Cambridge IGCSE 0580

Geometry Vocabulary
几 何 (Geometry) 词 汇 卡

Topic 4 | 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

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

- ⊞ **Vocabulary Tables** (p. 3–5) — 45+ 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

♥ **Enjoying this resource?**

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

4.1 Geometrical Terms, Shapes & Angle Properties

C4.1/E4.1 几何术语、形状与角的性质

☰ Basic Shapes & Triangles | 基本形状与三角形

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
Point	点	diǎn	A position in space with no size
Line segment	线段	xiàn duàn	A straight path between two points
Parallel	平行	píng xíng	Lines that never meet, always the same distance apart
Perpendicular	垂直	chuí zhí	Lines meeting at a right angle ($90°$)
Triangle	三角形	sān jiǎo xíng	A shape with 3 sides; angles sum to $180°$
Equilateral triangle	等边三角形	děng biān sān jiǎo xíng	All sides and angles equal ($60°$ each)
Isosceles triangle	等腰三角形	děng yāo sān jiǎo xíng	Two equal sides and two equal base angles
Right-angled triangle	直角三角形	zhí jiǎo sān jiǎo xíng	A triangle with one $90°$ angle

☰ Quadrilaterals & Polygons | 四边形与多边形

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
Quadrilateral	四边形	sì biān xíng	A shape with 4 sides; angles sum to $360°$
Parallelogram	平行四边形	píng xíng sì biān xíng	Opposite sides parallel and equal
Trapezium	梯形	tī xíng	Exactly one pair of parallel sides
Rhombus	菱形	líng xíng	All sides equal; opposite angles equal
Kite	鸢形	yuān xíng	Two pairs of adjacent equal sides
Polygon	多边形	duō biān xíng	A closed shape with 3 or more straight sides
Regular polygon	正多边形	zhèng duō biān xíng	All sides and all angles are equal

4.1–4.3 Circles, Solids & Constructions

C4.1–C4.3/E4.1–E4.3 圆、立 体 与 作 图

⊞ Circle Parts | 圆的组成

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
Circle	圆	yuán	A set of points equidistant from a centre
Radius	半径	bàn jìng	Distance from centre to circumference
Diameter	直径	zhí jìng	A chord through the centre; $d = 2r$
Circumference	圆周	yuán zhōu	The perimeter of a circle; $C = \pi d$
Chord	弦	xián	A line segment joining two points on a circle
Arc	弧	hú	A part of the circumference
Sector	扇形	shàn xíng	The region between two radii and an arc
Tangent	切线	qiē xiàn	A line touching the circle at exactly one point

⊞ Solids, Constructions & Bearings | 立体、作图与方位角

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
Net	展开图	zhǎn kāi tú	A 2D pattern that folds into a 3D solid
Prism	棱柱	léng zhù	A solid with uniform cross-section
Pyramid	棱锥	léng zhuī	A solid with a polygon base and triangular faces
Cylinder	圆柱	yuán zhù	A solid with two parallel circular faces
Cone	圆锥	yuán zhuī	A solid with a circular base and a point (apex)
Sphere	球	qiú	A solid where every point is equidistant from the centre
Bearing	方位角	fāng wèi jiǎo	Direction measured clockwise from North $(000°–360°)$
Scale drawing	比例尺图	bǐ lì chǐ tú	A drawing using a fixed scale, e.g. $1 : 50\,000$

4.4–4.8 Similarity, Symmetry, Angles & Circle Theorems

C4.4–C4.8/E4.4–E4.8 相似、对称、角与圆定理

☰ Similarity, Symmetry & Congruence | 相似、对称与全等

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
Similar	相似	xiāng sì	Same shape, different size; proportional sides
Congruent	全等	quán děng	Same shape and same size
Scale factor	比例因数	bǐ lì yīn shù	The ratio of corresponding lengths in similar shapes
Line symmetry	线对称	xiàn duì chèn	A shape can be folded along a line to match exactly
Rotational symmetry	旋转对称	xuán zhuǎn duì chèn	A shape looks the same after rotation less than $360°$
Perpendicular bisector	垂直平分线	chuí zhí píng fēn xiàn	A line cutting a segment at $90°$ through its midpoint *(Ext.)*

☰ Angles & Circle Theorems | 角与圆定理

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
Interior angle	内角	nèi jiǎo	An angle inside a polygon
Exterior angle	外角	wài jiǎo	An angle between a side and its extension
Corresponding angles	同位角	tóng wèi jiǎo	Equal angles on same side of transversal (F-shape)
Alternate angles	内错角	nèi cuò jiǎo	Equal angles on opposite sides of transversal (Z-shape)
Co-interior angles	同旁内角	tóng páng nèi jiǎo	Angles on same side of transversal; sum $= 180°$
Cyclic quadrilateral	圆内接四边形	yuán nèi jiē sì biān xíng	All 4 vertices lie on a circle; opposite angles sum to $180°$ *(Ext.)*
Alternate segment	弧切角	hú qiē jiǎo	Angle between tangent and chord $=$ angle in alternate segment *(Ext.)*
Hemisphere	半球	bàn qiú	Half of a sphere *(Ext.)*
Frustum	平截头体	píng jié tóu tǐ	A solid formed by cutting the top off a cone or pyramid *(Ext.)*

Triangle
三 角 形

Parallel
平 行

Radius
半 径

Polygon
多 边 形

Similar
相 似

Congruent
全 等

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。

Parallel   平行

Lines that never meet, always the same distance apart
永不相交、始终等距的线

Triangle   三角形

A shape with 3 sides; angles sum to $180°$
有 3 条边的形状；内角和为 $180°$

Polygon   多边形

A closed shape with 3 or more straight sides
由 3 条或更多直边围成的封闭形状

Radius   半径

Distance from centre to circumference
从圆心到圆周的距离

Congruent   全等

Same shape and same size
形状相同且大小相同

Similar   相似

Same shape, different size; proportional sides
形状相同、大小不同；边成比例

🖨 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。

Bearing
方 位 角

Tangent
切 线

Interior Angle
内 角

Symmetry
对 称

Chord
弦

Sector
扇 形

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

Tangent 切线

A line touching the circle at exactly one point
与圆恰好相切于一点的直线

Bearing 方位角

Direction measured clockwise from North (000°–360°)
从北方顺时针测量的方向（000°–360°）

Symmetry 对称

A shape looks the same after reflection or rotation
形状经反射或旋转后保持不变

Interior Angle 内角

An angle inside a polygon
多边形内部的角

Sector 扇形

The region between two radii and an arc
两条半径和一段弧之间的区域

Chord 弦

A line segment joining two points on a circle
连接圆上两点的线段

Diameter

直 径

Perpendicular

垂 直

Arc

弧

Exterior Angle

外 角

Circumference

圆 周

Prism

棱 柱

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。

Perpendicular 垂直

Lines meeting at a right angle ($90°$)
成直角（$90°$）相交的线

Diameter 直径

A chord through the centre; $d = 2r$
过圆心的弦；$d = 2r$

Exterior Angle 外角

An angle between a
side and its extension
一边与其延长线之间的角

Arc 弧

A part of the circumference
圆周的一部分

Prism 棱柱

A solid with uniform cross-section
横截面一致的立体

Circumference 圆周

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

🖨 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。