
Morning Reading 晨读

Grade 10 · Week 14

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。

A recipe is a plan: first wash the rice, then add water, then cook. Computer scientists call such a plan an **algorithm**: a list of steps that turns **input** into **output**. You can write it as **pseudocode**, simple English-like lines, or draw it as a **flowchart** with boxes and arrows. Good programs also check their input. **Validation** stops silly answers: a **range check** rejects an age of 200, and a **presence check** makes sure the box is not empty.

Deep inside every atom is a tiny **nucleus** made of **protons** and **neutrons**. Atoms of the same element always have the same number of protons, but the number of neutrons can differ. Such atoms are called **isotopes**.

Not all joblessness is the same. **Frictional unemployment** is short: a worker is between jobs. **Structural unemployment** is deeper: the industry itself has changed, and old skills no longer fit. When the whole economy slows down, **cyclical unemployment** rises everywhere.

Talk about it 说一说:

1. Write a four-step algorithm for making your breakfast.
2. A robot factory replaces 100 workers. What kind of unemployment is this? What could help the workers?

Physics

Topics 4-5 · Electricity and magnetism, Nuclear physics

⊙ **slip rings** 滑环

🔌 **brushes** 电刷

↪ **deflect** 偏转

 turning effect 转动效应			
 split-ring commutator 换向器			
 step-up 升压			
 step-down 降压			
 high-voltage transmission 高压输电			
 atom 原子			
 orbit 轨道			
 charge 电荷			
 alpha particle α 粒子			
 beta particle β 粒子			
 gold foil 金箔			
 scattering 散射			
 nucleon 核子			
 nucleus 原子核			
 nucleon number 核子数			
 proton number 质子数			
 proton 质子			
 relative 相对			
 neutron 中子			

Chemistry

Topic 10 · Chemistry of the environment

☠ toxic 有毒

⇌ deoxygenation 缺氧

☒ sedimentation 沉降

🚰 filtration 过滤

💧 chlorination 氯消毒

🌱 fertilisers 肥料

☁ oxides of nitrogen 氮氧化物

🔥 phosphorus 磷

🌡 greenhouse gases 温室气体

🔥 complete combustion 完全燃烧

🔥 incomplete combustion 不完全燃烧

☼ particulates 颗粒物

🏠 fossil fuels 化石燃料

🌡 global warming 全球变暖

☼ climate change 气候变化

⇌ respiratory 呼吸

☁ acid rain 酸雨

☁ photochemical smog 光化学烟雾

🌱 renewable energy 可再生能源

🏠 catalytic converters 催化
转化器

🏠 flue gas desulfurisation
烟气脱硫

🌿 chlorophyll 叶绿素

Biology

Topic 16 · Reproduction

⊙ diploid 二倍体

🌿 sepals 萼片

🌸 petals 花瓣

🌸 stamens 雄蕊

🌿 filament 花丝

⊙ anther 花药

🌸 pollen grains 花粉粒

🌸 carpel 雌蕊

⊙ stigma 柱头

🌿 style 花柱

○ ovary 子房

○ ovules 胚珠

↔ self-pollination 自花传粉

↔ cross-pollination 异花传
粉

🐝 pollinators 传粉者

🌿 pollen tube 花粉管

🌿 seed 种子

🌱	germinate	萌发			
○	scrotum	阴囊			
🌀	sperm ducts	输精管			
⊙	prostate gland	前列腺			
↑	penis	阴茎			
🌀	oviducts	输卵管			
😊	uterus	子宫			
⊙	cervix	子宫颈			
↓	vagina	阴道			
🌀	flagellum	鞭毛			
△	acrosome	顶体			
⊙	jelly coat	胶质层			
⊙	embryo	胚胎			
⚓	implants	植入			
😊	fetus	胎儿			
🌀	umbilical cord	脐带			
○	amniotic sac	羊膜囊			
💧	amniotic fluid	羊水			
🧠	toxins	毒素			
↗	puberty	青春期			

Mathematics

Topics 5–6 · Mensuration, Trigonometry

 **minor sector** 小扇形

 **major sector** 大扇形

 **arc length** 弧长

 **surface area** 表面积

 **cross-section** 横截面

 **curved surface area** 侧面积

 **slant height** 斜高

 **compound shape** 组合图形

 **right-angled triangle** 直角三角形

 **hypotenuse** 斜边

 **opposite** 对边

 **adjacent** 邻边

 **sine** 正弦

 **cosine** 余弦

 **tangent ratio** 正切

 **angle of elevation** 仰角

Computer Science

Topics 7–8 · Programming

 **format check** 格式检查

 **verification** 核实

👁 visual check 目视检查			
📄 double entry 双重输入			
📊 trace table 追踪表			
+ normal 正常数据			
⚠ abnormal 异常数据			
🔥 extreme 极端数据			
[] boundary 边界数据			
🔍 linear search 线性查找			
↕ bubble sort 冒泡排序			
Σ totalling 求和			
# counting 计数			
^ maximum 最大值			
✓ minimum 最小值			
— average 平均值			
(x) variable 变量			
🔒 constant 常量			
📢 declare 声明			
📦 data type 数据类型			

Economics

Topics 4–5 · Government and the macroeconomy, Economic development

📋 labour force survey 劳动力调查			
👥 labour force 劳动力			
↔ frictional unemployment 摩擦性失业			

 structural unemployment 结构性失业			
 cyclical unemployment 周期性失业			
 deflation 通货紧缩			
 Consumer Prices Index 消费者价格指数			
 weight 权重			
 demand-pull 需求拉动			
 cost-push 成本推动			
 purchasing power 购买力			
 indicator 指标			
 per head 人均			
 Human Development Index 人类发展指数			

English

Topics 9–10 · Listening skills, Speaking skills

 distractors 干扰项			
 conversation 对话			
 respond 回应			
 turns 轮流			
 develop 展开			
 pronunciation 发音			