

Review 1: 3D Printing



text types

narrative
記敘文

A narrative is a story, an account of a event, and its purpose is to entertain readers. Movies and TV dramas are mostly narratives.

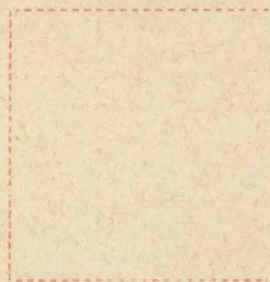
5400

8, -

text types

expository
説明文

share or explain



text types

argumentative
論說文

make a point, hoping people
to be on your side or believe
you.

What does an expository paragraph/ essay look like?

1. Introduction開頭

2. Body 內文

3. Conclusion結論

introduction= intro.

(a)to hook the readers' interest

(b)easily introduce your topic

(c)give a **thesis statement**

TS: 主題陳述

What does an expository paragraph/ essay look like?

1. Introduction 開頭

2. Body 內文

3. Conclusion 結論

body:

- (a) covers your topic with details
- (b) often 3 paragraphs long
- (c) each body paragraph has one and only idea
- (d) each body paragraph starts with a topic sentence (TPC)

What does an expository paragraph/ essay look like?

1. Introduction 開頭

2. Body 內文

3. Conclusion 結論

conclusion:

- (a) summarize the topic in discussion
- (b) no new information

Presentation:

artificial [ˌɑrtəˈfɪʃəl] 人造的

artificial limbs [ˌɑrtəˈfɪʃəl] [lɪmz] 義肢

artificial intelligence [ˌɑrtəˈfɪʃəl] [ɪnˈtɛlədʒəns] 人工智能



Presentation:

coral [ˈkɔrəl] 珊瑚蟲

reefs [ri:fz] 礁

coral reefs 珊瑚礁



Presentation:

electronic [ɪlekˈtrɒnɪk] 電子的
electronic arm 電子手臂



Presentation:

equip [ɪˈkwɪp] 裝備 配備 (with + 名詞)

beV equipped with ~ 配備著...的

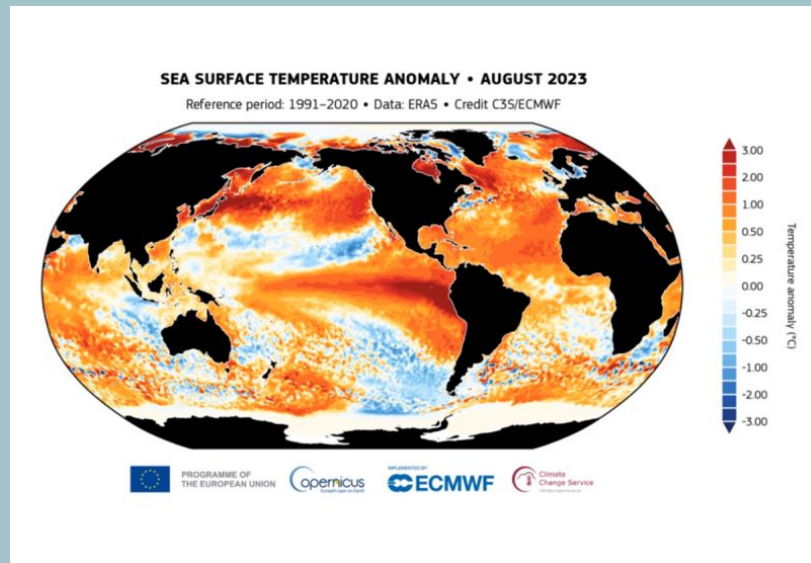
equipment (N.) 裝備



Presentation:

sea temperature [si] ['tɛmpɹətʃə] 海洋温度

room temperature 室温



Presentation:

balance [ˈbæləns] 平衡

the balance between work and life 工作與生活的平衡

the balance of the ecosystem 生態系的平衡



Presentation:

sea creatures

[si] [ˈkri:tʃə-z]

海洋生物



Presentation:

habitat [ˈhæbəˌtæt] (動物的)棲息地；(植物的)產地

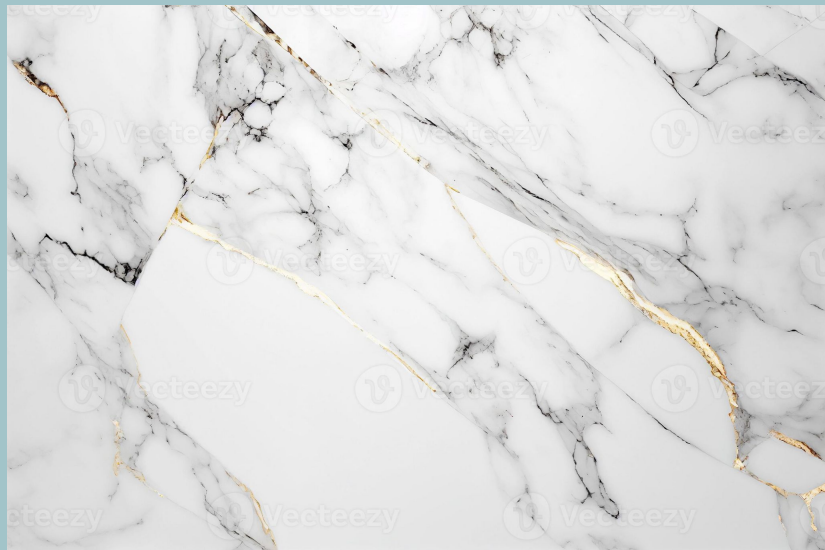
the habitat of koala

Eucalyptus trees



Presentation:

texture [ˈtɛkstʃə] (材料的)質地 紋理



marble 大理石

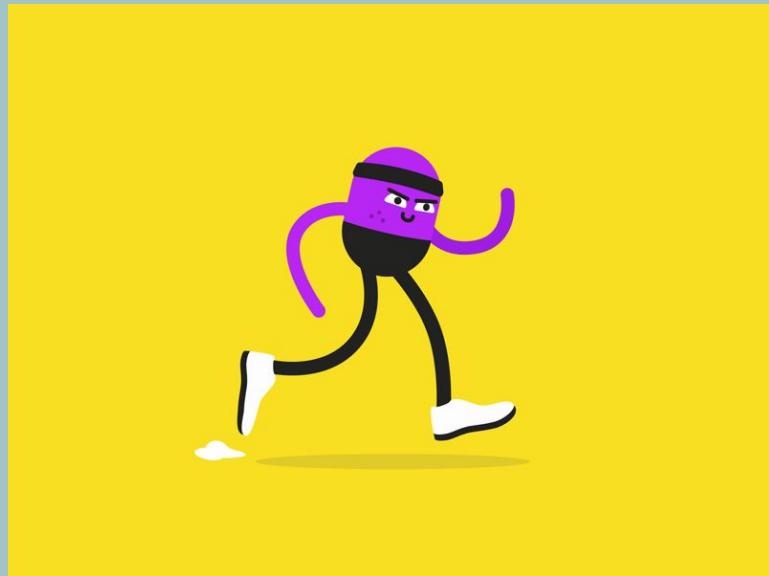
Presentation:

recuce costs 降低成本



Presentation:

speed up... 加快~

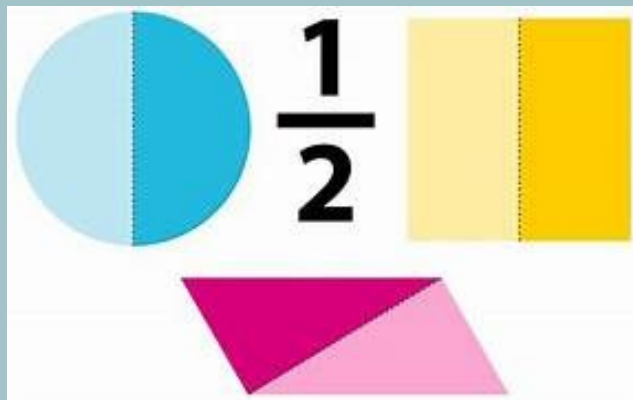


Presentation:

half (of) the labor 人力的一半

half (of) the time 時間的一半

half (of) the day 半天

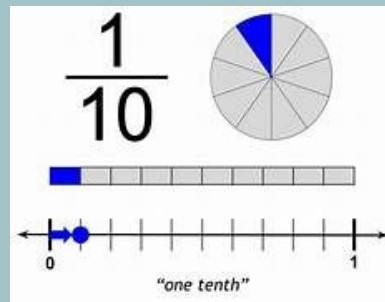


Presentation:

one tenth of the time 十分之一的時間

one tenth of the money 十分之一的錢

one tenth of the labor 十分之一的力氣



Presentation:

beV beneficial to... 對~有好處

Keep regular hours is beneficial to your health.
早睡早起對你的健康有好處。



Presentation:

build on... 以~為基礎

It's better not to build your hopes on him.
你最好別相信他。



Presentation:

map out... 詳細規劃...

Let's map out our next trip to Europe now.
一起現在來規劃下一趟去歐洲的旅行吧。



Presentation(2):

Puzzle game: please put papers in the right order, so they can become a good writing. 2 minutes, go!!!!



Presentation(2):

Imagine a printer capable of creating three-dimensional objects, such as **artificial**¹ limbs, **coral reefs**², and even buildings. Many might consider it **ridiculous**³ to dream of such machines. But with 3D printing, which makes use of computer designs and **layers**⁴ of material to create countless useful objects, it's already a reality.



Presentation(2):

- 3D-Printed Limbs: Body Parts That Don't Cost an Arm and a Leg

When Alex Pring was born in Florida without most of his right arm, it seemed that his life would never be like that of other children. However, Alex's life changed when engineering students at a university in the US collaborated to give him a hand. They developed a plastic **electronic arm equipped with** a sensor that would enable Alex to open and close his hand by slightly flexing his biceps muscle. Now, Alex can use both arms to hug his parents. With 3D printing technology, **artificial limbs** can be produced relatively cheaply, which promises to **benefit** people like Alex in ways that they never dreamed possible.



Presentation(2):



- Man-Made Reefs: 3D Under the Sea

Sea temperatures have risen to an alarming degree because of global warming. Many creatures underneath the surface have suffered as a result, especially due to the decreasing number of coral reefs. These frail and precious underwater structures are home to many sea creatures. If the reefs continue to disappear, the balance of many ecosystems might be destroyed forever. To help protect sea creatures' habitats, a project relying on 3D printing has been launched to create artificial coral reefs in the Caribbean. These reefs are designed to closely match natural reefs not only in texture but also in structure. If 3D-printed reefs can consistently succeed in attracting sea creatures, it appears that they could help save valuable underwater ecosystems.

Presentation(2):



- ☐ Building a Brighter Future: The 3D-Printed Cities of Tomorrow

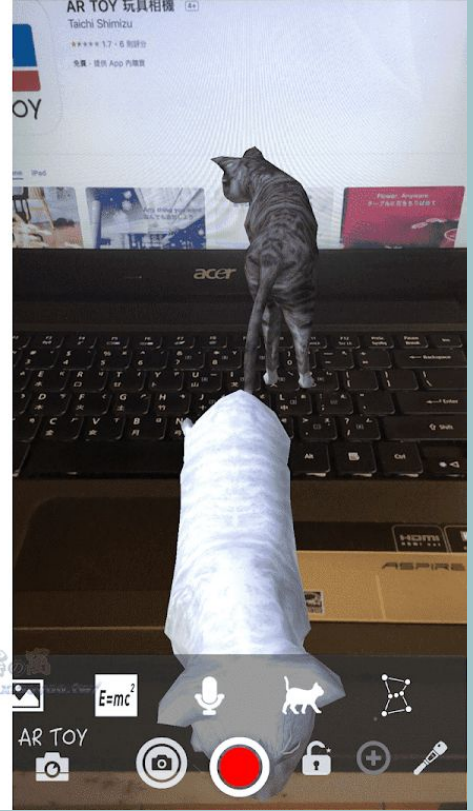
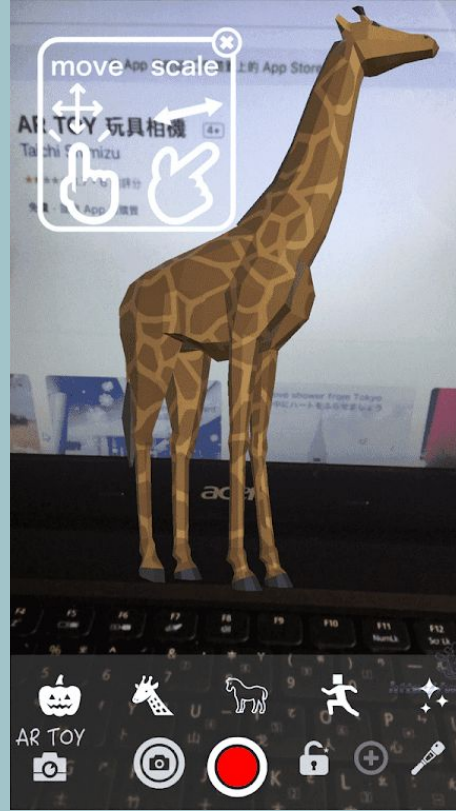
Erecting new buildings often requires a tremendous amount of labor and time. In order to **reduce costs** and **speed up** construction, experts in Dubai created the “Office of the Future,” the world’s first stable and reliable 3D-printed office building, in 2016. According to reports, it took a huge 3D printer just seventeen days to print all the parts for the 250-square-meter building and took workers only two days to assemble these individual concrete pieces. 3D printing this unique and modern-looking building required only **half the labor** and just **a tenth of the time**. This achievement has prompted Dubai to use innovative 3D printing technology more in the future. By 2030, 25% of its buildings will be constructed in this way.

Presentation(2):



Clearly, 3D printing can be tremendously **beneficial to** humankind and to our planet in numerous ways. To ensure positive change, we simply need to **build on** the technology we already have and **map out** a blueprint for the future. Just imagine!

Practice: group work!



Practice: now, it's your turn to...

1. use the color pens to mark(標記) the 3 parts of the article:
introduction (pink), body (blue), and conclusion (green)
2. 5 minutes.
3. discuss your result with your group members.

Introduction:

Augmented Reality (AR) is a rapidly advancing technology that is transforming how we interact with the world around us. Unlike virtual reality, which immerses users in a completely digital environment, AR overlays digital information onto the physical world, allowing users to see and interact with virtual elements in real time.

擴增實境是一項快速發展的科技，它改變了我們與真實世界互動的方式。不同於虛擬實境，使用者在虛擬實境中沉浸在完全數位模擬的環境，擴增實境疊加數位模擬的訊息在實體世界中，讓使用者可以同時看到真實與虛擬的元素。

Introduction:

(1)Augmented Reality (AR) is a rapidly advancing technology that is transforming how we interact with the world around us. (2)Unlike virtual reality, which immerses users in a completely digital environment, AR overlays digital information onto the physical world, allowing users to see and interact with virtual elements in real time.

(1)Augmented Reality (AR) **is a...** that is ...

定義法

(2)**Unlike** virtual reality, which..., AR overlays..., allowing....

比較法

Body:

This technology is being used in various fields, from healthcare, where AR can guide surgeons through complex procedures, to education, where students can explore interactive 3D models right in their classrooms. AR applications on smartphones are becoming increasingly common, and developers are constantly finding new ways to integrate this technology into everyday life.

這項科技正在許多領域使用中，從衛生保健，當中 AR可以引導外科醫師在複雜的手術過程中，到教育，當中學生可以在教室內探索3D互動模型。AR在手機應用程式中變得越來越普遍，開發商也正在找尋新方式來將這項新科技融入在日常生活中。

Body:

(1) This technology is being used in various fields, from healthcare, where AR can guide surgeons through complex procedures, to education, where students can explore interactive 3D models right in their classrooms. (2) AR applications on smartphones are becoming increasingly common, and developers are constantly finding new ways to integrate this technology into everyday life.

(1) This technology ..., **from** healthcare, where..., **to** education, where...

給例

子

(2) AR applications...are becoming..., and developers are...

展望

Conclusion:

As AR continues to develop, it holds immense potential to enhance learning, entertainment, and practical tasks in unprecedented ways.

隨著AR持續發展，AR正以前所未見的方式擁有強大的潛力來強化學習，娛樂和實際工作任務上。

Conclusion:

As AR continues to develop, it holds immense potential to enhance learning, entertainment, and practical tasks in unprecedented ways.

As AR continues to..., it holds...potential to enhance A, B, and C in...ways.

重述總結

Now, it's your turn to **summarize** what you have read.

1. Augmented Reality (AR) is a rapidly advancing __(1)__ that is changing how we interact with the world around us. Compared __(2)__ virtual reality, a completely digital environment, AR __(3)__ digital information with the physical world together.
2. This technology is being used in __(4)__ fields, from healthcare to education. For example, AR can help a __(5)__ when he or she is in a challenging operation. Also, students can interact with 3D models right in their __(6)__. AR applications on __(7)__ are more and more __(8)__, and developers are constantly finding new ways to integrate this technology into everyday life.
3. As AR continues to develop, it holds immense potential to enhance learning, entertainment, and practical tasks in unprecedented ways.

新加坡淡馬錫中學參訪(高二)



CG14/23 Consider the argument that there should be no censorship of the arts in modern society

the arts: expression + creativity
modern society: traits of today (tech advanced, interconnected, value systems)

- What exactly are traits of society today that necessitate/ do not necessitate censorship?

censorship: restricting access

- by governments/ digital platforms/ self-censorship

There should be no censorship (POB)	There should be some censorship (POA)

新加坡淡馬錫中學參訪（高二）



新加坡淡馬錫中學參訪(高二)



當天是議論文(argumentative essay)寫作課

題目是:

Consider the argument that there should be no censorship of the arts in modern society.

新加坡淡馬錫中學參訪(高二)

感想:

- 上課很投入
- 3C產品(電腦、平板、手機)用作上課工具
- 制服穿的很整齊
- 課程內容很有深度



Production: In your group, read the passage together.

- A. Discuss and fill out the Questions.**
- B. Remember, read from a smart angle because now you know the structure of a expository essay.**
- C. You may use your phone to help, but don't over-rely on it!**