




 Cambridge IGCSE 0580

# Statistics & Probability Vocabulary

## 统计与概率 (Statistics) 词汇卡

Topics 8 & 9 | 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


25Maths | IGCSE Mathematics Visual Resources

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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) — 40+ 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, Geometry, Mensuration, Trigonometry & Vectors Vocabulary Cards

## 9.1–9.3 Data, Averages & Spread

C9.1–C9.3/E9.1–E9.3 数据、平均数与离散度

### ≡ Data Classification | 数据分类

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Data</b>	数据	shù jù	Information collected for analysis
<b>Discrete data</b>	离散数据	lí sǎn shù jù	Data that can only take specific values, e.g. shoe size
<b>Continuous data</b>	连续数据	lián xù shù jù	Data that can take any value in a range, e.g. height
<b>Frequency</b>	频数	pín shù	The number of times a value occurs
<b>Tally</b>	计数符号	jì shù fú hào	A mark used to record data; groups of 5
<b>Two-way table</b>	双向表	shuāng xiàng biǎo	A table showing two categories of data
<b>Class interval</b>	组距	zǔ jù	A range of values used to group data, e.g. $10 \leq x < 20$

### ≡ Averages & Measures of Spread | 平均数与离散度

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Mean</b>	平均数	píng jūn shù	Sum of values ÷ number of values
<b>Median</b>	中位数	zhōng wèi shù	The middle value when data is ordered
<b>Mode</b>	众数	zhòng shù	The most frequently occurring value
<b>Range</b>	全距	quán jù	Largest value – smallest value
<b>Quartile</b>	四分位数	sì fēn wèi shù	Values dividing ordered data into four equal parts ( <i>Ext.</i> )
<b>Interquartile range</b>	四分位距	sì fēn wèi jù	$Q_3 - Q_1$ : spread of the middle 50% ( <i>Ext.</i> )
<b>Modal class</b>	众数组	zhòng shù zǔ	The class interval with the highest frequency ( <i>Ext.</i> )
<b>Estimated mean</b>	估计平均数	gū jì píng jūn shù	Mean calculated using midpoints of class intervals ( <i>Ext.</i> )

## 9.4–9.7 Charts, Diagrams & Advanced Statistics

C9.4–C9.5/E9.4–E9.7 图表与高级统计

### Charts & Diagrams | 图表

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Bar chart</b>	条形图	tiáo xíng tú	Bars showing frequency; equal width, gaps between bars
<b>Pie chart</b>	饼图	bǐng tú	A circle divided into sectors showing proportions
<b>Pictogram</b>	象形图	xiàng xíng tú	A chart using symbols to represent data
<b>Stem-and-leaf diagram</b>	茎叶图	jīng yè tú	Data split into stem (tens) and leaf (units)
<b>Scatter diagram</b>	散点图	sǎn diǎn tú	Points plotted to show relationship between two variables
<b>Correlation</b>	相关性	xiāng guān xìng	The relationship between two variables (positive/negative/zero)
<b>Line of best fit</b>	最佳拟合线	zuì jiā nǐ hé xiàn	A straight line that best represents scatter data

### Advanced Statistics | 高级统计

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Cumulative frequency</b>	累积频率	lěi jī pín lǜ	A running total of frequencies ( <i>Ext.</i> )
<b>Cumulative frequency diagram</b>	累积频率图	lěi jī pín lǜ tú	An S-shaped curve plotting cumulative frequency ( <i>Ext.</i> )
<b>Percentile</b>	百分位数	bǎi fēn wèi shù	A value below which a percentage of data falls ( <i>Ext.</i> )
<b>Histogram</b>	直方图	zhí fāng tú	Bars with no gaps; area represents frequency ( <i>Ext.</i> )
<b>Frequency density</b>	频率密度	pín lǜ mì dù	Frequency ÷ class width; the height in a histogram ( <i>Ext.</i> )
<b>Upper / Lower bound</b>	上界/下界	shàng jiè / xià jiè	The limits of a rounded value
<b>Outlier</b>	离群值	lí qún zhí	A data point far from the rest of the data

## 8.1–8.4 Probability

C8.1–C8.3/E8.1–E8.4 概 率

### Basic Probability | 基础概率

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Probability</b>	概率	gài lǜ	The chance of an event occurring, between 0 and 1
<b>Event</b>	事件	shì jiàn	A specific outcome or set of outcomes
<b>Outcome</b>	结果	jié guǒ	A possible result of an experiment
<b>Sample space</b>	样本空间	yàng běn kōng jiān	The set of all possible outcomes
<b>Relative frequency</b>	相对频率	xiāng duì pín lǜ	Frequency $\div$ total trials; an estimate of probability
<b>Expected frequency</b>	期望频数	qī wàng pín shù	Probability $\times$ number of trials
<b>Fair / Biased</b>	公平/有偏	gōng píng / yǒu piān	Fair: all outcomes equally likely; biased: not equally likely

### Combined & Conditional Probability | 复合与条件概率

English 英文	Chinese 中文	Pinyin 拼音	Definition 定义
<b>Independent events</b>	独立事件	dú lì shì jiàn	Events where one does not affect the other
<b>Dependent events</b>	相依事件	xiāng yī shì jiàn	Events where one affects the probability of the other
<b>Tree diagram</b>	树形图	shù xíng tú	A diagram showing all outcomes of sequential events
<b>Venn diagram</b>	韦恩图	wéi ēn tú	Overlapping circles showing relationships between sets
<b>With replacement</b>	有放回	yǒu fàng huí	Item returned before next selection; probabilities unchanged
<b>Without replacement</b>	无放回	wú fàng huí	Item not returned; probabilities change (Ext.)
<b>Conditional probability</b>	条件概率	tiáo jiàn gài lǜ	Probability of $A$ given that $B$ has occurred (Ext.)
<b>Mutually exclusive</b>	互斥事件	hù chì shì jiàn	Events that cannot happen at the same time

## Flashcards — Front (Terms)

闪卡正面 — 术语

**Mean**

平均数

**Probability**

概率

**Median**

中位数

**Bar Chart**

条形图

**Correlation**

相关性

**Range**

全距

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

### Probability

概率

The chance of an event occurring, between 0 and 1  
事件发生的可能性，介于 0 和 1 之间

### Mean

平均数

Sum of values  $\div$  number of values  
所有数值之和  $\div$  数值个数

### Bar Chart

条形图

Bars showing frequency; equal width, gaps between bars  
用等宽条形表示频数，条形之间有间隔

### Median

中位数

The middle value when data is ordered  
数据排序后的中间值

### Range

全距

Largest value – smallest value  
最大值 – 最小值

### Correlation

相关性

The relationship between two variables  
两个变量之间的关系

🖨️ 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

**Mode**

众数

**Pie Chart**

饼图

**Tree Diagram**

树形图

**Histogram**

直方图

**Scatter Diagram**

散点图

**Frequency**

频数

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

### Pie Chart

饼图

A circle divided into sectors showing proportions  
用扇形表示比例的圆形图

### Mode

众数

The most frequently occurring value  
出现次数最多的数值

### Histogram

直方图

Bars with no gaps; area represents frequency  
无间隔的条形；面积表示频数

### Tree Diagram

树形图

A diagram showing all outcomes of sequential events  
展示连续事件所有结果的图

### Frequency

频数

The number of times a value occurs  
一个数值出现的次数

### Scatter Diagram

散点图

Points plotted to show relationship between two variables  
通过描点展示两个变量之间的关系

🖨️ 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

**Cumulative Freq.**

累积频率

**Interquartile  
Range**

四分位距

**Sample Space**

样本空间

**Independent  
Events**

独立事件

**Frequency  
Density**

频率密度

**Discrete Data**

离散数据

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

### Interquartile Range

四分位距

$Q_3 - Q_1$ : spread of the middle 50% (*Ext.*)

$Q_3 - Q_1$ : 中间 50% 数据的分布范围

### Cumulative Freq.

累积频率

A running total of frequencies (*Ext.*)

频率的逐步累加总和

### Independent Events

独立事件

Events where one does  
not affect the other

一个事件不影响另一个事件

### Sample Space

样本空间

The set of all possible outcomes

所有可能结果的集合

### Discrete Data

离散数据

Data that can only take spe-  
cific values, e.g. shoe size

只能取特定值的数据, 如鞋码

### Frequency Density

频率密度

Frequency  $\div$  class width;  
height in a histogram (*Ext.*)

频率  $\div$  组距; 直方图的纵轴高度

🖨️ 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。