

# Discovery Lab

Write  
Procedure

1. Show

$$\frac{1}{C_{\text{series}}} = \frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3} + \dots$$

etc.

Resistors

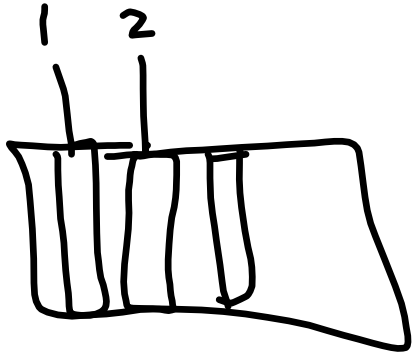
② Experimentally determine time constant

$\tau = RC$   
Growth  
Decay



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③ Find value of Inductor  
(How many Henry)



$$4/7 \times 10^2 \pm 5\%$$

Black 0  
 Brown 1  
 R 2  
 Y 3  
 G 4  
 B 5  
 V 6  
 Gray 7  
 White 8  
 9

Gold 5%  
 Silver 10%  
 No Color 20%