

## 高中藝術領域

# 雙語教學資源手冊 英語授課用語

A Reference Handbook for **Senior High School** Bilingual Teachers  
in the Domain of **Arts**: Instructional Language in English

〔 高中二年級 〕







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## 單元一 攝影與影像閱讀

### Photography and Image Reading

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#### ■ 前言 Introduction

Photography has become an indispensable part of modern life. It has the power to capture and preserve precious moments and scenes, evoking emotions of beauty and vitality. Moreover, it can record significant moments in history, sparking the imagination and critical thinking of viewers.

This unit will guide students towards a deeper understanding of the impact of images on society and the presentation of different viewpoints through the observation and description of photos. Additionally, the unit aims to provide students with opportunities to practice various photography skills, allowing them to use images to express their concerns about important life issues.

攝影已經成為現代生活中不可缺少的一部分。攝影可以捕捉和保存珍貴的瞬間和場景、讓人們感受到美與生活，更可以藉由影像紀錄歷史重要的時刻，進而激發觀者的想像力和思考。

本單元希望讓學生藉由對照片的觀察與描述，引導學生深入思考影像對社會所帶來的影響與影像觀點的呈現，並藉由不同攝影技巧的練習，讓學生用影像呈現其對生活議題的關注。

#### ■ 詞彙 Vocabulary

※粗黑體標示為此單元重點詞彙

詞彙	中譯	詞彙	中譯
Photo Composition 構圖			
s-curve	S 形 (構圖)	<b>rule of thirds</b>	三分法

radiating	放射狀 (構圖)	diagonal	對角線(構圖)
<b>central composition</b>	中央構圖	frame within a frame	框景
fill the frame	畫面填滿	<b>leading line</b>	引導線
<b>Light and Shadows 光與影子</b>			
front light(ing)	正光	side light(ing)	側光
back light(ing)	逆光	use shadows	利用影子
<b>Filters and Colors 濾鏡與顏色</b>			
<b>filter</b>	濾鏡	analogous color	類似色
complementary color	對比色	monochromatic	單色
<b>Camera Angles 拍攝角度</b>			
bird's eye	頂角	high-angle	高角度 (俯角)
eye-level angle	水平視角	low-angle	低角度 (仰角)
<b>Camera Settings 拍攝設定</b>			
auto-focus (AF)	自動對焦	manual focus (MF)	手動對焦
focal length	焦距	shutter speed	快門速度
ISO	感光度(單位)	aperture	光圈
depth of field	景深	<b>flash</b>	閃光燈
exposure	曝光	<b>zoom in/out</b>	畫面放大／縮小
camera timer	倒數計時器	aspect ratio	長寬比

Photography Subjects 攝影主題			
staged photography	編導式攝影	macro photography	微距攝影
street photography	街頭攝影	documentary photography	紀實攝影
black and white photography	黑白攝影	still life photography	靜物攝影
landscape photography	風景攝影	sports photography	運動攝影
experimental photography	實驗攝影	portrait photography	人像攝影
forced perspective photography	錯視攝影	time-lapse photography	縮時攝影
Photography Modes 攝影模式			
panorama mode	全景模式	pro mode	專業模式
food mode	食物模式	portrait mode	人像模式
slow motion	慢動作模式	night mode	夜間模式

## ■ 教學句型 Sentence Patterns

### ① What can you see in the photo?

There is/are \_\_\_\_\_.

例句：①: What can you see in the photo?

②: **There are** several people sitting on a steel beam.

①: 你在照片中看到什麼？

②: 鋼樑上坐著幾個人。

**② What does the photo make you wonder about?****Why is/are the \_\_\_\_\_?****Why do/does the \_\_\_\_\_.****I want to know \_\_\_\_\_.**例句：[1]: **What does the photo make you wonder about?**[2]: **Why are** the people sitting in a dangerous place?[2]: **Why aren't** they scared?[2]: **I want to know** who these people are.

[1]: 這張照片有什麼讓你好奇的地方？

[2]: 為什麼人們要坐在這麼危險的地方？

[2]: 他們為什麼不害怕？

[2]: 我想知道這些人是誰。

**③ How does the photo make you feel?****The photo makes me feel \_\_\_\_\_.**例句：[1]: **How does the photo make you feel?**[2]: **The photo makes me feel** anxious.

[1]: 這張照片給你什麼感覺呢？

[2]: 這張照片讓我覺得很焦慮。

**④ What makes a photo influential/impactful?****Because \_\_\_\_\_.**例句：[1]: **What makes a photo influential/impactful?**[2]: **Because** it can evoke emotions in people.

[1]: 為什麼這張照片有影響力呢？

[2]: 因為它可以激起人們的情感。

**⑤ Which photo is the most influential for you?**

I choose \_\_\_\_\_, because \_\_\_\_\_.

例句：①: **Which photo is the most influential for you?**

②: **I choose *The Vulture and the Little Girl*, because** it makes people aware of the problems of poverty and humanitarian aid.

①: 對你而言，為什麼這張是最有影響力的照片呢？

②: 我選飢餓的蘇丹，因為它讓許多人們開始正視貧窮以及人道救援的問題。

**⑥ What photography skills were used for this photo?**

The skills are \_\_\_\_\_ and \_\_\_\_\_.

例句：①: **What photography skills were used for this photo?**

②: **The skills are** central composition **and** back lighting.

①: 這張照片用了哪些攝影技巧呢？

②: 中央構圖與逆光。

**⑦ I used \_\_\_\_\_ (photography skills) to present the photo because \_\_\_\_\_.**

例句：**I used** central composition **to present the photo because** I want to show the loneliness of the topic.

我用中央構圖來呈現這張照片，因為我想表現出主題的孤獨感。

**⑧ The photo looks \_\_\_\_\_ because of \_\_\_\_\_.**

例句：**The photo looks** dynamic **because of** its diagonal composition.

這張照片看起來富有動態感，因為對角線構圖。



## ■ 學科概念講解 Explanation of Academic Concepts

### 概念一

#### The Nature of Photography 攝影的本質

Photographs have a profound impact on us, preserving memories, evoking emotions, and telling stories. They capture significant moments in history and shape our understanding of the world. Iconic images such as the "Tank Man" in Tiananmen Square and the Syrian boy on a Turkish beach have become symbols of major events, provoking strong reactions from viewers. Photos transcend linguistic and cultural barriers, uniting us in a shared experience and transporting us to different places and times.

照片對我們具有深遠的影響，照片可以保存記憶、喚起情感，並講述故事。它們捕捉了歷史上的重要時刻，也塑造我們對世界的理解。像是天安門廣場上的「坦克人」、土耳其海灘上的敘利亞男孩等標誌性形像，已成為重大事件的象徵，也引起了觀看者的強烈反響。照片超越了語言和文化的障礙，將我們團結在一個共同的體驗中，並帶領我們穿越到不同的地方和時空。

Teacher: We've talked about some basic photography skills already. But photography is not only about skills, it is also about impact. So, right now, I want to show you a photo of "Alan Kurdi". Look at the photo and answer these questions: "What can you see in the photo? What do you think? What does it make you wonder about?" Later, you can share your answers to these questions.

Teacher: So, the first question is "What can you see in the photo?" Does anyone want to try?

Student: There is a boy wearing a red T-shirt lying on the beach.

Teacher: Okay. Well done. How about the second question, "What do you think?"

Student: I think the boy might be sleeping or playing on the beach.

Teacher: How about the third question, "What does it make you wonder about?"

Student: Where is the boy? Why is this little boy lying on the beach? What happened to him?

Teacher: Okay, well done, everyone. Now, I want to share an article with you. The article will tell the story behind the photo.

Now that we know more about the photo, in your opinion, what impact has this photo had on the world?

Student: People may start to care about the issue and donate to help those refugees.

Teacher: Yes, well done. So, actually, photos can do more than we realize. Later, I want to show you more impactful photos so we can see their power.

老師：我們之前已經討論了一些基本的攝影技巧。攝影不僅是技巧，更重要的是影響力。現在，我想給你們看一張照片：“Alan Kurdi”。請大家看照片並回答這些問題：「你看到了什麼？」「你覺得怎麼樣？」「它讓你好奇的部分是什麼？」等一下會請大家回答問題。

老師：第一個問題是「你看到了什麼？」，有人想回答看看嗎？

學生：沙灘上躺著一個穿著紅色 T 恤的男孩。

老師：很好。那第二個問題，「你覺得怎麼樣？」

學生：我覺得這個男孩可能正在沙灘上睡覺或玩耍。

老師：那第三個問題，「它讓你好奇的部分是什麼？」。

學生：男孩在哪裡？為什麼這個小男孩躺在沙灘上？他發生了什麼事情？

老師：大家都很棒。現在我想給大家看一篇文章。這篇文章將講述這張照片背後的故事。

老師：現在我們對這張照片有了更多的了解，那你們覺得，這張照片對世界產生了怎樣的影響？

學生：人們可能會開始關心這個問題並捐款幫助難民。

老師：是的，所以實際上照片的作用比我們意識到的還要多。等一下我會給大家看更多具有影響力的照片，讓我們看到照片的力量。

## 概念二

### Interpretation and Appreciation of Photography 攝影的詮釋與賞析

Photographers use the pictures they capture with their cameras to convey their own perspectives and emotions, and then interpret a theme. The audience interprets the photographs based on their own background experience and feelings upon viewing them. The same photo may evoke completely different messages in the eyes of different viewers, and sometimes, the image presented by a single photo may not fully depict the facts. The interpretation of photographic works is not only affected by the photographer's intentions when shooting but also by the audience's own interpretation and imagination.

攝影師藉由相機所捕捉的畫面，展現自己的視角和情感，進而詮釋主題。而觀眾則是透過觀賞攝影作品，根據自身的背景經驗和感受進行詮釋。同一張照片在不同的觀眾眼中所接收到的訊息可能會截然不同，有時，單一照片所呈現的影像也不盡然是事實的全貌。攝影作品的詮釋不僅受到攝影師拍攝時的意圖影響，也受到觀眾自身的詮釋和想像所影響。

Teacher: I want to show you a photo. Look at the photo and answer these questions with your team members: "What do you see in the photo? What do you think? How does it make you feel?" Later, I will ask for a volunteer to share your team's ideas.

Teacher: Okay, time's up. Let's get started. Who wants to share first?

Student: I see a man flipping someone off.

Teacher: Good job. Does anyone know who he is?

Student: He is Prince William.

Teacher: Excellent. How about the second question? What do you think?

Student: I think someone might have asked him an impolite question or said something rude to him. He felt angry and expressed his anger with this gesture.

Teacher: That's an interesting perspective. And how about the third question? How does it make you feel?

Student: I feel surprised to see a member of the royal family behave in such a way.

Teacher: Great answers, everyone. Now, I want to show you another picture.

Ta-dah! This photo was taken from a different angle. As we can see, the Prince William did not actually make a rude gesture. This just goes to show how photography can sometimes present an incomplete or misleading picture of reality.

老師：現在要給大家看一張照片。看完之後與組員討論以下問題：「你看到什麼？」、「你怎麼想呢？」、「它給你什麼感覺？」。等一下會請自願的同學分享你們小組的答案。

老師：好，時間到。那我們開始吧。誰想要先分享呢？

學生：我看到一個男人比中指。

老師：很好，那有人知道他是誰嗎？

學生：他是英國的威廉王子。

老師：很好！那接下來第二個問題，「你怎麼想呢？」

學生：也許有人問了他不禮貌的問題或說了什麼無理的話，他覺得很生氣，並用這個手勢表達。

老師：有趣的觀點。那麼第三個問題呢？它讓你有什麼感覺？

學生：看到王室成員有這樣的舉止動作，我覺得很驚訝。

老師：很好的答案。大家，現在，我想給你們看另一張照片。噹噹！這張照片是從不同的角度拍攝的。就像我們所看到的，實際上威廉王子並沒有做出不良的舉動，這顯示了攝影有時會呈現出不完整或誤導性的畫面。

## ■ 教學活動 Class Activities

### 活動一

說明：練習以不同攝影技巧呈現不同感受

The teacher divides the students into four groups, and each member of the group must choose one season each. The teacher introduces photography skills in five stages: composition, light and shadow, camera angle, photo color, and principles of art. After the teacher explains the technical skills at each stage, the students will practice and use the skills to capture the atmosphere and emotions of their selected topic. Finally, students will share their works with their team members.

General overview

Step 1: Choose a task (one of the four seasons: spring, summer, fall, winter).

Step 2: Introduce 5 key photography skills.

Step 3: Practice each skill through a task.

Step 4: Share how each skill makes you feel with your team members.

Step 5: Upload the 5 photos to Google Classroom.

**\*\*For each photography skill stage, repeat steps 2 to 5**

教師將學生分為四人一組，同組組員須從春夏秋冬中各選一季節且不得重複。教師分階段介紹攝影的技巧，分別為：階段一，構圖；階段二：光線與影子，階段三：相機角度，階段四：照片色彩，以及階段五：美的原理原則。在教師解說每一階段技巧後，學生將實際進行練習，並嘗試用該階段技巧呈現所選主題的氛圍與感受，最後與成員分享。

活動總體概述

步驟一：選擇一任務（四季：春、夏、秋、冬）

步驟二：教師介紹攝影技巧

步驟三：攝影技巧練習

步驟四：與同組組員分享使用不同攝影技巧所呈現的感受

步驟五：將照片上傳至 Google Classroom

**\*\*每一攝影技巧階段，重複步驟二至步驟五**

Teacher: We just finished stage 1's practice: composition. Now, please share how each composition makes you feel and write down what you learned from your team members. You can think about your feelings, places to take photos, how to take photos, and so on. You have 5 minutes. Go.

Teacher: Ok, time's up. Who wants to share what you have discussed?

Student: I said diagonal composition presents a dynamic sense of movement.

Teacher: Well done, that's a great observation. Does anyone else want to share?

Student: I think a frame within a frame presents a sense of mystery.

Teacher: Good point. Later, remember to choose the best photos and upload them to our Google Classroom.

Teacher: Ok. Now, we are going to talk about the next stage: light and shadow.

老師：我們剛剛完成了第一階段的練習：構圖。現在請分享每種構圖給你帶來的感受，並寫下你從組員那裡學到的東西。可以想想你的感受，拍照的地方，怎麼拍照等等，你們有 5 分鐘。開始吧！

老師：好的，時間到了。有人可以分享你與團隊成員討論的內容嗎？

學生：對角構圖呈現動態感。

老師：很好，這是一個很好的觀察。還有人想分享嗎？

學生：我認為框架中的框架呈現出一種神秘感。

老師：好點子。等一下記得選擇最好的照片，並上傳到我們班的 Google Classroom 喔。

老師：好的，那現在我們要談談下一個階段的練習：光與影。

## 活動二

說明：利用編導式攝影呈現對議題的看法

After introducing the concept of staged photography, the teacher selects an issue related to the UN Sustainable Development Goals (SDGs) and asks the students to find creative texts such as articles, lyrics, and poems that relate to the issue. The students will then use their staged photography skills to visually represent the content of the text. Finally, the finished product will be made into a PowerPoint presentation and presented in a short speech.

Assessment:

1. Choose an article, poem, etc. related to \_\_\_\_\_ issues and present it with staged photography.
2. A series of 8 photos.
3. The PowerPoint should include the introduction, motivation (perspective about the issue), photos, and the division of tasks.
4. Oral presentation: 5 mins.

教師在介紹編導式攝影後，選擇一 SDGs 中的議題，並讓學生找出與該議題相關的文章、歌詞、詩等作為創作文本，再用編導式攝影的方式，呈現文本內容，最後將成品做成 PPT，並進行口頭分享。

評量說明：

1. 選擇與 \_\_\_\_\_（議題）相關的文章、詩等文本，並用編導式攝影手法呈現
2. 一系列照片 8 張
3. PPT 內容須包含：主題介紹、創作動機、編導式攝影照片、成員分工
4. 口頭報告 5 分鐘

Teacher: We've talked about the skills of staged photography. In the next part, we are going to talk about staged photography with issues. I will give you four different links. Each link shows how the photographer used staged photography to present the issue.

Teacher: Each team member should choose a different link to watch and think about the following questions: "What issues can you see in these photos?", "What staged photography techniques did the photographer use?", "How does it make you feel?" "Do you have any questions about the photo? and "What do you want to know more about?" After that, share your ideas with your team members and write them on the mini-whiteboard.

Teacher: Ok, now I want a volunteer to share the ideas from your group. Let's start with the first photographer. Who wants to go first?



Student: We saw the photographer wanted to show gender issues. He took selfies and used black and white colors to present the photos. I think the series of photos is good because the photographer successfully presented these feelings.

Teacher: Well done! How about the second photographer?

Student: The photographer wants to show environmental issues. She made a model of a future building and took some photos of that. I want to know what materials the photographer used to make the model.

Teacher: Good! So, now we know how photographers used different skills to present their staged photography photos. It's your turn.

Teacher: Ok, this is your assessment. You should work with your team members, choose an issue you care about, and use staged photos to present your perspectives.

老師：我們討論了編導式攝影的相關技巧。下一部分，我們討論將議題融入編導式攝影。我會給你們四個不同的連結。這些連結都是關於攝影師如何使用編導式攝影照片來呈現議題。

老師：每位小組成員需選擇不同的影片連結觀看，並思考以下問題：「從這些照片中看到了什麼議題？」，「攝影師使用了哪些編導式攝影技巧？」，「你有什麼感覺？你有產生任何問題嗎？你想知道什麼？」。

之後，請與你的小組成員分享你的想法，並將想法寫在小白板上。

老師：好的，現在，我需要一位自願的同學來分享你們小組的想法。讓我們從第一位攝影師開始。有人想試試嗎？

學生：我們觀察到攝影師想要展示性別議題。他自拍並使用黑白顏色呈現照片。我覺得這個系列的照片拍的很好，攝影師很成功地表達了感受。

老師：很好！第二位攝影師呢？

學生：攝影師想展示環境問題。她製作了一個未來的建築模型並拍了一些照片。我想知道攝影師用什麼材料製作模型。

老師：好的！所以現在，我們知道了攝影師是如何使用不同的技巧來呈現他們的編導式攝影照片的，現在輪到你們了。

老師：我要介紹評量的部分。小組成員一起討論，選擇一個你們關心的議題，並用編導式攝影照片來表達你們的觀點。

## 單元二 藝術戲仿與性別平等議題

### Parody Art and Gender Equality

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#### ■ 前言 Introduction

Contemporary art education could shed light on social issues often overlooked or marginalized in mainstream culture, one of which is the issue of gender equality. This unit introduces gender issues in visual culture and guides learners to reflect on the concepts of the male gaze, the gender gap, mainstream culture and sub-culture, strengthening their critical thinking proficiency. After that, the instructor guides learners to select classic artworks in art history based on the theme of gender equality to create artwork through parody.

當代藝術教育能夠揭示主流文化中經常被忽視或邊緣化的社會議題，其中一個就是性別平等議題。本單元介紹視覺文化中的性別議題，引導學習者反思男性凝視、性別差距、主流文化和次文化的概念，加強批判性思維能力。課程進一步引導他們以性別平等為主題，選擇藝術史上的經典作品，通過戲仿策略進行藝術創作。

#### ■ 詞彙 Vocabulary

※粗黑體標示為此單元重點詞彙

詞彙	中譯	詞彙	中譯
<b>Gender and Culture 性別與文化</b>			
feminist art	女性主義藝術	ancient Greek art	古希臘藝術
<b>gender equality</b>	性別平等	<b>sculpture</b>	雕塑
avant-garde	前衛	plurality	多元性
visual culture	視覺文化	diagram	圖表



contemporary art	當代藝術	mainstream	主流
gaze	凝視	non-mainstream	非主流
stereotype	刻板印象	sub-culture	次文化
femininity	陰柔特質	cyberfeminism	賽博女性主義
masculinity	陽剛氣質	symbol	象徵
represent	再現	composition	構圖
gender gap	性別差距	hegemony	霸權
Parody 戲仿			
ironic	諷刺	satire	諷刺
imitation	模仿	criticize	批評
exaggerated way	誇張方式	hilarious	詼諧的
replace	替代	switch roles	轉換角色
eliminate	清除	substitute	取代

## ■ 教學句型 Sentence Patterns

### ① Contemporary artists tend to challenge the \_\_\_\_\_ in traditional arts.

例句：Contemporary artists tend to challenge the themes, materials and forms in traditional arts.

當代藝術家傾向於挑戰傳統藝術中的主題、材料與形式。

**② \_\_\_\_\_ pay(s) more attention to the issues of \_\_\_\_\_.**

例句(1) : Contemporary artworks **pay more attention to the issues of** culture.

當代藝術更關注文化議題。

例句(2) : Cindy Sherman's artworks **pay more attention to the issues of** gender equality.

辛蒂·雪曼的作品更關注性別平等問題。

**③ There is a significant existence of \_\_\_\_\_ in art history.**

例句(1) : **There is a significant existence of the** gender gap **in art history.**

藝術史中存在著顯著的性別差距。

例句(2) : **There is a significant existence of** high culture **in art history.**

藝術史中存在著顯著的高文化。

**④ The issues in contemporary art include but are not limited to \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.**

例句(1) : **The issues in contemporary art include but are not limited to** gender equality, human rights, **and** environmental problems.

當代藝術中的議題包含但不限於性別平等、人權和環境問題。

例句(2) : **The issues in contemporary art include but are not limited to** racism, sub-cultures, **and** social inequality.

當代藝術中的議題包含但不限於種族主義、次文化和社會不平等。

**⑤ \_\_\_\_\_ is a strategy that some artists use to protest against mainstream culture.**

例句(1) : Culture jamming **is a strategy that some artists use to protest against mainstream culture.**

文化干擾是一些藝術家用來反抗主流文化的運動。

例句(2) : Data visualization **is a strategy that “Guerrilla girls” use to protest against male hegemony culture.**

資料視覺化是“游擊女孩”藝術團體用來對男性霸權文化的藝術手法。

**⑥ In fact, a female artist's \_\_\_\_\_ is exactly the same as a male artist's.**

例句(1) : **In fact, a female artist's talent is exactly the same as a male artist's.**

事實上，女性藝術家的天賦與男性藝術家並無二致。

例句(2) : **In fact, a female artist's creativity is exactly the same as a male artist's.**

事實上，女性藝術家的創造力與男性藝術家並無二致。

**⑦ In \_\_\_\_\_, women are objects for the pleasure of the male viewer.**

例句(1) : **In many traditional Western paintings, women are objects for the pleasure of the male viewer.**

在許多西方傳統繪畫中，女性都是作為取悅男性觀眾的對象。

例句(2) : **In many sculptures, women are objects for the pleasure of the male viewer.**

在許多雕塑作品中，女性都是作為取悅男性觀眾的對象。

**⑧ A parody takes a piece of \_\_\_\_\_ and imitates it in a/an \_\_\_\_\_ way.**

例句(1) : **A parody takes a piece of artwork and imitates it in an exaggerated way.**

戲仿是以誇張的方式模仿藝術作品。

例句(2) : **A parody takes a piece of literature work and imitates it in a comedic way.**

戲仿是以喜劇的方式模仿文學作品。

## ■ 學科概念講解 Explanation of Academic Concepts

### 概念一

說明：介紹什麼是男性凝視 (male gaze)

#### Male Gaze

The “male gaze” is the gaze of seeing women, from a male, straight viewpoint which presents and depicts women as merely visual objects for the enjoyment of the straight male viewer. The male gaze can also be defined as the power to look, which is traditionally held by the dominant gender. In many traditional Western paintings, women are objects for the pleasure of the male viewer. There is a significant existence of the gender gap in art history. But in fact, a female artist’s talent is exactly the same as a male artist's.

男性凝視是從男性直觀的角度觀看女性，將女性呈現與描繪為純粹的視覺對象，供男性觀看者欣賞。男性凝視也可以定義為一種觀看的權力，傳統上由具支配權力之性別擁有。在許多西方傳統繪畫中，女性都是作為取悅男性觀眾的對象。藝術史中存在著顯著的性別差距。但事實上，女性藝術家的天賦與男性藝術家並無二致。

Teacher: There are very few female artists in the history of art; they gradually appeared later in history. This is a painting drawn by Johan Zoffany in 1771, titled "Academicians of the Royal Academy"

Teacher: There are two female academicians in the painting. Where are they?

Student: I found them! on the wall!

Teacher: Yes. They are not shown as present in the life drawing class depicted by Johann Zoffany.

Student: Who are they? Why are they depicted on the walls?

Teacher: They are Angelica Kauffmann and Mary Moser, two female founding academicians. It was considered improper for them to attend such classes in person, so Zoffany depicted them in portraits on the walls of the class.

Student: That is weird!

Teacher: Yes. The fact that men could view female models but women could not view male models shows the gender gap in the culture at that time.

Student: So, we often view artworks from a male perspective?

Teacher: That's right. This is called the "male gaze", and the abundance of the male gaze in traditional artworks highlights an unequal power relationship.

老師：藝術史上女藝術家很少，後來才逐漸出現。這是約翰佐芬尼於 1771 年所繪製的一幅名為《皇家科學院院士》的畫作。

老師：畫中有兩位女院士，大家能找到她們在哪裡嗎？

學生：我找到了！在牆壁上！

老師：是的。他們沒有被呈現在 Johann Zoffany 所描繪的寫生課現場上。

學生：她們是誰？為什麼她們被描繪在牆上？

老師：她們是兩位女性創始院士 Angelica Kauffmann 和 Mary Moser。

在當時因為他們親自去上這樣的課被認為是不合適的。因此，Zoffany 在班級的牆上描繪了他們的肖像。

學生：這很奇怪！

老師：是的，為什麼男性可以觀看女性模特兒，但是女性不能觀看男性模特兒，顯示當時文化中的性別差距。

學生：所以我們很多時候是以男性的角度去觀看藝術作品嗎？

老師：沒錯，這就是一種男性凝視，傳統藝術中大量的男性凝視，彰顯了一種不平等的權力關係。

## 概念二

說明：介紹什麼是戲仿(parody)

Parody is an imitation of the style and form of a particular artist or school of art. Parody is typically negative and ridiculous in intent. However, parody can serve a constructive purpose, or it can be an expression of a specific issue or concern.

模仿是對特定藝術家或藝術流派的風格和形式的模仿。戲仿通常是負面的和荒謬的。但是，戲仿可以具有建設性的目的，也可以表達對特定議題的關注。

Teacher: When we face the gender bias behind visual images, we can create new works through the strategy of parody.

Student: What is parody?

Teacher: Parody is an imitation of the style and form of a particular artist or school of art. It is typically negative and ridiculous in intent.

Student: Does it mean to reinterpret classic works and original works?

Teacher: Yes, by means of satiric or ironic imitation, parody can serve a constructive purpose, or it can be an expression of an issue that we are concerned about.

Teacher: But why in a particularly hilarious or ridiculous way, can't it be serious?

Student: That's the beauty of parody. Sometimes deliberately amplifying the original ideology, or switching roles, and using humorous and absurd ways will not make people feel hostile, but it can present different perspectives.

老師：當我們面對視覺形象背後的性別偏見時，我們可以通過戲仿的策略來創作新的作品。

學生：什麼是戲仿？

老師：戲仿是對特定藝術家或藝術流派的風格和形式的模仿，通常是消極的和可笑的。

學生：是指重新詮釋經典作品和原創作品嗎？

老師：是的，通過諷刺或反諷的模仿，戲仿可以起到建設性的作用，也可以表達我們所關心的問題。

學生：可是為什麼特別要用特別可笑或者荒謬的方式，不能嚴肅以對嗎？

老師：這就是戲仿的高明之處。有的時候刻意放大原來的意識形態，或是轉換角色，用幽默荒唐的方式，不會讓人產生敵意抗拒，而是呈現另一種觀點。

## ■ 教學活動 Class Activities

### 活動一

說明：本活動為課堂之引起動機

This activity uses questioning. It asks students to list three female artists in art history, to encourage students to reflect on gender bias and ideology in art history and gradually guide them into the main topic of the course.

本活動透過提問：請學生舉例藝術史中的三位女性藝術家，讓學生反思藝術史中的性別偏見與意識形態，逐漸引導進入課程的主題。

Teacher: Who can list three female artists in art history?

Student: I can't think of any.

Teacher: Is it a little difficult? In fact, this is a thought-provoking question. Why are there so few female artists? Is this because female artists are less talented?

Student: No!

Teacher: No, it is because of a bias in some art cultures. In past art contexts, men often acted as the viewers, while women acted as the watched objects.

Student: Are there more female artists now?

Teacher: There are gradually more female artists in the contemporary era, and they show their talents in various types of art.

Teacher: Let me introduce some well-known contemporary female artists!

老師：老師問同學一個問題，哪一位同學可以提出藝術史中三位女性藝術家？

學生：...

老師：有點困難嗎，其實這是一個發人省思的問題。老師問你們，這是因為女性藝術家比較沒有天賦嗎？

學生：不是！

老師：確實不是，這是因為文化中的結構性偏見，男性在過去的藝術脈絡中經常作為觀看者，而女性扮演著被觀看的對象。

學生：那現在有比較多女性藝術家嗎？

老師：當代逐漸有較多女性藝術家了，她們在各類型的藝術中嶄露各自的天賦。讓我來介紹幾位知名的當代女性藝術家吧！

## 活動二

說明：戲仿創作呈現性別

After guiding students to understand the concept of parody, the teacher guides them to select classic artworks in art history based on the theme of gender equality to create artwork through parody strategy.

讓學生理解戲仿的基本概念後，教師引導學生針對性別平等的主题，選取藝術史中經典的藝術作品，透過戲仿的創作方式進行藝術創作。

Teacher: Now we understand the creative process of parody, a common strategy in contemporary art. Next, we will start creating our own works.

Student: What should we do?

Teacher: Earlier we learned about some gender equality issues. Now, each group will choose a classic artwork and discuss using the strategy of parody in creating a work, which you will turn into a promotional poster.

Student: Sir, should the poster highlight gender inequality?

Teacher: It can either highlight negative gender inequality or positively promote gender equality. We can parody a classic artwork, ideally one that is over 50 years old and widely known.

Student: Why should the artwork be over 50 years old and widely known?

Teacher: It's because artworks over 50 years old are less likely to be copyrighted, and widely known works are more influential.

Student: I see, thank you, Sir!

Teacher: Great! Let's begin the discussion.

老師：現在我們已經知道戲仿的創作方式了，這是當代藝術很常見的創作策略。接下來，我們要讓大家開始創作。

學生：老師，請問我們要做什麼？

老師：剛剛我們有學到一些性別平等的議題，現在請各組選擇一個經典的藝術作品，然後透過小組討論要用何種戲仿手法，對經典作品進行二次創作，最後成為一張宣導海報。

學生：老師請問海報要突顯性別不平等的現象嗎？

老師：可以是突顯負面的性別不平等，也可以是正面宣導兩性平權喔，所以我們可以透過經典藝術作品加以戲仿，這個經典作品最好是五十年以上的，且廣為人知的作品。

學生：老師為什麼要五十年以上，又要廣為人知的作品呢？

老師：因為五十年以上的作品比較沒有侵犯著作權的問題，而廣為人知才有感染力啊！

學生：原來如此，謝謝老師！

老師：很好！讓我們開始討論吧。



### 單元三 新媒體與生物藝術

### New Media and Bioart

臺北市立大同高級中學 陳育祥老師

#### ■ 前言 Introduction

Contemporary art is a challenging area in art teaching because learners are expected to have a higher literacy of artistic expression and appreciation, and need to be able to think about current social issues in relation to contemporary artworks. This unit takes contemporary Bioart as the main focus, guiding students to analyze the concept and artworks of Bioart. In the final stage, each learner imagines a future species corresponding to issues related to humans, animals and technology, carrying out art creation through new media forms.

當代藝術是藝術教學中一個具有挑戰性的領域，因為學習者應該有更高的藝術表達和欣賞素養，並能夠思考與當代藝術相關的當前社會問題。本單元以當代生物藝術為重點，引導學生分析生物藝術的概念和藝術作品。在最後階段，每個學習者都想像一個與人類、動物和技術相關的問題相對應的未來物種，通過新的媒體形式進行藝術創作。

#### ■ 詞彙 Vocabulary

※粗黑體標示為此單元重點詞彙

詞彙	中譯	詞彙	中譯
<b>contemporary art</b>	當代藝術	aerial perspective	空氣透視法
<b>new media art</b>	新媒體藝術	triangular composition	三角構圖
life process	生命歷程	sfumato	暈圖法
ethical issue(s)	道德議題	<b>theme</b>	<b>主題</b>
<b>avant-garde</b>	前衛	form	形式

Bioart	生物藝術	material	材料
live tissue	活體組織	creation	創造
bacteria	細菌	represent	再現
living organism	活體生物	draft	草圖
Cyborg	賽博格	art movement	藝術運動
New Media 新媒體			
virtual reality (VR)	虛擬實境	modeling	建模
augmented reality (AR)	擴增實境	digitalization	數位化

## ■ 教學句型 Sentence Patterns

### ① What components are included in an artwork?

An artwork includes \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

例句：An artwork includes theme, materials and forms.

一個藝術作品包含主題、材料與形式。

### ② What materials are included in Bioart works?

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ are included in Bioart works.

例句：Live tissues, bacteria, and living organisms are included in Bioart works.

生物藝術作品材料包括活組織、細菌、生物體。

- ③ Do you think these materials could be art?**  
**I think these materials could (not) be art materials because art \_\_\_\_\_. .**

例句(1) : **I think these materials could be art materials because art** has no boundaries.

我認為這些可以作為藝術材料，因為藝術是沒有界限的。

例句(2) : **I think these materials could not be art materials because art** should arouse a sense of beauty.

我認為這些材料不可作為藝術材料，因為藝術應該引起美感。

- ④ What is the main concern of this artist?**  
**The main concern of this artist is \_\_\_\_\_. .**

例句(1) : **The main concern of this artist is** the definition of art.

這位藝術家最關心的是藝術的定義。

例句(2) : **The main concern of this artist is** the added value of art.

這位藝術家最關心的是藝術的附加價值。

- ⑤ How can we describe Bioart?**  
**Bioart is a/an \_\_\_\_\_ art movement.**

例句(1) : **Bioart is a** thought-provoking **art movement.**

生物藝術是一個發人深省的藝術運動。

例句(2) : **Bioart is an** avant-grade **art movement.**

生物藝術是一種前衛的藝術運動。

- ⑥ I think this species has the appearance of \_\_\_\_\_ because it was influenced by \_\_\_\_\_. .**

例句(1) : **I think this species has the appearance of** different animals **because it was fabricated by** genetic engineering.

我認為這個物種具有不同動物的外觀，因為它是通過基因工程製造的。

例句(2) : **I think this species has the appearance of** fish **because it was influenced by** global warming.

我認為這個物種具有魚的外觀是因為它受到了全球暖化的影響。

**7 Despite the potential benefits of \_\_\_\_\_, it still raises/causes serious \_\_\_\_\_ concerns/problems.**

例句(1) : **Despite the potential benefits of genetic engineering, it still raises serious ethical concerns.**

儘管基因技術具有潛在的好處，但它仍然引發了嚴重的道德問題。

例句(2) : **Despite the potential benefits of industrial development, it still causes serious environmental problems.**

儘管工業發展有潛在的好處，但它仍然會帶來嚴重的環境問題。

**8 Can you imagine \_\_\_\_\_ from the viewpoint of \_\_\_\_\_?  
I can imagine \_\_\_\_\_ from the viewpoint of \_\_\_\_\_.**

例句(1) : **I can imagine a future species from the viewpoint of environmental issues.**

我可以通過環境問題的角度來想像未來的物種。

例句(2) : **I can imagine a future creature from the viewpoint of genetic engineering.**

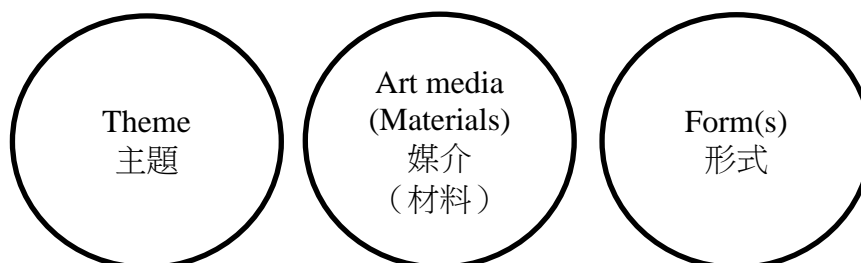
我可以通過基因工程的角度想像未來的生物。

■ **學科概念講解 Explanation of Academic Concepts**

**概念一**

說明：介紹藝術作品的基本元素

**藝術品的要素 The Basic components of Artwork**



Teacher: Have you ever thought about what components are included within an artwork?

Student: No.

Teacher: In fact, the artist thinks of a theme, selects some art media (materials), and transforms them into artworks through some creative techniques (skills) and forms.

Teacher: Traditional paintings are also formed in this way. Do you remember the artwork, the *Mona Lisa*?

Student: Yes!

Teacher: What is the theme of the *Mona Lisa*?

Student: A portrait of Mona Lisa?

Teacher: Great! So what are the materials used in the *Mona Lisa*?

Student: Oil paints.

Teacher: Great! Oil paints on wooden panels. And what is the form of the *Mona Lisa*?

Student: Do you mean the details of color and shape in the painting?

Teacher: Yes. Have you noticed the composition of the painting? It has a triangular composition, which makes the main character more stabilized. Sfumato is an Italian term. It is a painting technique for softening the transition between colors. Don't forget the aerial perspective too. Leonardo Da Vinci used this technique to make the *Mona Lisa* a focal point.

Student: Thank you, Sir!

老師：你們有沒有想過藝術作品中有哪些元素？

學生：……

老師：藝術家針對一個主題，選擇一些藝術媒介（材料），通過一些創作手法（技巧）和形式，將其轉化為藝術作品。

老師：傳統繪畫作品也是這樣形成的，你們還記得我們先前介紹的藝術作品蒙娜麗莎嗎？

學生：是的！

老師：蒙娜麗莎的主題是什麼？

學生：蒙娜麗莎的肖像？

老師：太好了！那麼蒙娜麗莎的材料是什麼？

學生：油彩！

老師：沒錯！油彩在木板上，那麼蒙娜麗莎的繪畫形式是什麼？

學生：你指的是繪畫中的顏色或形狀細節嗎？

老師：是的！你注意到這幅畫的構圖了嗎？它是三角構圖，為了使畫面主角更加穩定。Sfumato 是一個意大利術語，它是一種柔化顏色之間過渡的繪畫技術。

老師：還有別忘了空氣透視法，達文西就是用這個技巧讓蒙娜麗莎成為畫面中的焦點。

學生：原來如此，謝謝老師！

## 概念二

說明：介紹生物藝術（Bioart）

### 生物藝術的定義 The Definition of Bioart

Bioart is one of the avant-garde contemporary art. Bioart is an art practice where artists work with live tissues, bacteria, living organisms, and so on. It is a thought-provoking art movement which focuses on contemporary issues involving humans, animals and technology.

生物藝術是前衛的當代藝術之一。Bioart 是一種藝術實踐，藝術家使用活體組織、細菌、生物體等進行創作。它是一種發人深省的藝術運動，關注人類、動物和技術之間的當代問題。

Teacher: We just mentioned that the components of art including themes, mediums and forms. Contemporary artworks actually pay more attention to the issues in daily life, and the themes are usually connected to our living environment.

Student: Do you mean environmental and human rights issues?

Teacher: Yes! Contemporary artists constantly consider what forms and materials can reflect some contemporary issues. Therefore, in Bioart, artists work with live tissues, bacteria, living organisms, and so on.

Student: Bioart works sound really scary. Why do they want to do this?

Teacher: Not all of the works are scary. Some Bioart works may have a beautiful appearance, but if you think about it more deeply, the themes may still reflect the dark side of real-world issues. This is because one of the characteristics of contemporary art is to reflect important social issues. Despite the potential benefits of technology, some technologies like genetic engineering, raise serious ethical questions.

Student: Do you mean like cloning sheep?

Teacher: Yes! What ethical problems can you think of regarding biotechnology?

老師：我們剛剛提到藝術的構成要素包括主題、媒介和形式。當代藝術其實更關注我們日常生活中的議題，因而題材與我們的生活環境息息相關。

學生：比如環境和人權問題？

老師：是的！當代藝術家不斷思考什麼樣的形式和材料可以反映一些當代問題。

老師：因此，在生物藝術中，藝術家使用活體組織、細菌、生物體等進行創作。

學生：生物藝術作品應該很可怕，那為什麼他們要這樣做？

老師：並不是所有的作品都是可怕的，有些生物藝術作品可能有漂亮外表，但如果你深入研究，主題可能仍然反映了現實世界議題的黑暗面。

老師：因為當代藝術的特點之一就是反映重要的社會問題。儘管技術有潛在的好處，但基因工程也引發了嚴重的倫理問題。

學生：像複製羊？

老師：是的！關於生物技術，你還能想到哪些倫理問題？

## ■ 教學活動 Class Activities

### 活動一

說明：引起動機

生物藝術 Bioart	賽博格 cyborg
當代藝術 contemporary art	基因工程 genetic engineering
前衛 avant-garde	活體生物 living organism
藝術媒材 art medium	道德議題 ethical issue
活體組織 living tissue	永續發展目標 Sustainable Development Goals

Before the class starts, the teacher asks students to search for key words related to the course, aiming to establish their prior knowledge and pique their curiosity about the topic. Then the teacher will introduce a book about future species to lead to the class topic - Bioart.

在課堂開始前，教師先引導學生搜尋本課程之關鍵詞彙，目的在於建立學生先備知識，並引起對主題之好奇心。之後透過一本關於未來物種的書籍介紹，逐步引導生物藝術的相關主題。

Teacher: Good morning everyone! Today our topic is Bioart. Before we start the class, I will give you ten minutes to search for these terms on the internet and come up with some examples, and then I will invite several students to share their findings later on.

Student: (Complete the task and share their results.)

Teacher: Ok! Thanks for sharing. I think you already have basic understanding of these terms, and they are all related to our topic. Now I want to show you an interesting book.

Student: This book looks awesome!

Teacher: This book is called *After Man: A Zoology of the Future*. It is a 1981 speculative evolution book written by Scottish geologist Dougal Dixon and illustrated by several illustrators including Diz Wallis, John Butler, Brian McIntyre, Philip Hood, Roy Woodard and Gary Marsh.



Student: Why are these animals so ugly?

Teacher: The shapes of their bodies follow the functions. Like the bats that fool pollinating insects into landing in their hungry mouths.

Student: Why did the author want to imagine so many weird creatures?

Teacher: Millions of years from now, Earth will be a very different place. It may look like an alien planet. Can you imagine what animals might be like millions of years from now?

老師：大家早安！今天我們的主題是生物藝術。在我們開始課程之前，我會給大家十分鐘的時間在網路上搜尋這些課程相關詞彙，並思考有哪些例子，稍後我會邀請幾位學生分享。

學生：（做調查並分享結果。）

老師：好的！感謝分享。我想你已經對這些詞彙有了基本的了解，而且它們與我們的主題相關。現在我想給你們看一本有趣的書。

學生：這本書太棒了！

老師：這本書叫做 *After Man: A Zoology of the Future*。這是一本 1981 年由蘇格蘭地質學家道格爾·狄克森(Dougal Dixon)撰寫並由包括迪茲·威利斯(Diz Wallis)、約翰·巴特勒(John Butler)、布萊恩·麥金泰爾(Brian McIntyre)、菲利普·胡德(Philip Hood)、羅伊·伍達德(Roy Woodard)和蓋瑞·馬斯(Gary Marsh)在內的多位插畫家繪製的書籍。

學生：為什麼這些動物都這麼醜？

老師：他們的身體形狀都遵循著某些功能。像這些蝙蝠可以騙過昆蟲而讓牠們飛進飢餓的嘴裡。

學生：為什麼作者要想像那麼多奇怪的生物？

老師：數百萬年後，地球將是一個非常不同的地方，也可能看起來像一個外星球。所以你們能想像幾百萬年後，動物會是什麼樣子嗎？

## 活動二

說明：未來物種創作活動

### Create a future species based on the current environmental or social problems

In the creation stage, each learner imagines a future species corresponding to issues about humans, animals and technology, creating artworks in a combination of traditional and new media forms.



**根據當前環境或社會問題創造一個未來物種**

在創作階段，每位學習者想像一個與人類、動物和技術相關問題相對應的未來物種，以結合傳統和新媒體形式的方式創作藝術作品。

Teacher: It's time for you to create some artworks of your own! Create a future species based on the current environmental or social problems, and sketch it on your worksheet.

Student: Sir. Do you mean these factors can influence this future species?

Teacher: Yes! If you find it hard to come up with some species, you may take the Sustainable Development Goals (SDGs) as your point of reference. Let's think about a future species together. The birth of this species can be due to human, environmental or technological factors. Try to consider real social issues and use your imagination.

Student: But I am such an uncreative person...

Teacher: If you find it difficult to think creatively, try using the SCAMPER method. The letters SCAMPER stand for (S) Substitute, (C) Combine, (A) Adapt, (M) Modify, (P) Put to another use, (E) Eliminate and (R) Reverse. Following these keywords can help you diversify your ideas and address problems during the creative thinking process.

Teacher: We'll have a group discussion to share your drafts later. Try to get some feedback and revise your ideas.

Student: We are all done!

Teacher: You all did a great job. Next week we will learn to draw 3D computer graphics based on hand-drawn images.

老師：是時候創作一些自己的藝術作品囉！請同學根據當前的環境或社會問題，思考並創建一個未來物種，並請在學習單中畫出草圖。

學生：老師的意思是這個想像的未來物種，是受到這些因素的影響？

老師：是的！如果你們覺得有些物種很難想出，可以參考永續發展目標（SDGs），去思考一個未來的物種。這個物種的產生可以是由於人類、環境或科技因素造成的。嘗試去思考真實的社會議題並發揮一些想像力。

學生：可是我真的是一個沒有創意的人...

老師：如果你發現很難創意思考，可以試著透過 SCAMPER 策略。SCAMPER 是 (S) 替代、(C) 連結、(A) 調適、(M) 修改、(P) 另作他用、(E) 消除和 (R) 反轉的字母縮寫。透過這些關鍵字可以幫助創造性思考，使想法發散並解決問題。

老師：之後我們將會進行分組討論，分享你們草稿並嘗試獲得一些回饋，並繼續修改你們的想法。

學生：我們完成了！

老師：你們都做得很好。下週我們將學習繪製手畫圖像的 3D 電腦繪圖。

## 單元四 世界音樂-拉丁音樂

### World Music – Latin Music

國立新竹科學園區實驗高級中等學校 連冠閔老師

#### ■ 前言 Introduction

In this unit, students will learn about some types of world music, specifically Latin music and Latin dance. Firstly, we will discuss Latin music and different types of Latin dance. Latin music is unique because it blends different rhythms and instruments together and it can be further divided into different types.

在本單元中，學生將學習世界音樂的數種型態，特別是拉丁音樂和拉丁舞蹈。首先，我們將討論拉丁音樂和不同型態的拉丁舞蹈。拉丁音樂的獨特之處在於它將不同的節奏和樂器融合在一起，並且可以分為不同的型態。

#### ■ 詞彙 Vocabulary

※粗黑體標示為此單元重點詞彙

詞彙	中譯	詞彙	中譯
Latin	拉丁（語系）的	origin	起源
Caribbean	加勒比海地區	percussion	打擊樂器
the Dominican Republic	多明尼加共和國	claves	響棒
Argentina	阿根廷	<b>guiro</b>	刮胡
collection	集合	<b>conga</b>	康加鼓
Folk music	民謠音樂	<b>maracas</b>	沙鈴
population	人口	pitched	定音的

rhythmic	富節奏的	cha-cha	恰恰舞
melodic	曲調的	tango	探戈舞
Cuban	古巴的	salsa	騷沙舞
indigenous	本土的	rumba	倫巴舞
tribal	部落的	sensual	感官的
upbeat	弱起拍		

## ■ 教學句型 Sentence Patterns

### ① \_\_\_\_\_ is widely recognized as \_\_\_\_\_ (prep.) \_\_\_\_\_.

例句(1) : Latin music **is widely recognized as** a collection of popular and folk music **from** Latin America.

拉丁音樂被廣泛認為是來自拉丁美洲的流行音樂和民謠音樂的集合。

例句(2) : Pop music **is widely recognized as** a genre of popular music that originated **in** the mid-1950s.

流行音樂被廣泛認為是起源於 1950 年代中期的通俗音樂流派之一。

### ② Melodic instruments such as \_\_\_\_\_ play a fundamental role in \_\_\_\_\_.

例句(1) : **Melodic instruments such as** the guitar and trumpet **play a fundamental role in** Latin music genres.

類似吉他和小號的曲調樂器在拉丁音樂流派中扮演著基本的角色。

例句(2) : **Melodic instruments such as** the saxophone and violin **play a fundamental role in** some pop music genres.

類似薩克管和小提琴的曲調樂器在某些流行音樂流派中扮演著基本的角色。

**③ \_\_\_\_\_ is typically sung in (a language) and is a fusion of various \_\_\_\_\_ influences.**

例句(1) : Latin music **is typically sung in** Spanish and **is a fusion of various** cultural **influences**.

拉丁音樂通常是用西班牙語演唱，是各種文化影響的融合。

例句(2) : Pop music **is typically sung in** English and **is a fusion of various** musical **influences**.

流行音樂通常是以英語演唱，是各種音樂影響的融合。

**④ \_\_\_\_\_ are well-known for their fusion of \_\_\_\_\_.**

例句(1) : Latin music genres such as salsa and rumba **are well-known for their fusion of** rhythms and instruments.

諸如騷沙舞和倫巴舞的拉丁音樂流派，以其融合節奏和樂器而著稱。

例句(2) : Pop music genres such as rock and hip hop **are well-known for their fusion of** various musical styles and instruments.

諸如搖滾和嘻哈的流行音樂流派，以其融合各種音樂風格和樂器而聞名。

**⑤ We can broadly define \_\_\_\_\_ as \_\_\_\_\_.**

例句(1) : **We can broadly define** Latin music **as** highly rhythmic music with Latin American origins.

我們可以廣泛地定義拉丁音樂為自拉丁美洲起源且富節奏感的音樂。

例句(2) : **We can broadly define** pop music **as** a genre that is characterized by its catchy melodies and memorable lyrics.

我們可以廣泛地定義流行音樂為一種以其朗朗上口曲調和易記歌詞為特徵的音樂流派。

**⑥ \_\_\_\_\_ have/has gained popularity worldwide since \_\_\_\_\_.**

例句(1) : Latin music **has gained popularity worldwide since** the 20th century.

自 20 世紀以來，拉丁音樂在全球廣受歡迎。

例句(2) : Pop music **has gained popularity worldwide since** the mid-20th century.

自 20 世紀中期以來，流行音樂在全世界廣受歡迎。

**⑦ Widely used \_\_\_\_\_ include \_\_\_\_, \_\_\_\_, and \_\_\_\_.**

例句(1) : **Widely used** percussion instruments in Latin music **include** the claves, the guiro, **and** the conga drum.

拉丁音樂中廣泛使用的打擊樂器包括響棒、刮胡和康加鼓。

例句(2) : **Widely used** percussion instruments in pop music **include** the jazz drums, the tambourine, **and** the cymbal.

流行音樂中廣泛使用的打擊樂器包括爵士鼓、鈴鼓和鈸。

**⑧ \_\_\_\_\_ and \_\_\_\_\_ are closely connected due to \_\_\_\_\_.**

例句(1) : Latin music **and** dance **are closely connected**, partly **due to** their African musical roots.

拉丁音樂和舞蹈由於其非洲音樂根源而緊密相關。

例句(2) : Pop music **and** dance **are closely connected due to** their lively and energetic beats.

流行音樂和舞蹈由於其生動有力的拍點而緊密相關。

**⑨ \_\_\_\_\_ is widely considered to be \_\_\_\_\_, with roots in \_\_\_\_\_.**

例句(1) : Rumba **is widely considered to be** the ‘father of Latin dance’, **with roots in** African tribal dance and Cuban folk music.

倫巴舞音其源於非洲部落舞蹈和古巴民謠音樂而被廣泛認為是「拉丁舞之父」，它源於非洲部落舞蹈和古巴民間音樂。

例句(2) : Hip hop dance **is widely considered to be** a significant part of hip hop culture, **with roots in** African American and Latino American communities.

嘻哈因其源於非裔美國人和拉丁美洲社區而被廣泛認為是嘻哈文化的重要部分。

**⑩ \_\_\_\_\_ is/are the most commonly used in \_\_\_\_\_.**

例句(1) : Percussion and melodic instruments **are the most commonly used in** Latin music.

打擊樂和曲調樂器常用於拉丁音樂。

例句(2) : Guitar and piano **are the most commonly used** melodic instruments **in** pop music.

吉他和鋼琴是常用於流行音樂中的曲調樂器。

## ■ 學科概念講解 Explanation of Academic Concepts

### 概念一

#### **Origin and Culture of Latin Music** 拉丁音樂的起源及文化

Latin music is widely recognized today as a collection of popular and folk music from Latin America, which includes the Caribbean, Central America, and South America. We can broadly define Latin music as highly rhythmic music with Latin American origins, and it is typically sung in Spanish. The music is a fusion of various cultural influences.

拉丁音樂在今天被廣泛認為是來自包括加勒比海、中美洲和南美洲在內的拉丁美洲，其流行音樂和民謠音樂的集合。我們可以廣泛地定義拉丁音樂為具有拉丁美洲起源且富節奏感的音樂，通常用西班牙語演唱，這種音樂是各種文化影響的融合。

#### **Types of Latin Music and Their Countries of Origin** 拉丁音樂的型態與其起源國家

Latin music genres such as salsa, rumba, and others are well-known for their fusion of rhythms, instruments, and forms from Africa and Europe, combined with indigenous music.

Since the 20th century, Latin music has gained popularity worldwide and is enjoyed by Spanish, Portuguese and English-speaking populations in North America, Central America, South America, and Spanish-speaking Caribbean nations such as Cuba and the Dominican Republic.

拉丁音樂流派如騷沙舞、倫巴舞等因融合非洲和歐洲的節奏、樂器和曲式，再加上原住民族音樂而聞名。

自 20 世紀以來，拉丁音樂在全球廣受歡迎，並在北美洲、中美洲、南美洲，以及像古巴和多明尼加共和國此類西班牙語系加勒比海國家，受到西班牙語和英語族群的喜愛。

#### **Musical Instruments of Latin Music** 拉丁音樂的樂器

In Latin music, the instrumental part is a crucial element. Percussion and melodic instruments are the most commonly used, with widely used percussion instruments such as claves, the guiro, the conga drum, maracas, and more.

Melodic instruments that can produce a pitched melodic line, such as the guitar and trumpet, play a fundamental role in Latin music genres.

在拉丁音樂中，樂器部分是一個至關重要的元素。打擊樂器和曲調樂器是最常用的，其中最廣泛使用的打擊樂器包括響棒、刮胡、康加鼓、沙鈴等。

能夠產生具有音高曲調線條的樂器，如吉他和小號，在拉丁音樂流派中扮演著重要的角色。

## Latin Music and Dance 拉丁音樂與舞蹈

Latin music and dance are highly connected, partly due to their African musical roots. There are several kinds of Latin dance, including salsa, Rumba, cha-cha, and Tango.

With roots in African tribal dance and Cuban folk music, Rumba is widely considered the ‘father of Latin dance’.

Cha-cha is a lively Latin dance with upbeat music and quick, rhythmic movements that originated in Cuba.

Tango, another sensual Latin dance, originated in the early 1900s among working-class communities in Argentina. Today, it is one of the most beloved dances worldwide.

拉丁音樂和舞蹈有著密切的連結，部分原因在於它們的非洲音樂根源。拉丁舞有幾種類型，包括騷沙舞、倫巴舞、恰恰舞和探戈舞。

倫巴舞起源於非洲部落舞蹈和古巴民謠音樂，被廣泛認為是「拉丁舞之父」。

恰恰舞是一種輕快的拉丁舞蹈，源自古巴，弱起拍且為快速富節奏感的律動。探戈舞是另一種性感的拉丁舞蹈，起源於 1900 年代初期的阿根廷工人階級社區。如今，它是全球最受喜愛的舞蹈之一。

Teacher: (After playing the music) How would you describe the music?

Student: The music sounds highly rhythmic and has lots of percussion instruments.

Teacher: Do you think the music is African music or Latin music?

Student: It's hard to tell. It seems that the music has both features, but is more Latin style because of the melody playing.

Teacher: What types of instruments can you identify in the song we've been listening to?

Student: I can hear the sound of maracas and some kind of drums. Maybe a conga drum?

Teacher: That's right. Those are commonly used percussion instruments in Latin music. What about the melodic instruments? Can you hear any?

Student: I think I can hear a trumpet and a guitar. They play a big role in Latin music genres, don't they?

Teacher: Yes, you are correct. Melodic instruments such as the guitar and trumpet are essential in Latin music genres. They create the pitched melodic lines that distinguish Latin music from other genres. And as we learned earlier, Latin music and dance are highly connected, with each genre having its unique dance styles. Let's stand up and practice dancing. Now, two- steps-up and two-steps -back, do the movement while I play the music again.



老師：（播放音樂後）你會如何描述這首音樂？

學生：音樂聽起來明顯有節奏感，且使用許多打擊樂器。

老師：你猜這首音樂是非洲音樂還是拉丁音樂？

學生：很難說，它似乎具有兩種特性，但因為曲調演奏的緣故，比較多些拉丁風格。

老師：你能辨識出我們正在聽的這首歌中的樂器嗎？

學生：我有聽到沙鈴和一些鼓聲，也許是康加鼓？

老師：是的，那些是拉丁音樂中常用的打擊樂器。那麼，你能聽出哪些曲調樂器嗎？

學生：我想我聽到小號和吉他。它們在拉丁音樂流派中有著重要角色，對吧？

老師：是的，你說得對。像吉他和小號這樣的曲調樂器在拉丁音樂流派不可或缺。它們創造出定音的曲調線條，且如我們之前所學的，拉丁音樂和舞蹈高度相關，每一流派有其獨特的舞蹈風格。現在讓我們起立來練習跳舞。我會播放音樂，你們跟著音樂的節奏做兩步前進和兩步後退的動作。

## ■ 教學活動 Class Activities

### 活動一

說明：讓學生利用打擊樂器創作且發表

1. Divide the class into several groups and provide each group with musical percussion instruments.
  2. Instruct the groups to create sounds and rhythms inspired by Latin music.
  3. Each group should then compose a simple song that incorporates Latin music-style rhythms and then practice it.
  4. Finally, have each group perform their song, and ask the rest of the class to identify the Latin rhythms in their compositions.
- 
1. 將班級分為幾組，為每組提供打擊樂器。
  2. 指導各組用拉丁音樂作為靈感創造出聲響和節奏。
  3. 然後每組應創作一首簡單的歌曲，融合拉丁音樂風格的節奏，並加以練習。
  4. 最後，讓每組表演他們的歌曲，並要求其他同學識別其作品中的拉丁節奏。



Teacher: Good morning, class. Today we're going to have a fun activity that involves music and creativity. I'm going to divide the class into several groups and provide each group with musical percussion instruments.

Student: Sounds exciting! What are we going to do with them?

Teacher: You're going to create sounds and rhythms inspired by Latin music. Each group will then compose a simple song that incorporates Latin music-style rhythms and practice it. Once you're ready, we'll have each group perform their song to the whole class.

Student: That sounds like a lot of fun, but I'm not sure how to create Latin rhythms.

Teacher: Don't worry, I'll give you some examples to get you started. You can also research different Latin music genres and listen to some popular songs to get some inspiration. And don't forget to practice and experiment with different rhythms until you find a suitable song.

Student: Okay, got it! What's next?

Teacher: Once each group is ready, we'll have a little performance session. And after each performance, I'll ask the rest of the class to identify the Latin rhythms in their compositions.

Student: That sounds like a great way to learn more about Latin music and rhythms. I can't wait to get started!

Teacher: Great! Let's get the instruments and start creating some music.

老師：大家早，今天我們要做一个關於音樂和創意的有趣活動。我會把班上分成幾組，並為每組提供打擊樂器。

學生：聽起來很刺激，老師！我們要用樂器做什麼呢？

老師：你們要創作出受拉丁音樂啟發的聲音和節奏。每個小組都要創作一首包含拉丁音樂風格節奏的簡單歌曲，並加以練習。準備好後，我們會讓每個小組為全班表演他們的歌曲。

學生：聽起來很有趣，但我不太確定怎麼創作拉丁節奏。

老師：別擔心，我會給你一些範例。你也可以研究不同的拉丁音樂流派，聽一些流行歌曲，尋找靈感。還要記得練習和嘗試不同的節奏，直到找到最適合你的歌曲為止。

學生：好的，我明白了！接下來要怎麼做？

老師：每個小組準備好後，我們會有一個小表演。每次表演結束後，我會要求全班辨識出他們作品中的拉丁節奏。

學生：這聽起來是一個了解更多拉丁音樂和節奏的好方法。我迫不及待想要開始！

老師：太好了！讓我們拿起樂器，開始創作音樂吧。

## 單元五 浪漫時期音樂

### Music of the Romantic Era

國立新竹科學園區實驗高級中等學校 連冠閔老師

#### ■ 前言 Introduction

The Romantic era in music started around 1813 and ended around 1910. During that time, the concept of personal feelings gradually became valued, and composers saw music as a means of individual and emotional expression. The Romantic movement in music rejected the borders of Classical convention. Composers experimented with new and daring harmony and form. They pursued the emotional, intuitive, and nature for inspiration, with more connections to art and literature.

Some characteristics of the Romantic period include program music, virtuoso performers, exoticism and nationalism, expressive tone colors, and an expanded range of dynamics and forms. Beethoven is the chief composer of the wave, making the transition from the Classical period to the Romantic period. He broke the strict rules and expanded the boundaries.

The instrument that symbolizes the Romantic period most is the piano. There was a demand for music that could be played at home and in the salon. Liszt and Chopin were the greatest virtuosos of their times.

音樂中的浪漫時期始於約 1813 年，結束約於 1910 年左右。在此期間，「個人感受」的概念逐漸變得有價值，作曲家也視音樂為個人及情緒表達的一種方法。音樂中的浪漫主義摒棄古典習俗的界線，作曲家以新且大膽的和聲與曲式進行實驗，他們追求情緒的、直覺的和自然的靈感，與藝術和文學有更多的結合。

浪漫時期的一些特徵包括標題音樂、炫技演奏者、異國情調和國家主義、富有表現力的音色，以及擴大範疇的力度和曲式。

貝多芬是這波浪潮中的領頭羊，使古典時期到浪漫時期得以的，他打破嚴格的規則並延展其界限。

在當時象徵浪漫時期的樂器是鋼琴，音樂的需求就是可在家也可在沙龍演奏，李斯特和蕭邦是彼時最偉大的炫技演奏者。

## ■ 詞彙 Vocabulary

※粗黑體標示為此單元重點詞彙

詞彙	中譯	詞彙	中譯
virtuoso/virtuosi (plural)	炫技者	dynamics	力度
dramatic	戲劇性的	transition	過渡
expressive	富表情的	aristocracy	貴族
inventive	創意的	symbol	象徵
passionate	熱情的	music critic	音樂評論
inspiration	靈感	<b>innovation</b>	<b>創新</b>
literature	文學	<b>leitmotif</b>	<b>主導動機</b>
theater	戲劇／劇場	character	角色
<b>program music</b>	<b>標題音樂</b>	<b>motif</b>	<b>動機</b>
<b>harmony</b>	<b>和聲</b>	<b>rubato</b>	<b>彈性速度</b>
<b>form</b>	<b>曲式</b>	imagination	想像力
pursue	追求	<b>modulation</b>	<b>轉調</b>
exoticism	異國情調	rhapsody	狂想曲
expanded	擴張的	nocturn	夜曲
		mazurka	馬厝卡舞曲

## ■ 教學句型 Sentence Patterns

### ① There are/were two important \_\_\_\_\_ (that-clause) : \_\_\_\_\_ and \_\_\_\_\_.

例句(1) : **There were** two **important** events **that** had very noticeable effects on music: the Industrial Revolution **and** the middle class in society.

有兩項重要的事件發生，對音樂產生非常顯著的：工業革命和社會中產階級。

例句(2) : **There are** two **important** elements **that** have crucial impacts on health: nutrition **and** exercise.

有兩項重要的因素對健康產生關鍵的影響：營養和運動。

### ② \_\_\_\_\_ replaced \_\_\_\_\_, becoming a symbol of the time.

例句(1) : The piano **replaced** the harpsichord, **becoming a symbol of the time**.

鋼琴取代了大鍵琴成為當時的象徵。

例句(2) : Cars **replaced** horses, **becoming a symbol of the time**.

汽車取代了馬車成為當時的象徵。

### ③ Another development is/was \_\_\_\_\_ of \_\_\_\_\_.

例句(1) : **Another development was** the growth **of the** middle class.

另一個發展是中產階級的興起。

例句(2) : **Another development was** the use **of** baton.

另一個發展是指揮棒的使用。

### ④ Unlike (subject) who (子句) , \_\_\_\_\_.

例句(1) : **Unlike** composers before **who** lived on the patronage of the upper class or aristocracy, they made a living by publishing musical scores, holding public concerts, or being music critics.

不像之前依賴上層貴族贊助的作曲家一樣，他們靠出版樂譜、舉辦公共音樂會或者撰寫樂評維生。

**⑤ \_\_\_\_\_ followed \_\_\_\_\_'s innovation, known as \_\_\_\_\_.**

例句(1) : Puccini and Strauss **followed** Wagner's **innovation, known as** leitmotifs.

普契尼和史特勞斯跟隨著華格納的創新，即以引導動機著稱。

例句(2) : Brahms and Mahler **followed** Beethoven's **innovation, known as** **expanding the scale of a symphony**.

布拉姆斯和馬勒跟隨著貝多芬的創新，即以擴大規模的交響曲著稱。

**⑥ The \_\_\_\_\_ had a big influence on the progress of \_\_\_\_\_.**

例句(1) : **The** orchestra **had a big influence on the progress of** instruments.

管弦樂團對於樂器的進步影響頗大。

例句(2) : **The** keyboard instrument **had a big influence on the progress of** piano.

鍵盤樂器在鋼琴進展影響頗大。

**⑦ \_\_\_\_\_ attempted to use \_\_\_\_\_ to \_\_\_\_\_.**

例句(1) : Composers **attempted to use** music **to** express deep emotions and passion.

作曲家企圖使用音樂來表現深度的情緒和熱情。

例句(2) : Performers **attempted to use** their interpretation **to** express composers' contents.

演奏家企圖透過詮釋來表現作曲家的作品內容。

**⑧ \_\_\_\_\_ is/was also an inspiration for \_\_\_\_\_.**

例句(1) : Nature **was also an inspiration for** composers.

大自然也是作曲家擷取靈感的來源。

例句(2) : Geometry **is also an inspiration for** designers.

幾何圖也是設計師擷取靈感的來源。

**⑨ \_\_\_\_\_ allowed \_\_\_\_\_ to explore a greater variety of \_\_\_\_\_.**

例句(1) : The progress of instruments **allowed** composers **to explore a greater variety of** sounds.

樂器的進步使作曲家能夠探索更多種類的聲音。

例句(2) : The progress of performers **allowed** composers **to explore a greater variety of** skills.  
演奏家的進步使作曲家能夠透索更多種類的技巧。

⑩ \_\_\_\_\_ can be recognized by \_\_\_\_\_, use of \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

例句(1) : This music **can be recognized by** a larger orchestra, **use of** rubato, complex harmonies, **and** modulations.  
音樂得以透過更龐大的管弦樂團、彈性速度的使用、繁複的和聲及轉調加以識別。

例句(2) : The folk music **can be recognized by** tonality, **use of** rhythm, harmony, and instruments.  
民謠音樂得以藉由音調調性、節奏的使用、和聲和樂器加以識別使用。

## ■ 學科概念講解 Explanation of Academic Concepts

### 概念一

說明：講解浪漫時期的歷史背景，及其轉而影響音樂型態上表現的因素，包含樂器的發展和幾位代表性的作曲家。

#### Historical Background 歷史背景

In the nineteenth century, there were two important events that had very noticeable effects on music: the Industrial Revolution and the middle class in society.

The Industrial Revolution caused a major improvement in instrument-making, like woodwinds and brass instruments. The piano also replaced the harpsichord, becoming a symbol of the time. Another development was the growth of the middle class. Unlike composers before who lived on the patronage of the upper class or aristocracy, they made a living by publishing musical scores, holding public concerts, or being music critics.

在 19 世紀，發生兩項對音樂產生顯著影響的重要事件：工業革命和社會中產階級。工業革命對樂器製造帶來重大改進，如木管樂器和銅管樂器。而鋼琴也取代了大鍵琴，成為了當代的象徵。

另一個發展是中產階級的崛起。與以前靠上層貴族贊助為生的作曲家不同，他們以出版樂譜、舉辦公共音樂會或撰寫音樂評論家維生。

## Composers 作曲家

There are quite a few notable composers of the Romantic period.

Piano virtuosos, like Liszt and the piano-poet Chopin. Verdi, Bizet, and Wagner are famous composers in the opera field. Puccini and Strauss followed Wagner's innovation, known as leitmotifs, in which characters are given motif melodies in opera.

浪漫時期有不少著名作曲家。

鋼琴大師如李斯特、鋼琴詩人蕭邦，而威爾第、比才和華格納都是歌劇界的著名作曲家。普契尼和史特勞斯遵循華格納的創新，即以賦予劇中角色動機曲調之引導動機著稱。

## Instruments and Sound 樂器和聲響

The orchestra had a big influence on the progress of instruments, and orchestras also needed to be expanded in scale as well. This allowed composers to explore a greater variety of sounds, and it helped them develop their individuality and creativity.

管弦樂團在樂器的進化上影響頗大，且同時有擴大自身規模的需要。這使作曲家能夠探索更多種類的聲音，使之發展個性和創意。

## Music Style 音樂風格

Romantic era music was full of expression and imagination. Composers attempted to use music to express deep emotions and passion through telling stories, or by describing places and events. Nature was also an inspiration for composers; Mendelssohn's "Hebrides Overture" was an example. The music of the time can be recognized for a larger orchestra, use of rubato, complex harmonies, and modulations.

浪漫時期的音樂充滿表現力和想像力。作曲家試圖以說故事、地點及事件的描述，使用音樂表達深刻的情緒和熱情。

大自然也是作曲家的靈感來源。孟德爾頌的《赫布里底序曲》就是一個例子。

彼時的音樂透過更具規模的管弦樂團、彈性速度的使用、繁複的和聲和轉調來加以識別。

Teacher: Before talking about musicians of the Romantic era, we need to understand the background of the time. Around 1820, the Industrial Revolution was coming to a close and the middle class was growing. So how would these events impact culture?

Student: The growth of the middle class means there were more people who could afford to learn music. So, did they become the main patrons of music?



Teacher: We know that during the Baroque and Classical eras, the upper class and aristocracy mainly sponsored musicians like J.S. Bach, Haydn and so on. Since the middle class replaced the role of the sponsors, the demand for instruments increased. Think about it, what kind of instrument do you think was most common at home?

Student: The piano?

Chopin was a famous composer during this time, and he left a lot of piano works. But what's the connection between the piano and the Industrial Revolution?

Teacher: Playing the piano became popular among the middle class. The increasing demand for pianos led to the rapid industrialization of piano manufacturing. What would be required to attract more audiences?

Student: Louder volumes and longer sustains. So, iron material would have been used in producing pianos.

Teacher: In addition to modifying the piano, the representative piano virtuosi who accompanied the piano's evolution were Chopin and Liszt. Meanwhile, many composers tackled themes from nature, taking inspiration from art and literature, and expanding forms.

Student: Were they expanding forms? Music was becoming longer, and dynamics became louder and softer. What else changed?

Teacher: Yes, in addition to the sonata form and the symphony, composers wrote more new forms, like the rhapsody, the nocturne, the mazurka and program music.

老師：在談浪漫時期的音樂家之前，我們先了解一下當時的背景。它始於 1820 年左右，同時有工業革命和中產階級崛起。那麼這些事件將如何影響文化？

學生：中產階級的崛起意味著有更多的人有能力學習音樂。所以，他們成了音樂的主要贊助人？

老師：我們知道，在巴洛克和古典時期，上流社會和貴族成為音樂家主要贊助者，如巴赫、海頓等人。由於中產階級取代成為贊助者的角色，對樂器的需求也就增加。想想看，家裡最常見的樂器是什麼？

學生：鋼琴？蕭邦是當時著名的作曲家，留下了很多鋼琴作品。但是鋼琴和工業革命之間有什麼關聯呢？

老師：彈鋼琴這件事在中產階級變得流行。由於對鋼琴的需求日增，導致鋼琴製造的快速工業化。需要什麼才能吸引更多觀眾呢？

學生：更大的音量和更長的持續音。還有，鐵材料可用於製造鋼琴。

老師：除了鋼琴製造的進化外，著名的鋼琴炫技者也伴隨鋼琴演進而生如蕭邦和李斯特。與此同時，許多作曲家從大自然獲取主題，從藝術和文學汲取靈感，並擴展曲式。



學生：他們擴大曲式嗎？音樂變得更加長大，力度變得更加響亮和柔和。還有什麼改變呢？

老師：是的，除了奏鳴曲式和交響曲之外，作曲家還寫作更多的新曲式，如狂想曲、夜曲、馬祖卡舞曲和標題音樂

## ■ 教學活動 Class Activities

### 活動一

- Let students know they will be playing a ‘matching’ activity, about terms related to Romantic era music.
- Divide students into pairs.
- Pass out two worksheets, one with the following 10 terms, and the other one with the corresponding 10 definitions (scrambled).
- The first pair to answer all 10 questions correctly is the winner.
- 讓學生知道會進行一個“連連看”活動，關於與浪漫時期音樂相關的術語。
- 學生兩人一組
- 發下預先印好的學習單，每份包含以下 10 個術語及相對應的 10 個定義，但順序混合。
- 第一個答對 10 題的組別獲勝。

1) forte piano	first play loudly and then play softly fp 先彈大聲再小聲
2) crescendo	gradually get louder 逐漸大聲
3) <i>La Traviata</i> (opera)	opera by Verdi 茶花女（歌劇）威爾第的歌劇
4) Schubert	the “King of Song” 舒伯特，歌曲之王
5) Puccini	<i>La Boheme</i> (opera) 普契尼，波希米亞人（歌劇）
6) Polish, poet of the piano	Chopin 波蘭人，鋼琴詩人 - 蕭邦
7) Rossini	<i>The Barber of Seville</i> (opera) 塞爾維亞的理髮師（歌劇）
8) Rubato	the freedom or flexibility to choose your own tempo for a part or a phrase of music. 彈性速度 – 自由或彈性地在某個樂段，選擇自己的速度
9) dynamics	volume 音量 / 力度
10) Tchaikovsky	wrote the ballet <i>Swan Lake</i> 柴可夫斯基 - 寫芭蕾舞劇-天鵝湖

Teacher: Now, let's see if you can match the music works to the musicians and terms. Get into pairs. I will pass out the worksheets: one with 10 terms, and another one with the answers mixed up.

Student: Do I work out the answers with my partner?

Teacher: Yes, it's a matching game. The winners will get a small prize. The first pair that answers all 10 questions correctly wins the prize.

Student: Can we open our book to check the answers?

Teacher: Yes, and you can also look at the notes from the extension part when we watched the video. You have 5 minutes to complete the worksheet.

(A few minutes later...)

Student: (Raising a hand.) We are done.

Teacher: Good, please hand in your answer sheet to me.

(Take a look.) The 5th and 7th questions need to be corrected, check your answers again.

Student: Can I use my phone to look for the answers?

Teacher: Yes, you may.

老師：現在，讓我們看看能否將音樂作品與音樂家及術語相配對。每兩人一組，我會傳下工作表，一張有 10 個術語，另一張有混合的配對。

學生：我和我的搭檔一起找出答案，對嗎？

老師：是的，這是一個配對遊戲。獲勝者將獲得小獎品。第一組答對所有 10 個問題將獲勝。

學生：我們可以看書找答案嗎？

老師：可以的，我們在影片中看到的延伸部分的筆記也算在內。你們有 5 分鐘的時間來完成。（幾分鐘後...）

學生：（舉手）我們完成了。

老師：好的，請把你們的答卷交給我。（看一看）第 5 題和第 7 題需要改正，請再核對。

學生：我可以用手機查資料嗎？

老師：是的，可以。

## 單元六 音樂與科技

### Music and Technology

國立新竹科學園區實驗高級中等學校 連冠閔老師

#### ■ 前言 Introduction

Technology has an enormous influence on every aspect of our lives, and the music industry is no exception. In this unit, we will talk about some of the latest music technology inventions from the past century and discuss how people use them in their lives. For instance, MIDI is a musical programming language used to communicate with various devices, including digital audio workstations (DAW) over Wi-Fi. There is also the synthesizer keyboard, an electronic device that generates and modifies sounds and is a popular tool for musicians to compose and perform their music.

科技對我們生活的各個方面都有巨大的影響，音樂工業也不例外。在本單元中，我們將談論過去一個世紀一些最新的音樂技術發明，並討論人們如何在生活中使用它們。舉例來說，MIDI 是一種音樂程式語言，用於各種設備的通訊，包括通過 Wi-Fi 連接的數位音訊工作站(DAW)。此外，合成器鍵盤是一種電子設備，用於生成和修改聲音，是音樂家創作和演奏音樂的流行工具。

#### ■ 詞彙 Vocabulary

※粗黑體標示為此單元重點詞彙

詞彙	中譯	詞彙	中譯
enormous	巨大的	<b>amplifier</b>	<b>擴音器</b>
aspect	方面	pitch	音高
industry	工業／產業	<b>accessible</b>	<b>易使用的</b>
exception	例外	transmit	傳送

invention	發明	controller	控制器
programming	程式設計	note	音符
device	裝置	tone	音
generate	產生	synthesizer	合成器
modify	修改	characteristic	特徵
numerous	許多的	composition	作曲
benefit	好處	rise	興起
notable	顯著的	popularity	普及
stereo	立體聲	convert	轉換
fidelity	精確	tune	曲子

## ■ 教學句型 Sentence Patterns

### ① \_\_\_\_\_ have/has brought numerous benefits to \_\_\_\_\_.

例句(1) : Music technology **has brought numerous benefits to** our lives.

音樂科技為我們的生活帶來了許多好處。

例句(2) : Playing sports **has brought numerous benefits to** my health.

運動對我的健康帶來了許多好處。

### ② \_\_\_\_ produce(s) \_\_\_\_\_ and separate \_\_\_\_\_ into \_\_\_\_\_.

例句(1) : Stereo sound **produces** high-fidelity sound **and separates** a single source **into** multiple tracks.

立體聲可以產生高傳真的聲音，並將單一聲源分為多個音軌。

例句(2) : Digital cameras **produce** high-quality images **and separate** light **into** different colors.  
數位相機能夠產生高品質的影像並將光分為不同的顏色。

③ \_\_\_\_\_ **increase the** \_\_\_\_\_ **of** \_\_\_\_\_.

例句(1) : Amplifiers **increase the** power and volume **of** sound.  
擴音器可以增加聲音的功率和音量。

④ \_\_\_\_\_ **allow** \_\_\_\_\_ **to** \_\_\_\_\_.

例句(1) : Digital Audio Workstations (DAW) **allow** users **to** record and edit their audio and sound.  
數位音訊工作站(DAW)允許用戶錄製和編輯他們的音訊和聲音。

例句(2) : Video editing software **allows** users **to** cut and arrange their video clips.  
影片編輯軟體允許用戶剪輯和排列他們的影片片段。

⑤ \_\_\_\_\_ **be a widely** (adj.) (noun) \_\_\_\_\_.

例句(1) : GarageBand **is a widely** used and accessible DAW.  
GarageBand 是一個廣泛使用且易於使用的數位音訊工作站 (DAW)。

例句(2) : Pro Tools **is a widely** recognized and professional DAW.  
Pro Tools 是一個廣為認可且專業的數位音訊工作站 (DAW)。

⑥ \_\_\_\_\_ **is a programming language used for** \_\_\_\_\_.

例句(1) : Musical Instrument Digital Interface (MIDI) **is a programming language used for** devices that can transmit digital information to a DAW.  
MIDI 是用於可傳輸數位訊息至 DAW 的裝置的程式設計語言。

例句(2) : Hypertext Markup Language (HTML) **is a programming language used for** creating websites.  
超文本標記語言(HTML)是用於建立網站的程式設計語言。

**⑦ \_\_\_\_\_ are capable of \_\_\_\_\_.**

例句(1) : Most forms of musical software **are capable of** reading MIDI files.

大多數音樂軟體的形式都能夠讀取 MIDI 文件。

例句(2) : Most web browsers **are capable of** rendering HTML files.

大多數網頁瀏覽器都能夠顯示 HTML 文件。

**⑧ \_\_\_\_\_ is a/an \_\_\_\_\_ that creates \_\_\_\_\_.**

例句(1) : A synthesizer keyboard **is an** instrument **that creates** sound waves and can then modify their characteristics.

合成器鍵盤是一種創建聲音波並修改其特徵的器具。

例句(2) : A paintbrush **is a** tool **that creates** strokes and can then modify their thickness.

畫筆是一種創建筆觸並修改其粗細的工具。

**⑨ \_\_\_\_\_ can (convert/change/translate, etc.) \_\_\_\_\_ into \_\_\_\_\_.**

例句(1) : Computers can **convert** digital information **into** sound.

電腦可以將數位訊息轉換為聲音。

例句(2) : Smartphones can **translate** voice commands **into** text.

智慧型手機可以將語音命令轉換為文字。

**⑩ \_\_\_\_\_ began to rise in popularity during (time).**

例句(1) : Digital synthesizers **began to rise in popularity during** the 1980s.

數位合成器在 1980 年代開始變得越來越受歡迎。

例句(2) : Electric cars **began to rise in popularity during** the early 2010s.

電動車在 2010 年代初開始變得越來越受歡迎。

## ■ 學科概念講解 Explanation of Academic Concepts

### 概念一

說明：說明在生活上音樂科技上的種類，MIDI 與合成器的使用

#### Music Technology 音樂科技

What did music technology bring to our lives? Some notable inventions include:

1. Stereo sound: high fidelity sound that separates one source into multiple tracks.
2. Amplifier: a device that can increase the power and volume of sound.
3. Auto-tune: software used to correct pitch, key of vocals and instruments.
4. Digital Audio Workstation (DAW): software with multi-track boards that allow users to record and edit their audio and sound. Some versions, such as GarageBand, are widely used and accessible.

音樂科技為我們生活帶來哪些好處？一些值得注意的發明包括：

1. 立體聲：高傳真的聲響能將單一聲源分為多個音軌。
2. 揚聲器：能增加聲音功率和音量的裝置。
3. 自動調音：用以修正人聲和樂器的音高和調高的軟體。
4. 數位音訊工作站（DAW）：能錄製和編輯音頻和聲音的多軌音頻裝置系統。  
GarageBand 即是其中廣泛使用且容易接觸的一類。

#### MIDI 樂器數位介面

Musical Instrument Digital Interface (MIDI) is a programming language used for devices that can transmit digital information to a DAW. Most forms of musical software are capable of reading MIDI files, and MIDI controllers can include keyboards, a series of instruments, and foot controllers. People can send MIDI messages over Wi-Fi, and users can easily modify the notes, pitch and tone on musical software.

樂器數位介面（MIDI）是一種程式語言，用於能夠將數字訊息傳輸到 DAW 的設備上。音樂軟體大多數的形式都能夠讀取 MIDI 檔案，而 MIDI 控制器可以包括鍵盤、系列樂器、鼓墊和踏板。人們可以通過 Wi-Fi 發送 MIDI 信息，在音樂軟體上可以輕易修改音符、音高或音本身。



## Synthesizer 合成器

What is a synthesizer? A synthesizer keyboard is an instrument that creates sound waves and can then change their characteristics. It can modify sounds through buttons, knobs and slides and is often used for music composition and live performances. Digital synthesizers began to rise in popularity during the 1980s. Their function is similar to computers, which convert digital information into sound.

什麼是合成器？合成器鍵盤是一種創建聲波並改變其特徵的器具。它可以藉由按鈕、旋鈕和滑塊修改聲音，通常用於音樂創作和現場演出。數位合成器在1980年代開始崛起，其功能類似電腦，可以將數位訊息轉換為聲音。

Teacher: Good morning, class. Today we're going to be learning about music technology. As we have learnt, a computer is the foundation of the DAW, running software to record, edit and mix the music. As you can see in the video, a singer is recording in a studio, where you can see the people wear headsets in another small room and work with the DAW.

Student: Can the DAW receive digital data from music? What can be done with the recorded music? Can they adjust the singer's voice?

Teacher: Yes, the DAW can receive digital data from music. They can adjust the singer's voice, change the pitch or add instrumental sounds. Previously, when recording with a solo track, any mistake during the live recording meant that the piece had to be performed and recorded again.

Student: It seems easier to record now. Can we do similar work at home?

Teacher: Pro Tools is the common software program for DAW, but many home studios use GarageBand.

Student: It is quite accessible and affordable for most people, like YouTubers.

Teacher: Yes, producing music at home has become much easier. A song can incorporate anywhere from 25-70 tracks, which can be edited individually or integrated together.

老師：同學們早安。今天我們要學習音樂科技。之前所學，電腦是 DAW 的基礎，運用軟體來錄製、編輯和混音音樂。在這段影片中，你可以看到歌手在錄音室錄製，而其他人戴著耳機在另一個小房間裡使用 DAW 工作。

學生：DAW 可以接收來自音樂的數據嗎？錄製的音樂可以做什麼？可以調整歌手的聲音嗎？

老師：是的，DAW 可以接收來自音樂的數據，可以調整歌手的聲音，改變音高或添加樂器聲音。早先錄製單音軌的錄音，現場錄音如果有任何錯誤，都意味著必須整個重新演奏及錄製。

學生：現在似乎更容易錄製了。我們可以在家裡做類似的工作嗎？

老師：Pro-Tools 是 DAW 的常見軟體程式，但許多家庭工作室使用 GarageBand。

學生：對大多數人來說相當易於接觸和負擔，像 YouTuber 一樣。

老師：是的，現在在家裡製作音樂變得更容易了。一首歌可以包含 25 至 70 個音軌，可以逐個編輯或合併在一起。

## ■ 教學活動 Class Activities

### 活動一

Students need to add their voices to cartoon characters and review sound waves using music technology software. They need to record their voices on the computer using microphones and apply them to the cartoon characters.

After importing their voices, students can play their cartoon clips on the computer.

學生需要使用音樂技術軟體，為卡通角色添加自己的聲音並檢查聲波。他們需要使用麥克風將自己的聲音錄入電腦，並將其應用於卡通角色。在將聲音導入後，學生可以在電腦上播放他們的卡通片段。

Teacher: Good morning, class. Today we will be using music technology software to create a cartoon clip with your voices.

Student: That sounds interesting! What will we be doing exactly?

Teacher: You will be adding your voices to cartoon characters using the software. First, you will record your voice on the computer with a microphone, and then you will apply it to the cartoon characters.

Student: That sounds fun! What software will we be using?

Teacher: We will be using music technology software that allows you to review sound waves and edit your recordings. It's a great way to learn how to use technology in music.

Student: That sounds challenging. What if we make mistakes?

Teacher: No worries. You can always edit and adjust your recordings using the software. This is how you learn to improve your skills and create something unique.

Student: I'm excited to try it out! When do we get started?

Teacher: Right now! Let's get you set up with the microphone and software, and we'll begin recording your voices for the cartoon clip.

老師：大家早安。今天我們要使用音樂科技軟體，以你們的聲音為卡通片創作配音。

學生：聽起來很有趣！我們會做什麼呢？

老師：你們要使用軟體將你們的聲音添加至卡通內。首先，你們要透過麥克風將聲音錄製到電腦中，然後將聲音應用到卡通角色上。

學生：這聽起來很有趣！我們會使用哪種軟體？

老師：我們將使用音樂科技軟體，可以查看聲波並編輯你們的錄音。這是一個學習如何使用音樂科技的不錯方式。

學生：聽起來很有挑戰性。如果我們失誤怎麼辦？

老師：別擔心。你們可以隨時使用軟體進行編輯和調整你們的錄音。這是你們學習如何提高技能並創造獨特作品的一種方式。

學生：我很興奮想趕快嘗試看看！我們什麼時候開始？

老師：現在就開始！讓我們先設置好麥克風和軟體，然後我們就可以開始為卡通片錄製配音。

## 國內外參考資源 More to Explore

國家教育研究院樂詞網	
查詢學科詞彙 <a href="https://terms.naer.edu.tw/search/">https://terms.naer.edu.tw/search/</a>	
教育雲：教育媒體影音	
為教育部委辦計畫雙語教學影片 <a href="https://video.cloud.edu.tw/video/co_search.php?s=%E9%9B%99%E8%AA%9E">https://video.cloud.edu.tw/video/co_search.php?s=%E9%9B%99%E8%AA%9E</a>	
酷課雲學習吧專區：雙語藝術教學影音教材	
國小三年級、四年級影音教材 <a href="https://sites.google.com/view/cooclearnmodeart/unit1">https://sites.google.com/view/cooclearnmodeart/unit1</a>	
酷課雲學習吧專區：雙語音樂教學影音教材	
國小三、四年級藝術影音教材，每單元皆有影片及口說佳句練習。 <a href="https://sites.google.com/view/cooclearnmodemusic/unit1">https://sites.google.com/view/cooclearnmodemusic/unit1</a>	
Chrome Music Lab	
有趣、互動性高的音樂網站，適合老師帶學生探索音樂 <a href="https://musiclab.chromeexperiments.com/">https://musiclab.chromeexperiments.com/</a>	

Music Tech Teacher	
<p>有許多樂理知識供老師參考教學</p> <p><a href="http://www.musictechteacher.com/">http://www.musictechteacher.com/</a></p>	
Study.com	
<p>國外教學及影音資源，除了藝術領域還有其他科目</p> <p><a href="https://study.com/learn/art.html">https://study.com/learn/art.html</a></p>	
Twinkl	
<p>國外教學及影音資源，除了藝術領域還有其他科目，多為小學及學齡前內容</p> <p><a href="https://www.twinkl.com.tw/">https://www.twinkl.com.tw/</a></p>	
Khan Academy	
<p>可汗學院，有藝術教學影片及問題的討論。</p> <p><a href="https://www.khanacademy.org/">https://www.khanacademy.org/</a></p>	
Oak Teacher Hub	
<p>國外教學及影音資源，除了藝術領域還有其他科目</p> <p><a href="https://teachers.thenational.academy/">https://teachers.thenational.academy/</a></p>	

<b>Music Theory</b>	
<p>音樂相關教學資源，可結合平板教學  <a href="https://www.musictheory.net/">https://www.musictheory.net/</a></p>	
<b>The Kennedy Center: Digital Resources Library</b>	
<p>許多教育相關之英文報導可練習閱讀  <a href="https://www.kennedy-center.org/education/resources-for-educators/classroom-resources/">https://www.kennedy-center.org/education/resources-for-educators/classroom-resources/</a></p>	
<b>國民中小學部分領域課程雙語教學實施計畫</b>	
<p>許多雙語教學影片和教案範例  <a href="https://cirn.moe.edu.tw/Module/index.aspx?sid=1192">https://cirn.moe.edu.tw/Module/index.aspx?sid=1192</a></p>	



## 高中藝術領域雙語教學資源手冊：英語授課用語

[ 十一年級 ]

A Reference Handbook for Senior High School Bilingual Teachers in  
the Domain of Arts: Instructional Language in English

[ 11<sup>th</sup> grade ]

- 研編單位：國立臺灣師範大學雙語教學研究中心
- 指導單位：教育部師資培育及藝術教育司
- 撰稿：吳俐璇、陳育祥、連冠閔
- 語言諮詢：Alex Wallace
- 綜合規劃：王宏均
- 編輯排版：吳依靜
- 封面封底：JUPE Design







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MOE DEPARTMENT OF TEACHER AND ART EDUCATION