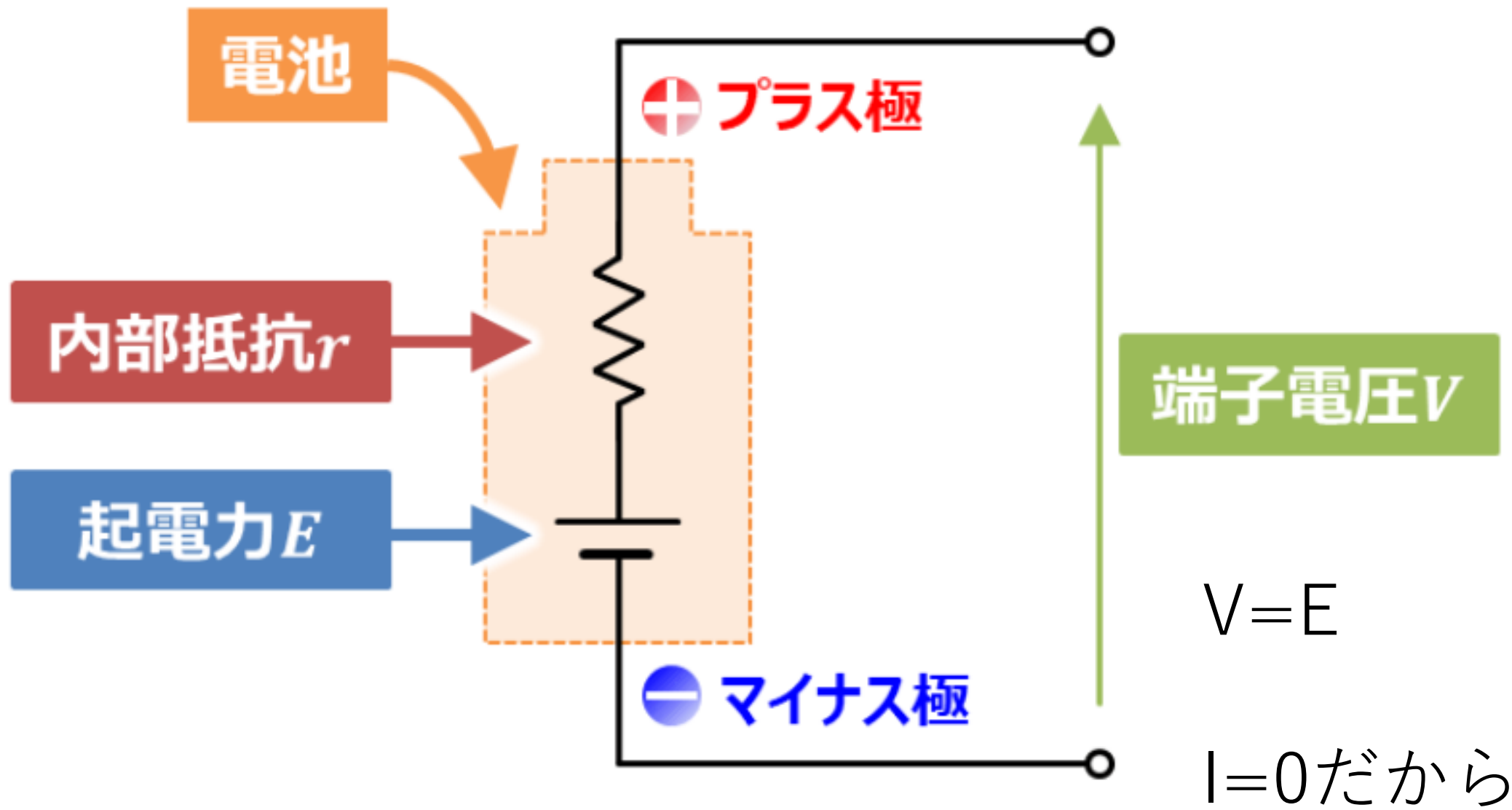
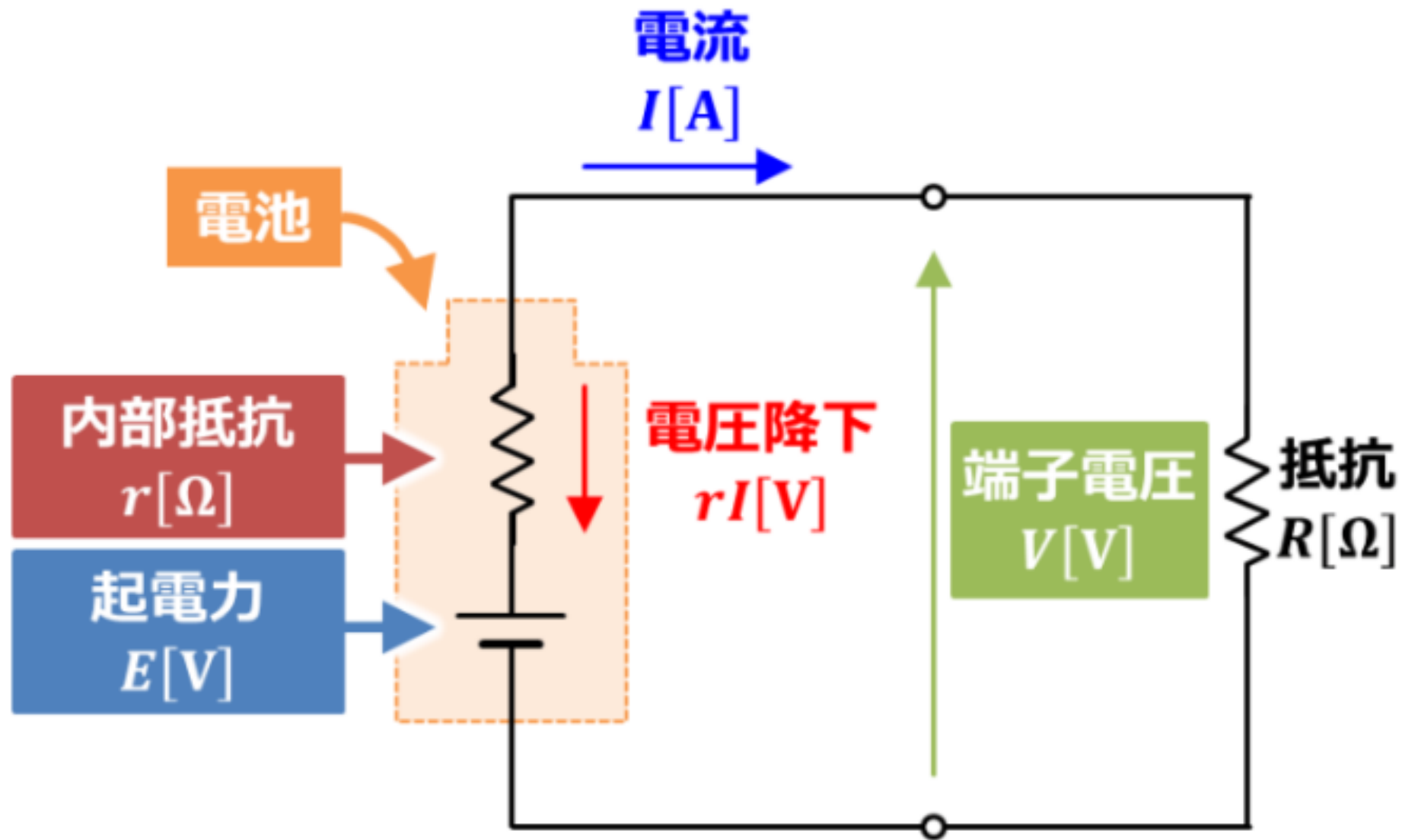


電池の内部抵抗とは

電池の内部抵抗

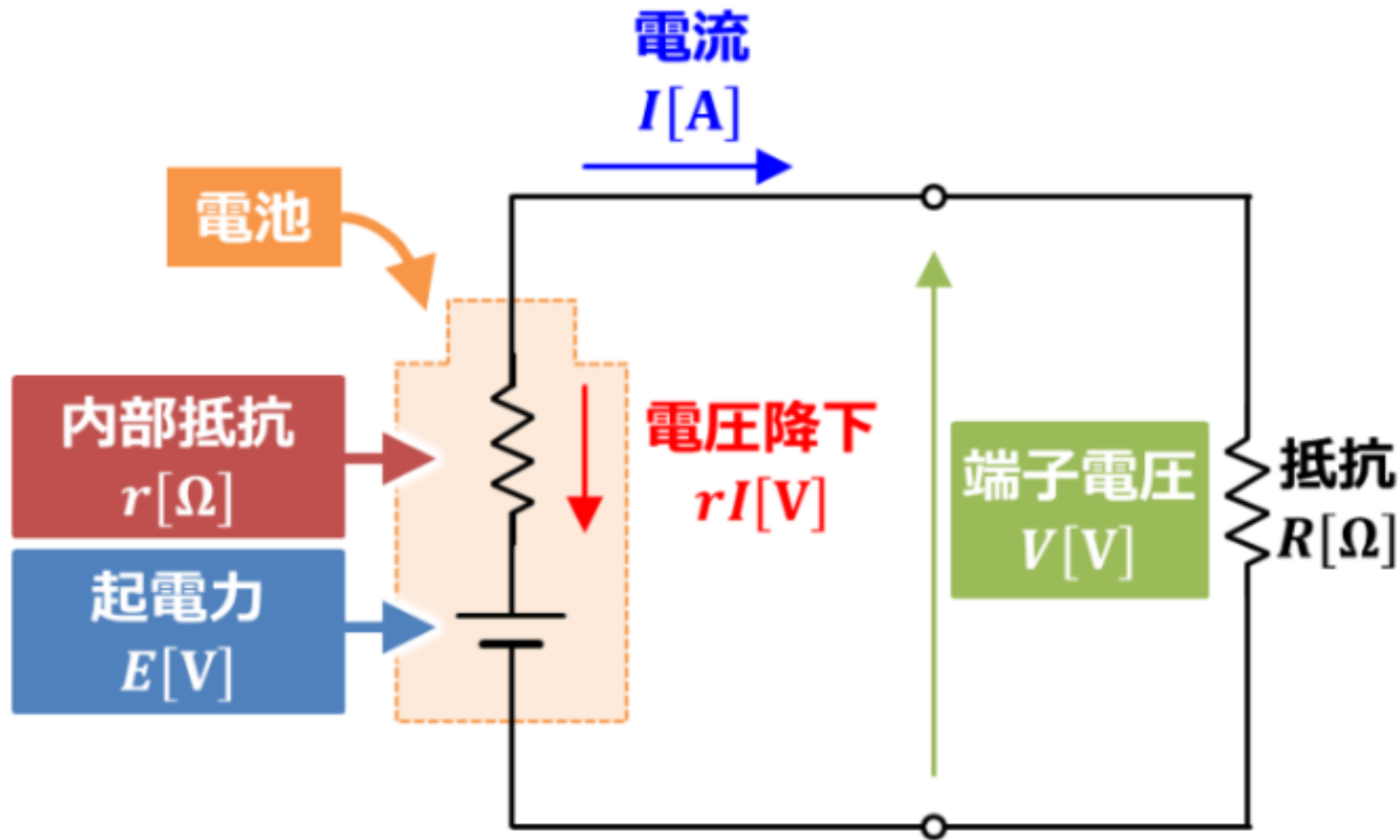
電池の内部にある非常に小さな抵抗のこと





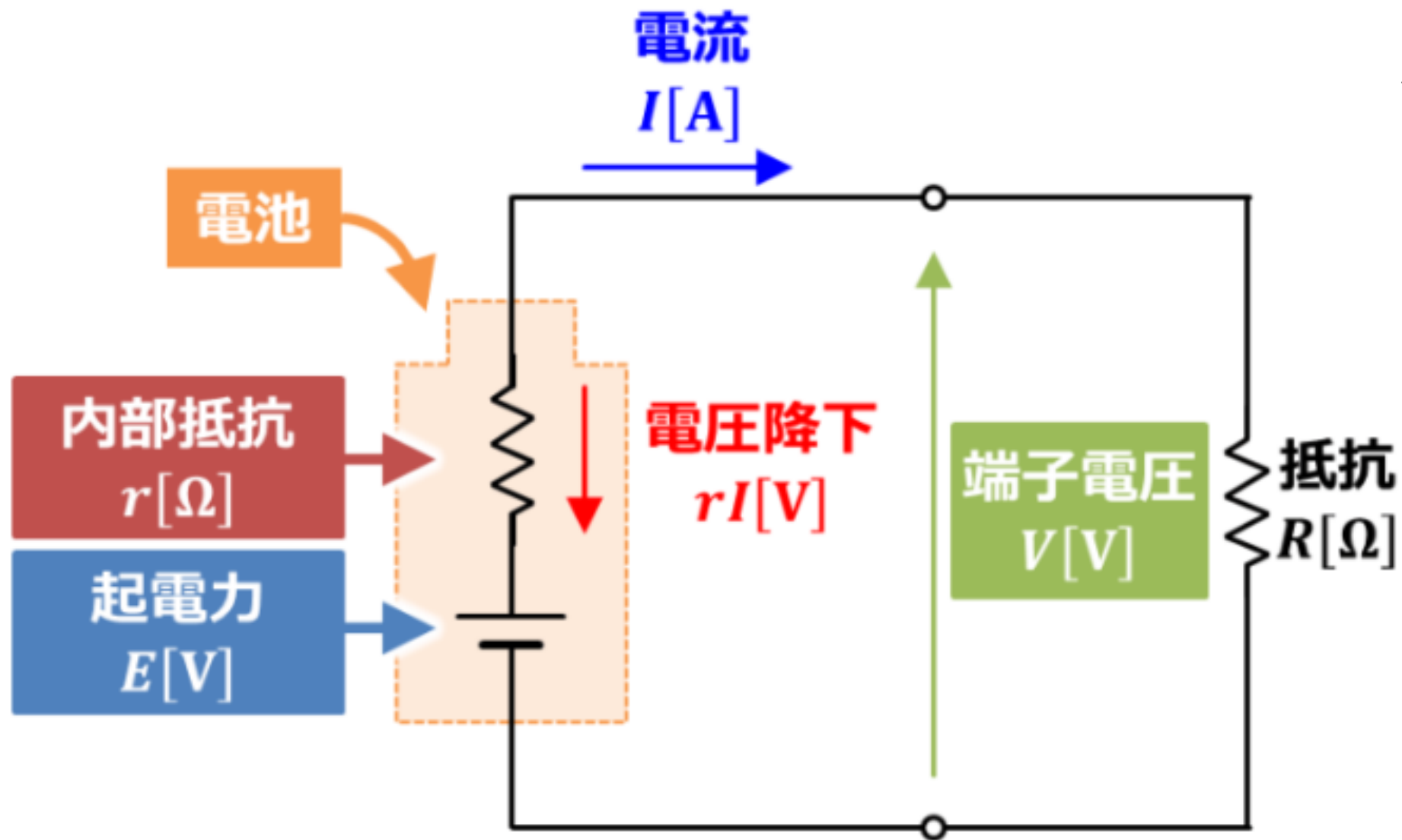
$$V = 1.0[V]$$
$$R = 10[\Omega]$$
$$I = ?$$

$$E = 1.5[V]$$
$$r = ?[\Omega]$$



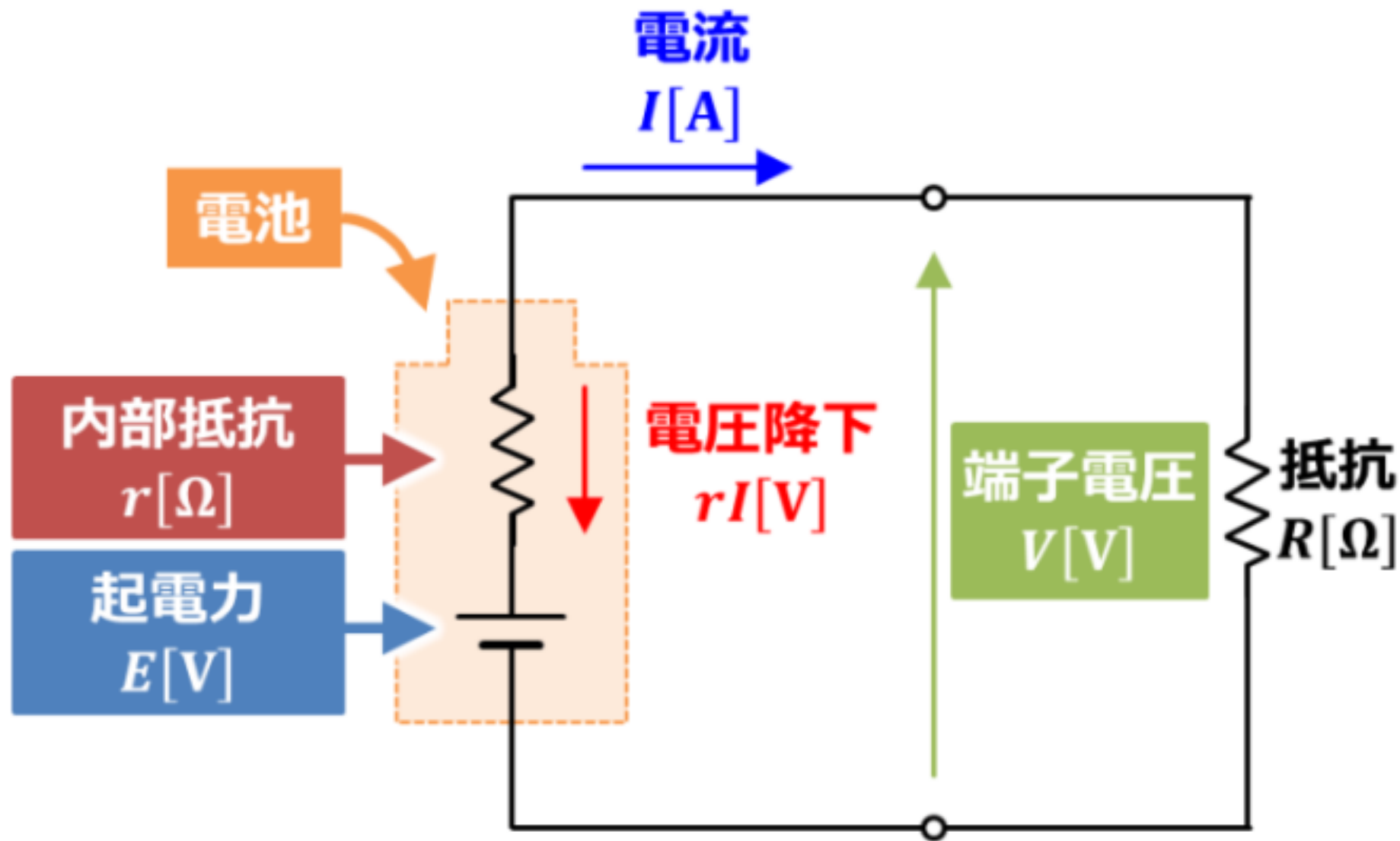
$$\begin{aligned} V &= 1.0[V] \\ R &= 10[\Omega] \\ I &= V/R \\ &= 1/10 = 0.1 \end{aligned}$$

$$\begin{aligned} E &= 1.5[V] \\ r &= V/I \\ &= 0.5/0.1 \\ &= 5[\Omega] \end{aligned}$$



$$V = 2.0[V]$$
$$R = 10[\Omega]$$
$$I = ?$$

$$E = 3.0[V]$$
$$r = ?[\Omega]$$



$$V=2.0[V]$$

$$R=10[\Omega]$$

$$I=V/R$$

$$=2/10$$

$$=0.2[A]$$

$$E=3.0[V]$$

$$r=V/I$$

$$=1/0.2$$

$$=5[\Omega]$$