
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 1–5 · Motion, forces and energy, Nuclear physics

Σ nucleon number 核子数	_____	_____	_____
# proton number 质子数	_____	_____	_____
+ proton 质子	_____	_____	_____

 relative 相对			
 neutron 中子			
 nuclide 核素			
 isotope 同位素			
 nuclear fission 核裂变			
 nuclear fusion 核聚变			
 hydrogen 氢			
 helium 氦			
 unstable 不稳定			
 radiation 辐射			
 background radiation 背景辐射			
 gamma radiation γ 射线			
 radioactive 放射性			
 decay 衰变			
 spontaneous 自发			
 random 随机			
 radon 氡			

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			
$\wedge$ maximum 最大值			
$\vee$ minimum 最小值			
— average 平均值			
(x) variable 变量			
$\square$ constant 常量			
∇ declare 声明			
$\diamond$ data type 数据类型			

Economics

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

$\square$ labour force survey 劳动力调查			
∞ labour force 劳动力			
$\rightleftharpoons$ frictional unemployment 摩擦性失业			
$\square$ structural unemployment 结构性失业			
$\rightleftharpoons$ cyclical unemployment 周期性失业			
$\searrow$ deflation 通货紧缩			
$\mathbb{C}$ Consumer Prices Index 消费者价格指数			
$\mathbb{A}$ weight 权重			
$\mathbb{D}$ demand-pull 需求拉动			
$\uparrow$ 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			