



Cambridge IGCSE 0580

# Mensuration Vocabulary

## 度量 (Mensuration) 词 汇 卡

Topic 5 | Core & Extended

FREE | Cambridge 0580 | Bilingual 双语

📘 Bilingual Vocabulary Cards 双语词汇卡

🎓 For Chinese-English Math Education

适用于中英双语数学教学

👉 Vocab Tables ✂️ Printable Flashcards 📖 Core & Extended

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## How to Use This Resource / 使用说明 **What's inside** / 内容概览

- ▣ **Vocabulary Tables** (p. 3–5) — 36 bilingual terms with pinyin & definitions
- ☒ **Flashcards** (p. 6–11) — 3 sets of printable cards, print front/back pages back-to-back
- ➥ **Extended labels** — Look for *(Ext.)* to spot Extended-only content



## Differentiation Tips / 分层教学建议

- ★ **Core students** — Focus on terms without the *(Ext.)* marker
- ➥ **Extended students** — Learn all terms including *(Ext.)* items
- 👤 **Bilingual learners** — Use the Chinese and Pinyin columns for support
- 🖨 **Printing tip** — Print flashcard pages double-sided for front/back cards

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Also available: Number, Algebra, Coordinate Geometry, Geometry, Trigonometry, Vectors & Statistics Vocabulary Cards

## 5.1–5.2 Units & Area / Perimeter

C5.1–C5.2/E5.1–E5.2 计量单位与面积/周长

### Units of Measure | 计量单位

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Metric unit</b>	公制单位	gōng zhì dān wèi	A unit in the metric system, e.g. m, kg, L
<b>Convert</b>	换算	huàn suàn	To change a measurement from one unit to another
<b>Length</b>	长度	cháng dù	A measure of distance, e.g. mm, cm, m, km
<b>Mass</b>	质量	zhì liàng	A measure of how much matter, e.g. g, kg, t
<b>Capacity</b>	容量	róng liàng	The amount a container can hold, e.g. mL, L

### Area & Perimeter | 面积与周长

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Perimeter</b>	周长	zhōu cháng	The total distance around the outside of a shape
<b>Area</b>	面积	miàn jī	The amount of space inside a 2D shape
<b>Base</b>	底	dǐ	The side used for calculating area, often the bottom
<b>Height</b>	高	gāo	Perpendicular distance from base to the top vertex
<b>Parallelogram</b>	平行四边形	píng xíng sì biān xíng	$\text{Area} = b \times h$ ; a quadrilateral with two pairs of parallel sides
<b>Trapezium</b>	梯形	tī xíng	$\text{Area} = \frac{1}{2}(a + b)h$ ; has one pair of parallel sides

## 5.3–5.4 Circles, Arcs, Surface Area & Volume

C5.3–C5.4/E5.3–E5.4 圆弧、扇形、表面积与体积

### III Circles, Arcs & Sectors | 圆、弧与扇形

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Circumference</b>	周长 (圆)	zhōu cháng	The perimeter of a circle; $C = \pi d$ or $C = 2\pi r$
<b>Pi (<math>\pi</math>)</b>	圆周率	yuán zhōu lǜ	Ratio of circumference to diameter; $\approx 3.14159$
<b>Area of circle</b>	圆的面积	yuán de miàn jī	$A = \pi r^2$ ; space enclosed by a circle
<b>Arc</b>	弧	hú	A part of the circumference of a circle
<b>Arc length</b>	弧长	hú cháng	$l = \frac{\theta}{360} \times 2\pi r$ ; length of an arc
<b>Sector</b>	扇形	shàn xíng	A region bounded by two radii and an arc
<b>Sector area</b>	扇形面积	shàn xíng miàn jī	$A = \frac{\theta}{360} \times \pi r^2$ ; area of a sector

### IV Surface Area & Volume | 表面积与体积

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Surface area</b>	表面积	biǎo miàn jī	Total area of all faces of a 3D solid
<b>Volume</b>	体积	tǐ jī	The amount of 3D space a solid occupies
<b>Cuboid</b>	长方体	cháng fāng tǐ	$V = l \times w \times h$ ; a box-shaped solid
<b>Prism</b>	棱柱	léng zhù	$V = \text{cross-section area} \times \text{length}$
<b>Cylinder</b>	圆柱	yuán zhù	$V = \pi r^2 h$ ; a prism with circular cross-section
<b>Cross-section</b>	截面	jié miàn	The face revealed when a solid is sliced through

## 5.4–5.5 3D Solids & Compound Shapes

E5.4–E5.5 立体图形与组合图形

### 3D Solids (Extended) | 立体图形 (扩展)

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Sphere</b>	球体	qiú tǐ	$V = \frac{4}{3}\pi r^3$ ; a perfectly round solid (Ext.)
<b>Pyramid</b>	棱锥	léng zhuī	$V = \frac{1}{3} \times \text{base area} \times h$ (Ext.)
<b>Cone</b>	圆锥	yuán zhuī	$V = \frac{1}{3}\pi r^2 h$ ; a solid with circular base and apex (Ext.)
<b>Hemisphere</b>	半球	bàn qiú	Half of a sphere; $V = \frac{2}{3}\pi r^3$ (Ext.)
<b>Net</b>	展开图	zhǎn kāi tú	A flat pattern that folds into a 3D solid
<b>Slant height</b>	斜高	xié gāo	The distance along the sloping side of a cone or pyramid (Ext.)

### Compound Shapes | 组合图形

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Compound shape</b>	组合图形	zǔ hé tú xíng	A shape made by joining two or more simple shapes
<b>Compound solid</b>	组合体	zǔ hé tǐ	A 3D solid formed by combining simpler solids (Ext.)
<b>Frustum</b>	棱台	léng tái	A solid formed by cutting the top off a cone or pyramid (Ext.)
<b>Semicircle</b>	半圆	bàn yuán	Half of a circle; area = $\frac{1}{2}\pi r^2$
<b>Curved surface area</b>	曲面面积	qū miàn miàn jī	The area of the curved part, excluding flat ends (Ext.)
<b>Dimension</b>	维度	wéi dù	A measurable extent: length, width, or height

## Flashcards — Front (Terms)

闪 卡 正 面 — 术 语

**Perimeter**

周 长

**Area**

面 积

**Circumference**

周 长 (圆)

**Volume**

体 积

**Surface Area**

表 面 积

**Pi ( $\pi$ )**

圆 周 率

Cut along dashed lines. Print this and next back-to-back. 沿虚线剪开。本页与下一页双面打印。

## Flashcards — Back (Definitions)

闪卡背面—定义

### Area

面积

Space inside a 2D shape  
二维图形内部的空间

### Perimeter

周长

Total distance around a shape  
图形外围的总长度

### Volume

体积

3D space a solid occupies  
立体图形占据的三维空间

### Circumference

周长（圆）

Perimeter of a circle;  $C = \pi d$   
圆的周长;  $C = \pi d$

### Pi ( $\pi$ )

圆周率

$\text{Circumference} \div \text{diameter} \approx 3.14159$   
周长 ÷ 直径 ≈ 3.14159

### Surface Area

表面积

Total area of all faces of a solid  
立体图形所有面的总面积

🖨️ Print pages 6–7 back-to-back, then cut along dashed lines. 第6–7页双面打印，沿虚线剪裁。

## Flashcards — Front (More Terms)

闪卡正面—更多术语

**Arc Length**

弧长

**Sector Area**

扇形面积

**Prism**

棱柱

**Cylinder**

圆柱

**Trapezium**

梯形

**Cross-section**

截面

Cut along dashed lines. Print this and next back-to-back. 沿虚线剪开。本页与下一页双面打印。

## Flashcards — Back (Definitions)

闪卡背面—定义

### Sector Area

扇形面积

$$A = \frac{\theta}{360} \times \pi r^2$$

扇形面积公式

### Arc Length

弧长

$$l = \frac{\theta}{360} \times 2\pi r$$

弧长公式

### Cylinder

圆柱

$$V = \pi r^2 h; \text{ circular cross-section}$$

$V = \pi r^2 h$ ; 横截面为圆

### Prism

棱柱

$$V = \text{cross-section} \times \text{length}$$

$V = \text{截面面积} \times \text{长}$

### Cross-section

截面

The face when a solid is sliced through

沿某方向切开立体图形露出的面

### Trapezium

梯形

$$A = \frac{1}{2}(a + b)h; \text{ one pair of parallel sides}$$

$A = \frac{1}{2}(a + b)h$ ; 一对平行边

🖨️ Print pages 8–9 back-to-back, then cut along dashed lines. 第8–9页双面打印，沿虚线剪裁。

## Flashcards — Front (Even More Terms)

闪卡正面—更多术语

**Sphere**

球体

**Cone**

圆锥

**Pyramid**

棱锥

**Frustum**

棱台

**Compound Shape**

组合图形

**Net**

展开图

Cut along dashed lines. Print this and next back-to-back. 沿虚线剪开。本页与下一页双面打印。

## Flashcards — Back (Definitions)

闪卡背面—定义

### Cone

圆锥

$$V = \frac{1}{3}\pi r^2 h; \text{ circular base + apex}$$

$$V = \frac{1}{3}\pi r^2 h; \text{ 圆底 + 顶点}$$

### Sphere

球体

$$V = \frac{4}{3}\pi r^3; \text{ perfectly round solid}$$

$$V = \frac{4}{3}\pi r^3; \text{ 完美的圆球}$$

### Frustum

棱台

Top cut off a cone or pyramid

圆锥或棱锥截去顶部后的立体

### Pyramid

棱锥

$$V = \frac{1}{3} \times \text{base} \times h$$

$$V = \frac{1}{3} \times \text{底面积} \times h$$

### Net

展开图

A flat pattern that folds into a 3D solid

可折叠成立体图形的平面图案

### Compound Shape

组合图形

A shape made from simpler shapes

由简单图形组合而成的图形

🖨️ Print pages 10–11 back-to-back, then cut along dashed lines. 第 10–11 页双面打印，沿虚线剪裁。