

Morning Reading 晨读

Grade 11 · AS · Week 17

Read each word aloud, then copy the English word three times. 朗读每个单词，然后把英语单词抄写三遍。

Reading 阅读

Read the passage aloud twice. 把短文朗读两遍。

Why does China build high-speed trains while another country grows coffee? Because countries, like people, gain when they **specialise**. A country has an **absolute advantage** when it can make something using fewer resources than others. But the deeper idea is **comparative advantage**: even a country that is worse at everything should make what it gives up least to produce, and trade for the rest. Trade makes both sides better off, which is why economists frown when **protectionism** returns: a **tariff** taxes imports, a **quota** limits them, and consumers quietly pay the bill. Defenders reply that a young **infant industry** may need shelter before it can compete.

Programmers use the same principle: divide the work. A **function** is a small, named piece of a program that does one job well. You call it with **arguments**, it works with its own **local variables**, and it hands back a result. Big programs are built from small functions, each written once and reused everywhere, the code version of specialisation.

Talk about it 说一说:

1. Your friend is faster than you at both maths and English homework. Can trading tasks still help you both?
2. Name three things a function and a factory worker have in common.

Physics

Topics 1–11 · Physical quantities and units, Kinematics, Dynamics, Forces, density and pressure, Waves, Superposition, Electricity, Particle physics

 intercept 截距			
/ˌɪntə'sept/			
 division 分度			
/dɪ'vɪʒn/			
 reaction time 反应时间			
/rɪ'ækʃn taɪm/			
 half the range 极差的一半			
/hɑːf ðə reɪndʒ/			
 percentage difference 百分比差异			
/pə'sentɪdʒ 'dɪfrəns/			
 same number of significant figures 有效数字			
/seɪm 'nʌmbə ɒv sɪɡ'nɪfɪkənt 'fɪɡəz/			
 error bar 误差棒			
/'erə bɑː/			
 line of best fit 最佳拟合直线			
/laɪn ɒv best fɪt/			
 worst acceptable line 最差可接受直线			
/wɜːst ək'septəbl laɪn/			
 scale drawing 按比例作图			
/skeɪl 'drɔːɪŋ/			
 acceleration of free fall 自由落体加速度			
/ək'selə'reɪʃn ɒv frɪː fɔːl/			
 light gates 光电门			
/laɪt geɪts/			
 viscosity 黏度			
/vɪ'skʊsɪti/			

⟳	plumb line 铅垂线			
	/plʌm laɪn/			
⟳	propagates 传播			
	/ˈprɒpəgeɪts/			
⟳	electromagnetic waves 电磁波			
	/ɪˌlektɹəmægˈnetɪk weɪvz/			
≈	waves 波			
	/weɪvz/			
≈	progressive waves 行波			
	/prəˈɡresɪv weɪvz/			
⦿	holes 空穴			
	/həʊlz/			
⦿	alpha particles α 粒子			
	/ˈælfə ˈpɑːtɪklz/			

Chemistry

Topics 14–18 · Hydrocarbons, Halogen compounds, Hydroxy compounds, Carbonyl compounds, Carboxylic acids and derivatives

⬢	amine 胺			
	/ˈæmaɪn/			
⦿	silver nitrate 硝酸银			
	/ˈsɪlvə ˈnaɪtreɪt/			
⬢	transition state 过渡态			
	/trænˈsɪʃn steɪt/			
↪	aldehyde 醛			
	/ˈældɪhaɪd/			
≡	ketone 酮			
	/ˈkeɪtəʊn/			
⬢	carboxylic acid 羧酸			
	/kɑːbɒkˈsɪlɪk ˈæsɪd/			
⊗	ester 酯			
	/ˈestə/			

⦿	distillation 蒸馏			
	/dɪstrɪˈleɪʃn/			
↺	reflux 回流			
	/ˈrɪːflʌks/			
⬢	tri-iodomethane 三碘甲烷			
	/traɪ ˈaɪədaʊmθeɪn/			
⬢	acidity 酸性			
	/æˈsɪdɪti/			
⬢	carbonyl compound 羰基化合物			
	/ˈkɑːbənaɪl ˈkɒmpaʊnd/			
⬢	carbonyl 羰基			
	/ˈkɑːbənaɪl/			
⦿	hydrogen cyanide 氰化氢			
	/ˈhaɪdrədʒn ˈsaɪənaɪd/			
⬢	hydroxynitrile 羟基腈			
	/haɪˈdrɒksɪnaɪtrɪl/			
⦿	Fehling's reagent 斐林试剂			
	/ˈfeɪlɪŋz rɪˈeɪdʒənt/			
⦿	Tollens' reagent 托伦试剂			
	/ˈtəʊlənz rɪˈeɪdʒənt/			
⊗	esterification 酯化			
	/ˌestəˌrɪfɪˈkeɪʃn/			

Biology

Topics 9–10 · Gas exchange, Infectious diseases

⦿	microbe 微生物			
	/ˈmaɪkraʊb/			
↪	smooth muscle 平滑肌			
	/smuːð ˈmʌsəl/			
↪	elastic fibre 弹性纤维			
	/ɪˈlæstɪk ˈfaɪbə/			

	squamous epithelium 扁平上皮			
	/ˈskwɒməs ˌepɪˈθi:liəm/			
	infectious disease 传染病			
	/ɪnˈfekʃəs diˈzi:z/			
	pathogen 病原体			
	/ˈpæθədʒn/			
	transmit 传播			
	/trænˈsmɪt/			
	cholera 霍乱			
	/ˈkɒlərə/			
	contaminated 污染			
	/kənˈtæmɪneɪtɪd/			
	faeces 粪便			
	/ˈfi:si:z/			
	malaria 疟疾			
	/məˈleəriə/			
	protocist 原生生物			
	/ˈprəʊtəʊkɪst/			
	mosquito 蚊子			
	/məˈski:təʊ/			
	vector 媒介			
	/ˈvektə/			
	tuberculosis 结核病			
	/ˌtju:ˈbækjəˈləʊsɪs/			
	droplet 飞沫			
	/ˈdrɒplɪt/			
	AIDS 艾滋病			
	/eɪdz/			
	immune system 免疫系统			
	/ɪˈmju:n ˈsɪstəm/			
	vaccine 疫苗			
	/vækˈsi:n/			
	insecticide 杀虫剂			
	/ɪnˈsektɪsaɪd/			

	antibiotic 抗生素			
	/ˌæntɪbaɪˈɒtɪk/			
	penicillin 青霉素			
	/ˌpenɪˈsɪlɪn/			

Mathematics

Topic 5 · Probability & Statistics 1

	conditional probability 条件概率			
	/kənˈdɪʃənəl ˌprɒbəˈbɪlɪti/			
	discrete random variable 离散型随机变量			
	/dɪˈskrɪt ˈrændəm ˈveəriəbl/			
	probability distribution table 概率分布表			
	/ˌprɒbəˈbɪlɪti ˌdɪstrɪˈbjʊʃn ˈteɪbl/			
	expectation 期望			
	/ekspekˈteɪʃn/			
	binomial distribution 二项分布			
	/baɪˈnəʊmɪəl ˌdɪstrɪˈbjʊʃn/			
	geometric distribution 几何分布			
	/dʒi:əˈmetrɪk ˌdɪstrɪˈbjʊʃn/			
	normal distribution 正态分布			
	/ˈnɔ:ml ˌdɪstrɪˈbjʊʃn/			
	continuous random variable 连续型随机变量			
	/kənˈtɪnju:əs ˈrændəm ˈveəriəbl/			
	approximation 近似			
	/əˌprɒksɪˈmeɪʃn/			

Further Mathematics

Topic 4 · Further Probability & Statistics

✓ goodness of fit 拟合优度			
<i>/ˈɡɒdnəs əv fɪt/</i>			
↯ independence 独立性			
<i>/ˌɪndɪˈpendəns/</i>			
▦ contingency table 列联表			
<i>/kənˈtɪndʒənsi ˈteɪbl/</i>			
↷ non-parametric test 非参数检验			
<i>/nɒn ˌpærəˈmetrɪk test/</i>			

Computer Science

Topics 1–11 · Information representation, Communication, Hardware, Processor Fundamentals, System Software, Programming

↶ return value 返回值			
<i>/rɪˈtɜːn ˈvæljuː/</i>			
▦ format 格式			
<i>/ˈfɔːmət/</i>			
▦ register width 寄存器宽度			
<i>/ˈredʒɪstə wɪθ/</i>			
» arithmetic shift 算术移位			
<i>/ˌæriθˈmetɪk ʃɪft/</i>			
≡ frame 帧			
<i>/freɪm/</i>			
↷ frame rate 帧率			
<i>/freɪm reɪt/</i>			
☎ Public Switched Telephone Network 公共交换电话网			
<i>/ˈpʌblɪk swɪtʃt ˈtelɪfəʊn ˈnetwɜːk/</i>			
☁ public cloud 公有云			
<i>/ˈpʌblɪk klaʊd/</i>			

☁ private cloud 私有云			
<i>/ˈpraɪvət klaʊd/</i>			
↻ repeater 中继器			
<i>/rɪˈpiːtə/</i>			
⚡ bit rate 比特率			
<i>/bɪt reɪt/</i>			
📶 dedicated line 专线			
<i>/ˈdedɪkeɪtɪd laɪn/</i>			
🐝 cell phone network 蜂窝网络			
<i>/sel faʊn ˈnetwɜːk/</i>			
📷 fuser 定影器			
<i>/ˈfjuːsə/</i>			
🔌 digital-to-analogue converter 数模转换器			
<i>/ˈdɪdʒɪtl tə ˈænəlɒɡ kənˈvɜːtə/</i>			
🔧 actuator arms 磁头臂			
<i>/ˈæktʃuːeɪtə ɑːmz/</i>			
🔍 floating-gate transistor 浮栅晶体管			
<i>/ˈfləʊtɪŋ geɪt trænˈzɪstə/</i>			
🕳 pits 凹坑			
<i>/pɪts/</i>			
⚙ preset value 预设值			
<i>/ˈpriːset ˈvæljuː/</i>			
⊗ operand 操作数			
<i>/ˈɒpərænd/</i>			
🖨 number of cores 核心			
<i>/ˈnʌmbə əv kɔːz/</i>			
💾 amount of RAM 随机存取存储器			
<i>/əˈmaʊnt əv ræm/</i>			
↔ register transfer notation 寄存器传送记法			
<i>/ˈredʒɪstə ˈtrænsfɜː nəʊˈteɪʃn/</i>			

 interrupt register 中断寄存器			
<i>/ˈɪntəʁəpt ˈredʒɪstə/</i>			
<> opcode 操作码			
<i>/'ɒpkəʊd/</i>			
 memory protection 内存保护			
<i>/'meməri prə'tekʃn/</i>			
 scheduling 调度			
<i>/'fedʒu:lɪŋ/</i>			
 directory 目录			
<i>/daɪ'rektəri/</i>			

Economics

Topic 6 · International economic issues

 specialise 专业化			
<i>/'speʃəlaɪz/</i>			
 absolute advantage 绝对优势			
<i>/'æbsəlu:t əd'væntɪdʒ/</i>			
 comparative advantage 比较优势			
<i>/kəm'pærətɪv əd'væntɪdʒ/</i>			
 terms of trade 贸易条件			
<i>/'tɜ:mz ɒv treɪd/</i>			
 protectionism 贸易保护主义			
<i>/'prə'tekʃənɪzəm/</i>			
 tariff 关税			
<i>/'tærɪf/</i>			
 quota 配额			
<i>/'kwəʊtə/</i>			
 embargo 禁运			
<i>/em'bɑ:gəʊ/</i>			

 administrative barriers 行政壁垒			
<i>/əd'mɪnɪstrətɪv 'bæriəz/</i>			
 infant industry 幼稚产业			
<i>/'ɪnfənt 'ɪndəstri/</i>			
 dumping 倾销			
<i>/'dʌmpɪŋ/</i>			
 retaliation 报复			
<i>/'rɪ,tæli'eɪʃn/</i>			
 stakeholder 利益相关者			
<i>/'steɪkhəʊldə/</i>			
 current account 经常账户			
<i>/'kʌrənt ə'kaʊnt/</i>			