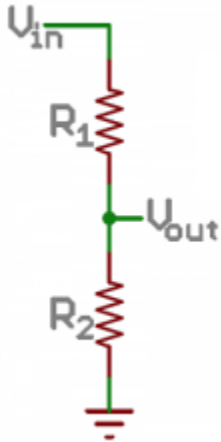# Voltage Dividers

Overview

A **voltage divider** is a simple circuit which turns a large **voltage** into a smaller one. Using just two series resistors and an input **voltage**, we can create an output **voltage** that is a fraction of the input. **Voltage dividers** are one of the most fundamental circuits in electronics.
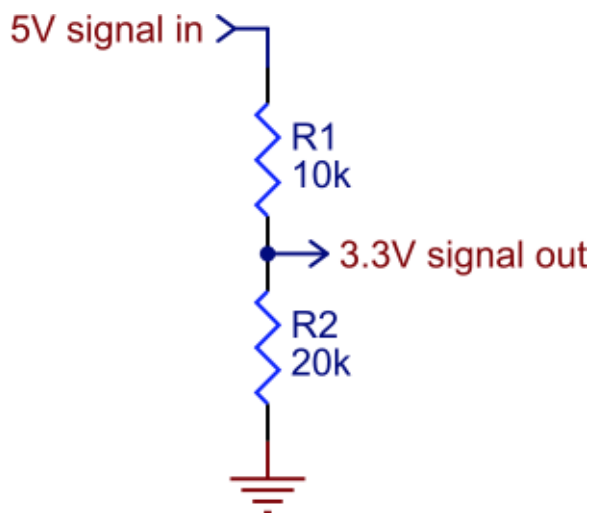
Don't use a voltage divider as a power supply! Use for level shifting.

Calculating Vout

$$V_{out} = V_{in} \cdot \frac{R_2}{R_1 + R_2}$$

Samples

References

Reference	URL
Spark Fun	https://learn.sparkfun.com/tutorials/voltage-dividers