




 Cambridge IGCSE 0580

# Number Vocabulary

## 数 (Number) 词汇卡

Topic 1 | 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. 3–6) — 50+ bilingual terms with pinyin & definitions

✂️ **Flashcards** (p. 7–12) — 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: Algebra, Coordinate Geometry, Geometry, Mensuration, Trigonometry, Vectors & Statistics Vocabulary Cards

## 1.1 Identify and Use Numbers & 1.2 Sets

C1.1/E1.1 识别与使用数 C1.2/E1.2 集合

### ≡ Number Types | 数的类型

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Natural number</b>	自然数	zì rán shù	Positive counting numbers: 1, 2, 3, ...
<b>Integer</b>	整数	zhěng shù	Whole numbers including negatives: ..., -2, -1, 0, 1, 2, ...
<b>Prime number</b>	质数/素数	zhì shù	A number with exactly two factors: 2, 3, 5, 7, 11, ...
<b>Square number</b>	平方数	píng fāng shù	$n^2$ : 1, 4, 9, 16, 25, ...
<b>Cube number</b>	立方数	lì fāng shù	$n^3$ : 1, 8, 27, 64, 125, ...
<b>Rational number</b>	有理数	yǒu lǐ shù	Can be written as $\frac{a}{b}$ where $a, b \in \mathbb{Z}$ , $b \neq 0$
<b>Irrational number</b>	无理数	wú lǐ shù	Cannot be written as a fraction, e.g. $\sqrt{2}$ , $\pi$
<b>Reciprocal</b>	倒数	dào shù	The reciprocal of $n$ is $\frac{1}{n}$ ; $n \times \frac{1}{n} = 1$

### ≡ Sets | 集合

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Set</b>	集合	jí hé	A collection of objects (elements)
<b>Universal set</b>	全集	quán jí	The set of all elements under consideration, $\mathcal{U}$
<b>Intersection</b>	交集	jiāo jí	$A \cap B$ — elements in both $A$ and $B$
<b>Union</b>	并集	bìng jí	$A \cup B$ — elements in $A$ or $B$ (or both)
<b>Complement</b>	补集	bǔ jí	$A'$ — elements NOT in $A$
<b>Subset</b>	子集	zǐ jí	$A \subseteq B$ — all elements of $A$ are in $B$ (Ext.)
<b>Venn diagram</b>	韦恩图	wéi ēn tú	2 sets (Core) or 3 sets (Extended)

## 1.3–1.6 Powers, Fractions & Operations

C1.3–C1.6 幂与根、分数、四则运算

### ≡ Powers & Roots | 幂与根

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Square root</b>	平方根	píng fāng gēn	$\sqrt{n}$ : the number that, squared, gives $n$
<b>Cube root</b>	立方根	lì fāng gēn	$\sqrt[3]{n}$ : the number that, cubed, gives $n$
<b>Index / Power</b>	指数/幂	zhǐ shù	In $a^n$ , $n$ is the index; fractional indices (Ext.)

### ≡ Fractions, Decimals & Percentages | 分数、小数与百分数

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Numerator</b>	分子	fēn zǐ	The top number in a fraction
<b>Denominator</b>	分母	fēn mǔ	The bottom number in a fraction
<b>Proper fraction</b>	真分数	zhēn fēn shù	Numerator < Denominator, e.g. $\frac{3}{5}$
<b>Improper fraction</b>	假分数	jiǎ fēn shù	Numerator $\geq$ Denominator, e.g. $\frac{7}{4}$
<b>Mixed number</b>	带分数	dài fēn shù	Integer + proper fraction, e.g. $1\frac{3}{4}$
<b>Recurring decimal</b>	循环小数	xún huán xiǎo shù	Repeats, e.g. $0.\dot{3}$ ; convert to fraction (Ext.)
<b>Percentage</b>	百分数	bǎi fēn shù	A number out of 100, written with % symbol

### ≡ Operations | 四则运算

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Sum</b>	和	hé	The result of addition
<b>Difference</b>	差	chā	The result of subtraction
<b>Product</b>	积	jī	The result of multiplication
<b>Quotient</b>	商	shāng	The result of division
<b>BIDMAS / Order of operations</b>	运算顺序	yùn suàn shùn xù	Brackets, Indices, Division/Multiplication, Addition/Subtraction

## 1.7–1.13 Standard Form, Estimation & Percentage

C1.7–C1.13 标准式、估算与百分比

### Indices & Standard Form | 指数与标准式

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Standard form</b>	标准式	biāo zhǔn shì	$A \times 10^n$ where $1 \leq A < 10$ and $n \in \mathbb{Z}$
<b>Base</b>	底数	dǐ shù	In $a^n$ , the $a$ is the base
<b>Exponent</b>	指数	zhǐ shù	Another word for index/power

### Estimation & Accuracy | 估算与精确度

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Decimal place (d.p.)</b>	小数位	xiǎo shù wèi	Number of digits after the decimal point
<b>Significant figure (s.f.)</b>	有效数字	yǒu xiào shù zì	Digits that carry meaning, starting from the first non-zero digit
<b>Estimation</b>	估算	gū suàn	Approximate calculation by rounding values first
<b>Upper bound</b>	上界	shàng jiè	Greatest value before rounding; calc. bounds (Ext.)
<b>Lower bound</b>	下界	xià jiè	Smallest value before rounding; calc. bounds (Ext.)

### Ratio, Proportion & Percentage | 比、比例与百分比

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Ratio</b>	比	bǐ	Comparison of two quantities, e.g. 3 : 5
<b>Proportion</b>	比例	bǐ lì	Equality of two ratios; a part compared to the whole
<b>Simple interest</b>	单利	dān lì	Interest calculated on original amount only
<b>Compound interest</b>	复利	fù lì	Interest calculated on amount + accumulated interest
<b>Reverse percentage</b>	逆向百分比	nì xiàng bǎi fēn bǐ	Finding the original value before a % change (Ext.)

## C1.5, C1.12, E1.17–E1.18 Ordering, Rates & Advanced

C1.5、C1.12、E1.17–E1.18 排序、比率与进阶

### ≡ Ordering & Comparison | 排序与比较

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Ordering</b>	排序	pái xù	Arranging numbers using $<$ , $>$ , $\leq$ , $\geq$
<b>Greater than</b>	大于	dà yú	$a > b$ means $a$ is larger than $b$
<b>Less than</b>	小于	xiǎo yú	$a < b$ means $a$ is smaller than $b$

### ≡ Rates & Advanced Topics | 比率与高级话题

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Rate</b>	比率	bǐ lǜ	A ratio comparing two quantities with different units
<b>Speed</b>	速度	sù dù	Distance $\div$ time, e.g. km/h
<b>Density</b>	密度	mì dù	Mass $\div$ volume, e.g. g/cm <sup>3</sup>
<b>Exponential growth</b>	指数增长	zhǐ shù zēng zhǎng	Growth by a constant multiplier each period (Ext.)
<b>Surd</b>	根式	gēn shì	An irrational root, e.g. $\sqrt{3}$ , $2\sqrt{5}$ (Ext.)

## Flashcards — Front (Terms)

闪卡正面 — 术语

**Integer**

整数

**Prime**

质数

**Rational**

有理数

**Irrational**

无理数

**Reciprocal**

倒数

**Square Root**

平方根

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## Flashcards — Back (Definitions)

闪卡背面一定义

### Prime

质数

A number with exactly two factors: 2, 3, 5, 7, 11...

只有两个因数的数: 2, 3, 5, 7, 11...

### Integer

整数

Whole numbers including negatives: ..., -2, -1, 0, 1, 2...

包含负数的整数: ..., -2, -1, 0, 1, 2...

### Irrational

无理数

Cannot be written as a fraction, e.g.  $\sqrt{2}$ ,  $\pi$

不能写成分数, 如  $\sqrt{2}$ ,  $\pi$

### Rational

有理数

Can be written as  $\frac{a}{b}$  where  $b \neq 0$

能写成  $\frac{a}{b}$  的数 ( $b \neq 0$ )

### Square Root

平方根

$\sqrt{n}$ : the number that, squared, gives  $n$

$\sqrt{n}$ : 平方后等于  $n$  的数

### Reciprocal

倒数

The reciprocal of  $n$  is  $\frac{1}{n}$

$n$  的倒数是  $\frac{1}{n}$

Print pages 7–8 back-to-back, then cut along dashed lines. 第7–8页双面打印, 沿虚线剪裁。



## Flashcards — Front (More Terms)

闪卡正面—更多术语

**Numerator**

分子

**Denominator**

分母

**Upper Bound**

上界

**Lower Bound**

下界

**Standard Form**

标准式

**Compound  
Interest**

复利

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)

闪卡背面一定义

### Denominator

分母

The bottom number in a fraction  
分数中下面的数

### Numerator

分子

The top number in a fraction  
分数中上面的数

### Lower Bound

下界

The smallest possible value  
before rounding (*Ext.*)  
四舍五入前最小可能值

### Upper Bound

上界

The greatest possible value  
before rounding (*Ext.*)  
四舍五入前最大可能值

### Compound Interest

复利

Interest on amount +  
accumulated interest  
按本金加累积利息计算的利息

### Standard Form

标准式

$A \times 10^n$  where  $1 \leq A < 10$   
 $A \times 10^n$ , 其中  $1 \leq A < 10$

Print pages 9–10 back-to-back, then cut along dashed lines. 第 9–10 页双面打印, 沿虚线剪裁。

## Flashcards — Front (Even More Terms)

闪卡正面 — 更多术语

**Square Number**

平方数

**Cube Root**

立方根

**Percentage**

百分数

**Ratio**

比

**Significant Figure**

有效数字

**Estimation**

估算

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)

闪卡背面一定义

### Cube Root

立方根

$\sqrt[3]{n}$ : the number that, cubed, gives  $n$

$\sqrt[3]{n}$ : 立方后等于  $n$  的数

### Square Number

平方数

$n^2$ : 1, 4, 9, 16, 25, ...

$n^2$ : 1, 4, 9, 16, 25, ...

### Ratio

比

Comparison of two quantities, e.g. 3 : 5

两个量的比较, 如 3 : 5

### Percentage

百分数

A number out of 100,  
written with % symbol

以 100 为基准的数, 用% 表示

### Estimation

估算

Approximate calculation  
by rounding values first

先四舍五入再进行近似计算

### Significant Figure

有效数字

Digits that carry meaning, start-  
ing from the first non-zero digit

从第一个非零数字开始的有意义数字

🖨️ Print pages 11–12 back-to-back, then cut along dashed lines. 第 11–12 页双面打印, 沿虚线剪裁。