

CHINESE FLAGSHIP SECONDARY CURRICULUM
Level 4

Unit 3: Global Sustainability
Topic 2 Plan: Resource Management

What will students be able to do by the end of the topic?

<p>Speaking/ Listening (interpersonal and presentational)</p>	<ul style="list-style-type: none"> Students can comprehend the main ideas and some details of video or audio “programs” related to resource management. Students can exchange opinions on how to best manage resources such as water and electricity. Students can create an informational video about a resource management challenge of their choice.
<p>Reading (interpretive)</p>	<ul style="list-style-type: none"> Students can comprehend the main ideas and some details of news, magazine or internet articles related to resource consumption or management. Students can comprehend data tables and graphs related to resource consumption.
<p>Writing (presentational)</p>	<ul style="list-style-type: none"> Students can compare and contrast resource consumption data of China and US and use the results to help inform their approaches and define target audience of their communication portfolio. Students can create an artifact (including flyers, posters, pamphlets or “news” releases, blog posts or video scripts) to describe the influence of resource management on China and US cultures and habits.
<p>AP Theme</p>	<p>Global Challenges - Environmental Protection</p>

Vocabulary	Phrases/Grammar
<ol style="list-style-type: none"> 资源 zīyuán 循环 xúnhuá 源头 yuántóu 建造 jiànzào 构造 gòuzào 吸收 īshōu 稀疏 shīshū 茂密 màomì 差别 chābié 农业 nóngyè 灌溉 	<ol style="list-style-type: none"> 因为邻近五大湖，加拿大能用的水资源十分丰富。Because it is near the Great Lakes, Canada has a great resource for potable water. 为什么水循环对人类的生活很重要？Why water cycle is very important for human lives? 世界上很多大河的源头是高山上的冰雪。The origins of many rivers in the world is the glaciers in the high mountains. 这栋房子虽然是50年前建造的看起来和新的一样。Although this house was built 50 years ago, it looks like new. 树干的构造影响森林里雨水流到土里的快慢。The structure of branches of a tree influence the speed at which the rain water goes through the soil in the forest. 热带雨林能吸收很多的二氧化碳(CO₂), 帮助碳tàn (carbon) 循环。Tropical rain forests can absorb a lot of CO₂, helping with the carbon cycle. 植物稀疏的山坡，大雨后很危险。Hillsides sparsely populated with plants are dangerous after a rain storm. 热带雨林非常茂密，对水循环帮助很大。Tropical rain forests are very dense,

<p>xúnhuán 12. 发源地 fāyuándì 13. 发展 fāzhǎn 14. 灾害 zāihāi 15. 财产 cáichǎn 16. 损失 sǔnshī 17. 控制 kòngzhì 18. 管理 guǎnlǐ 19. 提供 tíngōng 20. 二次能源 èrcì néngyuán 21. 工程 gōngchéng 22. 水坝 shuǐbà 23. 发电厂 fādiànchǎng 24. 总共 zǒnggòng 25. 明显 míngxiǎn 26. 短期 duǎnqī 27. 负面 fùmiàn 28. 总量 zǒngliàng 29. 平均 píngjūn 30. 数据 shùjù 31. 可再生 kě zài shēng 32. 百分比 bǎifēn bǐ 33. 服务 fúwù 34. 节约 jiéyuē</p>	<p>providing tremendous help with the water cycle. 9. 热带雨林和沙漠的天气差别很大。Weather differences between trooic forests and deserts are huge. 10. 加州中部农业非常发达，所以很多人说这里是美国的『沙拉碗』。Agriculture is very developed in central California, so many people call it the “Salad Bowl” of the US. 11. 农业用水很多，因为不灌溉，菜就不长。Agriculture uses a lot of water because if they don't irrigate, vegetables won't grow. 12. 世界上很多大河的发源地是高山上的冰雪。The origins of many rivers in the world is the glaciers in the high mountains. 13. 文化的发展和水源有关，大部分的文明是在河边开始的。The development of civilization is related to water sources; most civilizations emerged along rivers. 14. 洪水是一种天然灾害，下雨下的太快、太多可能造成洪水。Flood is a natural disaster, torrential rain can cause flood. 15. 有钱的人通常tōngcháng (usually) 会有很多财产，但不一定是最快乐的人。Rich people usually have a lot of properties but they are necessarily the happiest people. 16. 昨天的火灾让我们家损失了很多贵重的东西。The fire yesterday caused our family to lose a lot of precious belongings. 17. 有人认为当老师最重要的是控制学生，有人认为是帮学生学习，有人认为两个都很重要。Some people think that it is important for a teacher to control students, some people think to help students learn, and some think both are very important. 18. 自然资源管理是保护环境最重要的一部分，因为这些资源的来源是自然环境。Natural resource management is an important part of environmental protection because the origins of these resources are the natural environment. 19. 有些学校提供午餐给学生吃。Some schools provide lunch for students. 20. 电力是二次能源，因为电力的来源是一次能源，比如，水力、风力，太阳能。Electricity is a secondary energy because it came from primary energy sources such as water, wind or solar energy. 21. 长江三峡xiá (gorges)大坝是一个很大的工程，花了很多人力，时间才建造完。The Yangtze River Dams is a large construction. It took a lot of manpower and time to complete. 22. 世界上很多国家用水坝控制河水的流量，所以不会有水灾。Many countries in the world use dams to control the amount of water flows through a river in order to control flood. 23. 世界上很多国家在大河上建造水力发电厂，用河水的力量来发电。Many countries in the world build hydro-electric power plants on large rivers to use hydro power to generate electricity. 24. 上面有三个形状，下面有两个形状，两个加起来，总共有五个。There are 3 shapes on the top and two at the bottom, add them up altogether, there are 5 shapes. 25. 黄色很明显，所以有些人喜欢穿黄色的雨衣，开车的人容易看到你。Yellow is very obvious, so some people like to wear yellow rain coats. 26. 有些人做事，只想到短期的问题，想得不是很远。Some people only think of short term problems; they don't think very far into the future. 27. 大量砍树会对山坡有负面影响，比方说塌方/坍方。Mass cutting of the trees on a hillside will have a negative effect; e.g. causing landslides.</p>
<p>Supplementary 35. 洪水 hóngshuǐ</p>	

<p>36. 水灾 shuǐzā</p> <p>37. 建筑 jiànzhù</p> <p>38. 结构 jiégòu</p> <p>39. 长期 chángqī</p> <p>40. 用量 yòngliàng</p> <p>41. 尤其 yóuqí</p> <p>42. 单位 dānwèi</p>	<p>28. 洛阳市的水资源总量比较少，所以常常有旱灾。Luoyang City's total water resource is relatively low, so drought occurs often.</p> <p>29. 我十三岁，弟弟十岁，妹妹八岁，平均是十岁。I am 13 year-old, my brother is 10, and my sister is 8. The average is 10-year-old.</p> <p>30. 根据现在有的数据，很多地方的天气越来越热。According currecntly avaiable data, weather is getting warmer in a lot of areas.</p> <p>31. 可再生的能源是用完了可以再有的，比如说水力、风力和太阳能。Renewable energy resources are the ones that can be regenerated; e.g. hydropower, wind power and solar energy.</p> <p>32. 说明数据的时候常常会用到百分比。Percentage is used often when explaining data.</p> <p>33. 有些高中生读书给小学生听，算是社区服务。Some high school students read books aloud to elementary students as a community service.</p> <p>34. 节约用水，从自己做起，从身边做起。Conserving water starts from oneself and around oneself.</p> <p>35. 雨下得太大、太快，会造成洪水。Flood is caused by torrential rain.</p> <p>36. 水灾通常是在台风后发生。Flood usually happen after a typhoon (hurricane in the Pacific)</p> <p>37. 上海市有很多非常高的建筑，最有名的是东方明珠。There are many very tall buildings in Shanghai, and the most famous one is Oriental Pearl.</p> <p>38. 树干的结构影响森林里雨水流到土里的快慢。The structure of branches of a tree influence the speed at which the rainwater goes through the soil in the forest.</p> <p>39. 做决定时，要想想长期会有什么效果，不要只想现在有什么好处。When making a decision, one should think about the long-term effect, not just focus on the current benefits.</p> <p>40. 我忘了药每天用量是什么，所以这次仔细看了用药的说明，因为怕又忘了。I forgot what the daily dosage should be for the medicine, so I took a closer look this time because I was afraid that I would forget again.</p> <p>41. 我喜欢吃水果，尤其是苹果(是我最喜欢的)。I like eating fruits, especially apples. (They are my favorite.)</p> <p>42. 中国和很多亚洲的国家用公尺、公分这些单位来量高度和长度。China and many countries in Asia use units such as meter and centimeter to measure height and length.</p> <p>Grammar: 我的看法/想法是....., 因为/理由是..... My view/thought is..., because/reasons being... 我的看法/想法是节约能源很重要, 因为/理由是很多能源不是可再生的, 用完了就没了。My view/thought is energy conservation is very important because/reasons being many energy sources are not renewable; i.e. they are gone forever once they are used up.</p> <p><u>Usage of a suffix, 量; e.g.</u></p> <ul style="list-style-type: none"> ● 大量 - a large amount ● 雨量 - the amount of rain <p>量= amount (大/小/多/少/高/低) +量的= (large/small) amount of</p>
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	<p>他需要大量的帮助才能把这件事在明天做完。 He needs a lot of help to finish this task tomorrow.</p> <p>东西+量= amount of stuff (need to be measured) 水量、雨量、食量 他的食量很大, 每天要吃很多食物。 His appetite is large, which means he eats a lot of food every day.</p> <p>动(+名)词+量= amount of stuff (need to be measured) 用量、出(水)量、下雨量、下雪量 美国西北部每年下雨/下雪量很高, 树长得非常茂密, 所以有好几个雨林。胡德山(Mt. Hood) 国家森林公园是其中的一个。 Northwestern US gets high volume of rainfall and snowfall every year, so there are several rain forests in the area. Mt. Hood National Forest is one of them.</p> <p><u>Usage of a suffix, 力, for nouns ; e.g.</u> 1. 水力 - water power 2. 破坏力 - destructive power 美国西北部每年下雨量很大, 所以水力发电很普遍。 Northwestern US get high volume of rainfall every year, so generating electricity using hydropower is very common. 美国南部夏天的大风雨, 常常造成水灾, 破坏力很大。 Southern US gets a lot of rain storms in the summer, often cause floods.</p> <p>根据 gēn jù (sentence) According to..., (sentence).</p> <p>根据天气预报, 星期二的雨量应该不大。 According to the weather forecast, precipitation should not be high on Tuesday.</p>
<p>AP Themes</p>	<p>Global Challenges - Environmental Protection</p>

<p>Planning for Instruction</p>	
<p>What instructional activities will be used?</p>	
<p>Lesson 1</p> <p>Objectives: L1PPT (p1~5)</p> <ul style="list-style-type: none"> • Students will be able to describe some effects of the forest on water resources. • Students will be able to comprehend the main ideas and some supporting details in the video. • Students will be able to paraphrase main ideas and some details using targeted vocabulary words and sentence patterns in connected sentences. • Students will be able to use specified sentence frames to express own thoughts and discuss them with other students. • (Optional) Students will be able identify different figurative devices and choose the appropriate 	

device for their writing.

Vocabulary:

资源 zī yuán, 循环 xúnhuán, 源头 yuántóu, 建造 jiànzào, 构造 gòuzào, 吸收 xīshōu, 稀疏 shīshū, 茂密 màomì, 差别 chābié

Grammar:

- 我的看法是....., 因为/理由是..... My views are..., because/reasons being...
- 我的想法是....., 因为/理由是..... My views are..., because/reasons being...

Activity 1: Warm-up - Activate Prior Knowledge [L1PPT](#) (p6~8)

- Warm-up - prompted speaking
- Use video title to predict content

Teach Vocabulary:

- [Flashcards](#)
- [Vocabulary List](#)
- Youtube Video *Forest and Water Resources* - <https://www.youtube.com/watch?v=Fb9oTvLremw>
- [L1PPT](#) (p9~24)
 - First contact in an authentic context and predict meaning using context
 - Details of each vocabulary word
 - Lower level practice - forms and meaning
 - High level practice

Activity 2: [Two Types of Questions](#) [L1PPT](#) (p25~29) Extract factual information and implied meaning from the video

- Warm-up discussion - check prior knowledge
- Ask students to come up with surface and deep level questions about the video Formative and/or summative assessments

Activity 3: [Figurative Devices](#) (part or all can be optional) [L1PPT](#) (p30~43)

- Warm-up
- Analyze these devices
- Identify figurative devices in the video.
- Select figurative devices?
- Formative and/or summative assessments

Lesson 2

Objectives: [L2PPT](#) (p1~5)

- Students will be able to describe and discuss some effects of the water on human societies.
- Students will be able to comprehend the main ideas and some supporting details in a short essay.
- Students will be able to paraphrase the main ideas and details using targeted vocabulary words and sentence patterns in connected sentences.
- Students will be able to use specified sentence frames to express own thoughts and discuss them with other students.

- Students will be able identify reading strategies used.

Vocabulary:

农业 nóngyè, 灌溉 xúnhuán, 发源地 fāyuándì, 发展 fāzhǎn, 洪水 hóngshuǐ, 灾害 zāihāi, 水灾 shuǐzāi, 财产 cáichǎn, 损失 sǔnshī, 控制 kòngzhì, 管理 guǎnlǐ

Grammar:

Usage of a suffix, 量, for nouns; e.g.

- 大量 - a large **amount**
- 雨量 - the **amount** of rain

Activity 1: Warm-up - Activate Prior Knowledge [L2PPT](#) (p6~10)

- Warm-up - prompted speaking : “没有水, 就没有人类文明(civilization)。”这句话是什么意思? 为什么你这么想?
- Use article title to predict vocabulary
- Use article title to predict content

Teach Vocabulary:

- [Flashcards](#)
- [Vocabulary List](#)
- Article: [The Influence of Water on Human Societies -1](#)
- [L2PPT](#) (p10~35)
 - First contact in a genuine context and predict meaning using context (p10~14)
 - Details of each vocabulary word (p15~27)
 - Lower level practice - forms and meaning (p28)
 - High level practice - (p31~p34)

Activity 2: Two Types of Questions - Extract factual information and implied meanings from the article

- Read aloud in pairs [L2PPT](#) (p35)
- Review definitions of surface level and deep level questions [L2PPT](#) (p36)
- Student generate surface level questions and peers answer them, [L2PPT](#) (p37~38)
- Student generate deep level questions and peers answer them, [L2PPT](#) (p39~40)

Activity 3: Reading Strategies [L2PPT](#) (p41~45)

- Warm-up discussion (check prior knowledge/review) [L2PPT](#) (p41)
- Reading strategies. [L2PPT](#) (p42~43)
- Discussion about strategies - scaffold for self monitoring later (p4~45)

Formative and/or summative assessments [L2PPT](#) (p46~47)

- Writing assessments (surface level, deep level, analogy questions)
- Reading assessments (surface level, deep level, analogy questions)

Lesson 3

Objectives:

- Students will be able to comprehend the main ideas and some supporting details in a short essay.
- Students will be able to paraphrase the main ideas and details using targeted vocabulary words and sentence patterns in connected sentences.
- Students will be able to use specified sentence frames to express own thoughts and discuss them with other students.

Vocabulary:

提供 tígōng, 二次能源 èrcì néngyuán, 工程 gōng chéng, 根据 gēn jù, 水坝 shuǐbà, 发电厂 fādiànchǎng, 总共 zǒnggòng, 建筑 jiànzhú, 明显 míngxian, 短期 duǎnqī, 长期 chángqī, 负面 fùmiàn

Grammar:

- Usage of a suffix, 力, for nouns ; e.g.
 - 水力 - water **power**
 - 破坏力 - destructive **power**
- 根据 gēn jù, (sentence) According to..., (sentence).

Activity 1: Warm-up - Activate Prior Knowledge [L3PPT](#) (p6~10)

- Warm-up - prompted speaking
- Use article title to predict content and vocabulary
- Article: [The Influence of Water on Human Societies - 1](#)

Teach Vocabulary:

- [Flashcards](#) (need to replace with new)
- [Vocabulary List](#)
- Article: [The Influence of Water on Human Societies - 2](#)
- [L3PPT](#) (p9~24)
 - First contact in a genuine context and predict meaning using context (p9~13)
 - Details of each vocabulary word (p14~26)
 - Lower level practice - forms and meaning (p27~30)
 - High level practice - (p31~33)

Activity 2: [Two Types of Questions](#) - Extract factual information and implied meanings from the article

- Read aloud in pairs [L3PPT](#) (p34)
- Review definitions of surface level and deep level questions [L3PPT](#) (p35~38)
- Student generate surface level questions and peers answer them, [L3PPT](#) (p38~39)
- Student generate deep level questions and peers answer them, [L3PPT](#) (p40~41)

Activity 3: [Formative and/or summative assessments](#) [L3PPT](#) (p46~47) - TBM

- Writing assessments (surface level, deep level, analogy questions)
- Reading assessments (surface level, deep level, analogy questions)

(Supplemental) Revisit Reading Strategies [L3PPT](#) (p43~48)

- Warm-up discussion (check prior knowledge/review) [L3PPT](#) (p44)
- Reading strategies. [L3PPT](#) (p45~46)
- Discussion about strategies - scaffold for self monitoring later (p47~48)

Lesson 4

Objective/s:

- Students will be able to describe and discuss what they see in data tables and graphs about energy sources and consumptions.
- Students will be able to describe what they see in data tables and graphs.
- Students will be able to make inferences based on what they see in data tables and graphs.
- Students will be able to discuss the implications based on data tables and graphs using connected sentences.
- Students will be able to use specified sentence frames to express own thoughts and discuss them with other students.

Vocabulary:

用量 yòngliàng, 总量 zǒngliàng, 单位 dānwèi, 平均 píngjūn, 数据 shùjù, 可再生 kě zài shēng, 百分比 bǎifēn bǐ, 能源 néngyuán, 结构 jiégòu, 服务 fúwù, 尤其 yóuqí, 节约 jiéyuē

Grammar:

- 百分之..... bǎi fēn zhī ...
- 从.....年到.....年

Activity 1: Warm-up - Activate Prior Knowledge [L4PPT](#)

- Prompted discussion
- Use context to do vocabulary matching

Teach Vocabulary:

- Flashcards (<https://quizlet.com/251sid>)
- [Vocabulary List](#)
- Data: [Resource Consumption in China and in the US](#)
- [L4PPT](#) (p7~24)
 - Details of each vocabulary word (p8~19)
 - Lower level practice - forms and meaning (p20)
 - High level practice - (p21~24)

Activity 2: Describe Data - I see 我看到 [L4PPT](#) (p25~28)

- Discuss T/F Questions
- What other things you can see from the data?

Activity 3: Inferences and Implications of Data - I wonder 我想知道 [L4PPT](#) (p29~xx)

- Review observations from Activity 2
- Generate “I wonder” questions
- Additional wonders: How are the data related to the video and the article read in Lesson 2 and 3?
- Formative and/or summative assessments

Lesson 5 (no slides)

Objective:

- Students will be able to make suggestions on what Chinese people in China and Chinese people in the US can do to help with resource management

Vocabulary:

No new required vocabulary words. Students are coming up with vocabulary words that they want to use in their performance tasks.

Grammar:

No new required grammar.

Review Vocabulary: [Vocabulary List](#)

- Remind students that all the vocabulary words are on Quizlet:
- Lesson 1: https://quizlet.com/_1vb0so
- Lesson 2: https://quizlet.com/_1wzfwv
- Lesson 3: https://quizlet.com/_1wzhrc
- Lesson 4: https://quizlet.com/_25lsid

Activity 1: [Activate Prior Knowledge](#)

- Discussion: prompted discussion to remind students of contents of previous lessons
- Share with class

Activity 2: [Communicate the Messages](#)

- Watch a video
- Analyze the video and the messages

Activity 3: [What are Your Messages?](#)

- What are your messages?
- How would you communicate the messages to different audiences (Chinese in China vs. Chinese in the US)?

Culture Activity: Final Performance Task

[Rubrics](#) for presentational writing and speaking

资源管理对中美文化及生活习惯的影响 The Influences of Resource Management on Cultures and Habits in China and in the US

- Posters: Optional
 - a. A poster to communicate your messages to Chinese people in China
 - b. A poster to communicate your messages to Chinese people in the US
- Choose one of the following (a or b) for your video, and write up a short paper to explain what modifications you would make for the other version (the one you didn't select to do as your video presentation) and why
 - a. A short video (1~2 minutes) to communicate your messages to Chinese people in China
 - b. A short video (1~2 minutes) to communicate your messages to Chinese people in the US

Other Options

- Presentational writing:
 - a. 资源管理对中美文化及生活习惯的影响 The Influences of Resource Management on Cultures and Habits in China and in the US
- Presentational speaking:
 - a. A oral proposal to explain how you will communicate your chosen messages in China and in the US in the most effective way based on the information provided in lessons and additional information you find, and provide rationales

Adapted from Jefferson County Public Schools, KY, 2011