

Electricity and magnetism

IGCSE Physics · Vocabulary

English	中文	Pinyin
 magnet	磁体	cí tǐ
 magnetic pole	磁极	cí jí
 north pole	北极	běi jí
 south pole	南极	nán jí
 repel	排斥	pái chì
 attract	吸引	xī yǐn
 magnetic material	磁性材料	cí xìng cái liào
 induced magnetism	感应磁性	gǎn yìng cí xìng
 soft iron	软铁	ruǎn tiě
 magnetise	磁化	cí huà
 temporary magnet	临时磁体	lín shí cí tǐ
 steel	钢	gāng
 permanent magnet	永磁体	yǒng cí tǐ
 unmagnetised	未磁化	wèi cí huà
 magnetic field	磁场	cí chǎng
 region	区域	qū yù
 magnetic field lines	磁场线	cí chǎng xiàn
 iron filings	铁屑	tiě xiè
 compass	指南针	zhǐ nán zhēn
 electromagnet	电磁铁	diàn cí tiě
 electric charge	电荷	diàn hè
 positive charge	正电荷	zhèng diàn hè
 negative charge	负电荷	fù diàn hè
 electron	电子	diàn zi

English	中文	Pinyin
 charging by friction	摩擦起电	mó cā qǐ diàn
 conductor	导体	dǎo tǐ
 insulator	绝缘体	jué yuán tǐ
 coulomb	库仑	kù lún
 electric field	电场	diàn chǎng
• point charge	点电荷	diǎn diàn hè
$\pm$ ion	离子	lí zi
 electric current	电流	diàn liú
 ampere	安培	ān péi
 ammeter	电流表	diàn liú biǎo
 free electrons	自由电子	zì yóu diàn zi
$\rightarrow$ conventional current	常规电流	cháng guī diàn liú
$-$ direct current	直流电	zhí liú diàn
 alternating current	交流电	jiāo liú diàn
 mains supply	市电	shì diàn
 energy	能量	néng liàng
 volt	伏特	fú tè
 electromotive force	电动势	diàn dòng shì
 circuit	电路	diàn lù
 potential difference	电势差	diàn shì chà
 voltmeter	电压表	diàn yā biǎo
ϕ resistance	电阻	diàn zǔ
Ω ohm	欧姆	ōu mǔ
 directly proportional	成正比	chéng zhèng bǐ
 inversely proportional	成反比	chéng fǎn bǐ
 cross-sectional area	横截面积	héng jié miàn jī
 resistor	电阻器	diàn zǔ qì

English	中文	Pinyin
 filament lamp	灯丝灯泡	dēng sī dēng pào
 diode	二极管	èr jí guǎn
 electrical power	电功率	diàn gōng lǜ
 watt	瓦特	wǎ tè
 electrical energy	电能	diàn néng
 joule	焦耳	jiāo ěr
 kilowatt-hour	千瓦时	qiān wǎ shí
 appliance	电器	diàn qì
 heater	加热器	jiā rè qì
 cell	电池	diàn chí
 battery	电池组	diàn chí zǔ
 power supply	电源	diàn yuán
 switch	开关	kāi guān
 variable resistor	可变电阻器	kě biàn diàn zǔ qì
 fuse	保险丝	bǎo xiǎn sī
 thermistor	热敏电阻	rè mǐn diàn zǔ
 light-dependent resistor	光敏电阻	guāng mǐn diàn zǔ
 light-emitting diode	发光二极管	fā guāng èr jí guǎn
 relay	继电器	jì diàn qì
 motor	电动机	diàn dòng jī
 bell	电铃	diàn líng
 transformer	变压器	biàn yā qì
 series	串联	chuàn lián
 parallel	并联	bìng lián
 total resistance	总电阻	zǒng diàn zǔ
 junction	节点	jié diǎn
 potential divider	分压器	fēn yā qì

English	中文	Pinyin
⚠ hazard	危险	wēi xiǎn
🛡 insulation	绝缘层	jué yuán céng
🔥 overheating	过热	guò rè
💧 damp	潮湿	cháo shī
🔄 overloading	过载	guò zài
🔌 socket	插座	chā zuò
⚡ live wire	火线	huǒ xiàn
— neutral wire	零线	líng xiàn
🌐 earth wire	地线	dì xiàn
🔌 fuse rating	额定值	é dìng zhí
🔌 trip switch	跳闸开关	tiào zhá kāi guān
📦 casing	外壳	wài ké
🌐 earthed	接地	jiē dì
🛡 double-insulated	双重绝缘	shuāng chóng jué yuán
🌀 solenoid	螺线管	luó xiàn guǎn
⚡ coil	线圈	xiàn quān
🔊 loudspeaker	扬声器	yáng shēng qì
🌀 electromagnetic induction	电磁感应	diàn cí gǎn yìng
🌀 a.c. generator	交流发电机	jiāo liú fā diàn jī
🔄 slip rings	滑环	huá huán
🔌 brushes	电刷	diàn shuā
↪ deflect	偏转	piān zhuǎn
🔄 turning effect	转动效应	zhuǎn dòng xiào yìng
🔄 d.c. motor	直流电动机	zhí liú diàn dòng jī
🔄 split-ring commutator	换向器	huàn xiàng qì
🔵 soft-iron core	软铁芯	ruǎn tiě xīn
⚡ primary coil	原线圈	yuán xiàn quān

English	中文	Pinyin
☼ secondary coil	副线圈	fù xiàn quān
⤴ step-up	升压	shēng yā
⤵ step-down	降压	jiàng yā
⚡ high-voltage transmission	高压输电	gāo yā shū diàn