Chapter 2 第二單元
Numerals 數詞

（請先看完英文版本後，再來看翻譯。已翻譯過的內容，後面課件內容會漸漸被省略）

1. Cardinal & Ordinal Numbers 基數與序數

Cardinal numbers are used for counting quantities. **Ordinal numbers** show the order, sequence, or position of something.

基數（**Cardinal numbers**）用於計算數量。序數（**Ordinal numbers**）用於表示某事物的順序、次序或位置。

Number	Cardinal 基數	Ordinal 序數	Abbreviations 縮寫
1	one	first	1st
2	two	second	2nd
3	three	third	3rd
4	four	fourth	4th
5	five	fifth（留意拼寫）	5th
6	six	sixth	6th
7	seven	seventh	7th
8	eight	eighth	8th
9	nine	ninth	9th
10	ten	tenth	10th
11	eleven	eleventh	11th
12	twelve	twelfth	12th
13	thirteen	thirteenth	13th
14	fourteen	fourteenth	14th
15	fifteen	fifteenth	15th
16	sixteen	sixteenth	16th

Number	Cardinal 基數	Ordinal 序數	Abbreviations 縮寫
17	seventeen	seventeenth	17th
18	eighteen	eighteenth	18th
19	nineteen	nineteenth	19th
20	twenty	twentieth	20th
21	twenty-one	twenty-first	21st
22	twenty-two	twenty-second	22nd
23	twenty-three	twenty-third	23rd
30	thirty	thirtieth	30th
40	forty	fortieth	40th
50	fifty	fiftieth	50th
60	sixty	sixtieth	60th
100	one hundred	hundredth	100th

Can you notice the pattern? 你有注意到其中的規律嗎？(請嘗試發覺，不著急往下看)

1. Numbers 1–12 have their own forms, so we usually memorise them. Numbers 20, 30, 40, and 50 have special spellings, so pay extra attention to them.
   1–12 的數字有各自獨特的形式，通常需要背。20、30、40 和 50 的拼寫較為特殊，需要特別留意。
2. -teen = number + 'teen'. For example, 1**4** = **four** + 'teen' = fourteen. However, pay special attention to the spelling of 13 and 15.
   11、12 以外，「十幾」的規律 = number + 'teen' ，例如：1**4** = **four** + 'teen' = fourteen。但要特別留意 13 和 15 的拼寫。
3. >20 = number + 'ty' + '-' + number. For example, **75** = **seven + 'ty'** + ' - ' + **five** = seventy-five.
   「幾十」的規律 = number + 'ty' + '-'（橫杠）+ number，例如：**75** = **seven + 'ty'** + ' - ' + **five** = seventy-five。

The Big Trap: '-teen' vs. '-ty' 大陷阱：「-teen」與「-ty」的區別

Many English learners confuse these sounds, which can cause massive misunderstandings in business or travel.

許多英語學習者會混淆這些發音，而這可能在商務或旅行場合造成嚴重的誤解。

- **-teen** (13–19): Stress the *end* of the word and hold the "n" sound. (e.g., thir-**TEEN**)

-**teen** (13–19): 重音放在單字的***後半部分***，並稍微拉長「n」音。(例如: thir-TEEN)
    - Thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen
- **-ty** (20–90): Stress the *beginning* of the word and make the end short. (e.g., **THIR**-ty)
  -**ty** (20–90): Stress the *beginning* （**前半部分**）of the word，字尾要讀得短而輕。(e.g., **THIR**-ty)
    - Twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety

2. Fractions, Decimals, Percentages 分數、小數、百分比 🟡

Fractions 分數

- **Rule:** Read the top number (numerator) as a **cardinal** number, and the bottom number (denominator) as an **ordinal** number.
  規則：分子（numerator）讀作 cardinal number，分母（denominator）讀作 ordinal number。

Example (if the top number is greater than 1, add an **"s"** to the bottom number):
Example (如果分子大於 1，分母序數要加上「s」):

- 1/3 = one-third
- 2/3 = two-third**s** ——（分子>1，third 要加「s」）
- 1/2 = one half (Special case) （特例）
- 1/4 = one quarter (or one-fourth)
- 3/5 = three fifth**s** ——（分子>1，fifth 要加「s」）

Decimals 小數

- **Rule:** Use the word **"point"** for the dot. Read every number *after* the decimal point **individually** as a single digit.
  Rule: 小數「**點**」讀作「point」。小數點後面的每一個 number 都要分別逐一念出來。
    - **0.5** = zero point five (or just point five)
    - **3.14** = three point one four (❌ NOT three point fourteen)
    - **52.753** = fifty-two point seven five three

Percentages 百分比

- 25% = twenty five percent
- 0.5% = zero point five percent

3. Math Operations: The Four Rules 四則運算 🟢

Here is how to read basic math equations out loud naturally.
以下是以自然的方式朗讀基本數學算式的方法。

Operation 運算	**Sign**	**How to say it (Verbal Form) 口語表達方式**	**Example & Reading [朗讀法]**
Addition 加	+	plus	5 + 3 = 8 *"Five plus three **equals** [等於] eight."*
Subtraction 減	–	minus	10 - 4 = 6 *"Ten minus four **equals** six."*

Operation 運算	Sign	How to say it (Verbal Form) 口語表達方式	Example & Reading［朗讀法］
Multiplication 乘	×	times / multiplied by	3 × 4 = 12 *"Three times four **is** twelve."* *"Three multiplied by four **is** twelve."*
Division 除	÷	divided by	20 ÷ 5 = 4 *"Twenty divided by five **equals** four."*

4. Multiples 倍數 🟡

To show how many times something is multiplied, we use **specialised vocabulary** for small numbers, and a formula for larger numbers.
為了表示某個數被乘了多少次，對於較小的次方我們使用專門的詞彙，而對於較大的次方則使用固定的表達公式。

- **1 time**［次］**:** Once (e.g., *I go to the gym **once** a week.* ［*我每週去一次健身房*］)
- **2 times**［次，因>1，為複數，故加「s」］**:** Twice (e.g., *Take this medicine **twice** a day* ［*請每天服用這個藥兩次*］)
- **3 times:** Three times (or the formal［正式］/literary word［文學性版本］ **Thrice**)
- **4+ times:** Four times, five times, etc［等等］.
- **1/2 times:** half (e.g., *I have **half** as much food as him* ［*我擁有的食物是他的一半*］)
- **1/3 times:** a third (e.g., *I learn **a third** as many words as he does* ［*我學的單字數量只有他的三分之一*］)

Comparing Multiples（倍數比較句型）
Use the structure: **[X times + as + adjective + as]**
使用句型： **[X times + as + 形容詞 + as]**

- *"This new phone is **twice as expensive as** my old one."* *這支新手機的價格是我舊手機的兩倍*
- *"His house is **three times as big as** mine."* *他的房子是我的三倍大*

5. Time, Dates, Eras 時間、日期、年代 🔴

Time 時間 ——請注意「**time**」是多義詞，在上面是用於指「**次數**」，在這裡是指「**時間**」。

- 7:00 = at seven OR seven o'clock
- 7:10 = seven ten OR ten past seven［<30 分鐘的句型=「**分鐘**」**past**「**點**」］
- 7:15 = seven fifteen OR a quarter［刻鐘］past seven
- 7:30 = seven thirty OR half［半］past seven
- 7:50 = seven fifty OR ten to eight［>30 分鐘的句型 =「**60 - 分鐘**」**to**「**點 + 1**」］

Example:

- We are meeting at twenty past eight / eight twenty. 我們在下午八點二十分見面。

Years 年份

- **Before 2000** [2000 年前]**:** Split the year into two-digit chunks. 將年份拆分成兩個兩位數的部分來讀。
  - **19**85 = *nineteen eighty-five*
  - **17**00 = *seventeen hundred*
- **2000–2009:** Say "two thousand [千] and..."
  - **20**05 = *two thousand and five*
- **2010–Present** [現今]**:** You can split it or say "two thousand (and, UK 英)..."
  - **20**26 = *twenty twenty-six* (Most common) [最常見] or *two thousand (and) twenty-six*

Decades and Eras 年代、時代

- **The 1980's** = the nineteen-eighties (or just 'the eighties') [八十年代]
- **500 B.C. =** five hundred B.C. 西元前 500 年

Days/Months 日期

- **Rule:** Always write standard numbers but **say them as ordinal numbers**.
  Rule: 一律使用一般數字書寫，但在讀的時候要使用 ordinal numbers。
  - Written [書面]: **18 June** (UK) / **June 18** (US 美)
  - Spoken [口語]: '**the eighteenth** of June' (UK) or "June **eighteenth**" (US).

Writing Dates 書寫日期

- **UK: 12th December 2020** → (most common) **12 December 2020**
- **US: December 12th, 2020** → (most common) **December 12, 2020**

Supplement 附錄：

Days of the Week 一週七天

Day	Abbreviations	
Monday [星期一]	Mon.	Weekday [週一至週五]
Tuesday	Tue. / Tues.	
Wednesday	Wed.	
Thursday	Thu. / Thurs.	
Friday	Fri.	
Saturday	Sat.	Weekend [週末]
Sunday [星期日]	Sun.	

Months of the Year 月份

January［一月］	Jan.	July［七月］	Jul.
February	Feb.	August	Aug.
March	Mar.	September	Sept. / Sep.
April	Apr.	October	Oct.
May	May	November	Nov.
June［六月］	Jun.	December［十二月］	Dec.

6. Temperature 溫度

English uses two temperature scales: **Celsius (℃)** and **Fahrenheit (°F)**.
英語中使用兩種溫度標示系統：Celsius（攝氏溫度）和 Fahrenheit（華氏溫度）。

- **25℃** = twenty-five degrees［度］ Celsius (or Centigrade)
- **-5℃** = minus［負］ five degrees / five degrees below zero［零下］
- **98°F** = ninety-eight degrees Fahrenheit

Example:

- The temperature this evening was ten degrees. 今天晚上的溫度是十度。

7. Dimensions: Length, Width, Height 尺寸：長、寬、高

When describing physical objects, we use the structure: **[Number + Unit + Adjective]**.
在描述實體物品的尺寸或大小時，我們使用此 structure: [Number + 單位 + 形容詞]。
Most common adjectives for dimensions 最常見尺寸形容詞:

- **Length 長度:** long
- **Width 寬度:** wide
- **Height 高度:** high / tall *(*use 'tall' for people, trees, or buildings［*'tall' 適用於人、樹木、大樓*］*)*
- **Depth 深度:** deep

Most common units for dimensions 最常見尺寸單位:

- **kilometre** (UK) / **kilometer** (US), abbreviation: **km** 公里
- **metre** (UK) / **meter** (US), abbreviation: **m** 公尺/米
- **centimetre** (UK) / **centimeter** (US), abbreviation: **cm** 公分
- **millimetre** (UK) / **millimeter** (US), abbreviation: **mm** 毫米
- **mile**, abbreviation: **mi / m** 英里
- **foot** (plural［複數］: **feet**), sign[符號]: ′ **;** abbreviation: **ft** 英尺
- **inch**, sign: ″ ; abbreviation: **in** 英吋
- **yard**, abbreviation: **yd** 碼

Examples:

- *'The swimming pool is **50 meters long** and **2 meters deep**.'* 這個游泳池長 50 公尺，深 2 公尺。
- *'My brother is **1.8 meters tall**.'* 我哥哥（弟弟）身高 1.8 公尺。
- *'The box is **30 centimetres wide**.'* 這個盒子的寬度是 30 公分。

Supplement（附錄）：
Most common units for weight［重量］:

- **tonne** (UK) / **ton** (US), abbreviation: **t** [噸]
- **kilogram**, abbreviation: **kg** [公斤/千克]
- **gram**, abbreviation: **g** [克]
- **milligram**, abbreviation: **mg** [毫克]
- **pound**, abbreviation: **lb** [磅]
- **ounce**, abbreviation: **oz** [盎司/英兩]
- **litre** (UK) / **liter** (US), abbreviation: **l** ［升］
- **millilitre** (UK) / **milliliter** (US)/ **cubic centimetre**, abbreviation: **cc** ［西西/毫升］

8. Large Numbers 巨數

- 1000 = one thousand ［一千］
- 1 000 000 = one million ［一百萬］
- 1 000 000 000 = one billion ［十億］
- 3564 = three thousand five hundred and sixty-four
- 478,873,467,823 = four hundred and seventy-eight billion, eight hundred and seventy-three million, four hundred and sixty-seven thousand, eight hundred and twenty-three

💡 **Speaking Tip:** When reading large numbers like **4,520**, native speakers usually say: *"Four thousand, five hundred **and** twenty."* (In American English, "and" is sometimes omitted, but it is standard in British English).
口說技巧：當朗讀像 **4,520** 這樣的大數字時，英語母語者通常會說：「**Four thousand, five hundred and twenty.**」（在美式英語中，**and** 有時會被省略，但在英式英語中則屬於標準用法。）