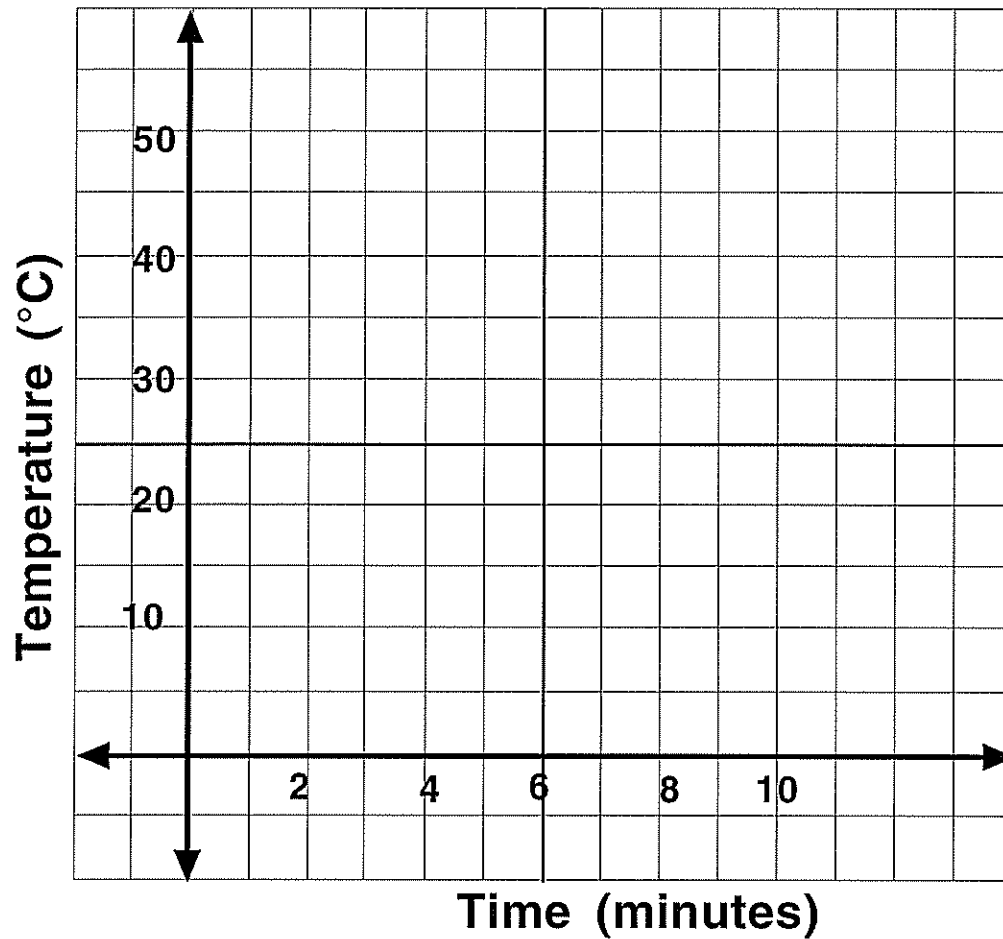
Wet cotton

Time (minutes)	Temperature (°C)
0	
2	
4	
6	
8	
10	

Control (no fabric)

Time (minutes)	Temperature (°C)
0	
2	
4	
6	
8	
10	

Temperature vs. Fabric Type



****Note:** Different color lines represent the different types of cloth.

Red = Wet wool

Blue = Dry wool

Orange = Wet cotton

Yellow = Dry cotton

Black = no fabric (control)