# CHINESE FLAGSHIP SECONDARY CURRICULUM AN INTERCONNECTED WORLD - Level 4

# **UNIT 3 Map: Global Sustainability**

ENDURING UNDERSTANDING:	ESSENTIAL QUESTIONS:	AP Theme
Students should protect the environment for future generations because we only have one earth.	<ul> <li>How do our behaviors impact the environment?</li> <li>What are China's/US environmental challenges?</li> <li>What are some solutions to protect the environment and manage natural resources for China's/US environmental challenges?</li> </ul>	<ul> <li>Humans and Nature</li> <li>Geography &amp; Climate</li> <li>Environmental Protection</li> </ul>

# What will students be able to do by the end of this unit:

Speaking/ Listening (interpersonal and presentational)	<ul> <li>Students can state their views and carry on conversations about how human' behavior impacts the environment.</li> <li>Students can discuss the environmental challenges faced by the US and China.</li> <li>Students can exchange opinions on how to best protect the environment.</li> <li>Students can debate the topics of global sustainability.</li> <li>Students can create an informational video about an environmental challenge of their choice.</li> <li>Students can present their opinions, provide supporting evidences and propose solutions on global sustainability through videos.</li> </ul>
Reading (interpretive)	<ul> <li>Students can comprehend news and magazine articles related to environmental issues, including climate change, natural resource management, pollution, recycling, endangered species, etc.</li> <li>Students can comprehend posters and pamphlets related to environmental issues, including climate change, natural resource management, pollution, recycling, endangered species, etc.</li> </ul>
Writing presentational	<ul> <li>Students can create a communication portfolio (including flyers, posters, pamphlets and "news" releases, blog posts or video scripts) to promote an environmental cause of their choice.</li> <li>Students can write an article for local Chinese newspaper or website about an environmental problem that affects local society.</li> </ul>

# **Topic 1: Environmental Protection**

Duration: About 15 hours

Vocabulary	Phrases/Grammar
1. 空气 Air 2. 质量 Quality 3. 噪声 Noise 4. 臭氧层 Ozonosphere 5. 沙尘暴 Sandstorm 6. 雾霾 haze 7. 严重 Serious	最近北京的空气怎么样? How is Beijing's air quality recently? 北京近几年沙尘暴和雾霾都很严重。 Recently Beijing has faced severe problems with sandstorms and haze. 你认为中国的环境问题主要是由什么导致的? What do you think are the major causes of China's environmental problems? 工业快速发展,因而产生大量的工业废水、废气和废渣。
7. 广重 Serious 8. 一次性 Disposable 9. 环境 Environment	工业快速发展,因间产生人量的工业废水、废气和废渣。 Fast development of industry results in large amounts of industrial waste. 中国采取什么措施治理环境污染问题?

保护 Protection 10. What major steps does the Chinese government take to manage environmental 11. 酸雨 Acid Rain problems? 12. 污染 Pollution 正确处理好经济发展同生态环境保护的关系,着力推进绿色发展、循环发展、低碳发 工业 Industry 13. 14. 废物 Waste Correctly handle the relationship between the economic development and 15. 排放 Emission environmental protection, consciously promote green development, recycling and 废气 Exhaust gas low-carbon development. 16. 17. 空气质量 Air 什么东西可回收再利用? What can be recycled? quality 18. 治理 manage 塑料制品、纸制品、玻璃瓶、报纸等等,都可以回收再利用。 Plastic products, paper products, bottles, newspaper, etc. are recyclable. 19. 回收 Recycle 20. 废物利用Recycle and reuse 21. 生态系统 Grammar: 不但.....反而.....not...but... Ecosystem 有些家庭不但不做回收,反而大量使用一次性餐具。 22. 破坏 Damage 保护区 Protected 23. 连......都.....even area 热带雨林 北京的雾霾一度严重到连自己的手都看不清楚。 24. Rainforest The haze in Beijing was once was so severe that you couldn't even see your own 25. 稀有 Rare hands clearly. 26. 珍贵 Precious 如......等 (such as..... etc.) 27. 濒临 On the verge of 中国的珍稀动物有大熊猫、华南虎、东北虎、金丝猴等。 28. 灭绝 extinct 29. 态度 Attitude 不难想象 (not hard to believe) 抗议 Protest 如果我们现在不好好保护环境,不难想象,在不久的将来,我们后代将生活在什么 30. 31. 避免 Avoid 样的环境里。 关注 Attention 32. 33. 倡议 Initiate 拯救 Save 34. 全球 Global 35. **Supplementary** 1. 人道 Humanity 2. 残忍 Cruel 3. 低碳 Low Carbon

## **Topic 2: Natural Resource Management**

Duration: About 15 hours

 氧气 Oxygen
 二氧化碳 Carbon Dioxide

Vocabulary	Phrases/Grammar	
1. 人类 2. 生物 3. 植物 4. 资源	<ol> <li>人类行为影响自然环境。Human behaviors affect natural environments.</li> <li>动物和植物是自然环境里的一部分。Animals and plants are part of the natural environment.</li> <li>生物课里会学到动物和植物怎么生长。One will learn how animals and plants grow in</li> </ol>	

- 5. 石油
- 6. 汽油
- 电力、水 力、风力
- 电源、水源 8.
- 有限(制) 9.
- 10. 能源
- 11. 管理
- 12. 生态
- 13. 维持?
- 14. 平衡
- 15. 山脉
- 16. 太阳能
- 17. 实现
- 18. 改善
- 19. 提高
- 20. 效率
- 21. 积极面
- 22. 消极面
- 23. 正面
- 24. 负面
- 25. 忽略
- 26. 意识
- 27. 行动
- 28. 采取
- <del>29.</del> 薄弱
- 30. 利用
- 31. 提供
- 32. 措施 33. 供给、供应
- 34. 需求
- 35. 面临
- 36. 可持续发展
- 37. 节约
- 38. 呼吁

## **Supplementary**

- 1. 克隆
- 2. 梦想
- 3. 世纪

- the biology class.
- 4. 能喝的水、干净的空气和森林是几种很重要的资源。Potable water, clean air and forests are several important resources.
- 5. 石油是很久以前死的动物和植物变成的。Oil is from dead animals and plants from long time ago.
- 6. 没有汽油,大部分的汽车就不能开。Without gasoline, most cars cannot move.
- 7. 电力、水力、风力是三个很重要的资源。electricity, hydropower and wind power are three very important resources.
- 8. 在美国西北部, 水源帮助发电。In the Pacific Northwest, water helps create electricity.
- 9. 如果很久不下雨, 能用的水源就会很有限。If it hasn't rained for a long time, usable water resources becomes limited.
- 10. 太阳光里的能源可以变成电。The energy in the sunlight could be turned into electricity.
- 11. 电力、水力、风力的管理对我们的生活很重要。The management of electricity, hydropower and wind power is very important to our lives.
- 12. 生态和植物、动物的生活环境有关。Ecology is related to the living environment of plants and animals.
- 13. 维持地球上的资源的使用及供给的平衡很不容易。Maintaining the balance of supply and demand of the earth's resources is not an easy job.
- 14. 能源管理是维持生态平衡的一部分。Energy management is part of maintaining ecological balance.
- 15. 美国有几座有名的山脉,比如说西北部的喀斯开山脉。There are a few famous mountain ranges in the US; for example, the Cascade Ranges in the Pacific Northwest.
- 16. 美国西南边不常下雨,所以太阳能很丰富。It doesn't rain in the southwestern US rain very often, so there is an abundance of solar energy.
- 17. 现在要努力学习,所以将来才能实现我们的梦想。We should work hard now, so we can realize our dreams later.
- 18. 美国西北部花了十多年时间来改善鲑鱼的生活环境。In the Pacific Northwest, it took more than ten years to improve the salmon hibitat.
- 19. 生活水平在不断地提高。Living standards increase constantly.
- 20. 工作效率高的人做事又快又好。Effective people not only complete tasks quickly and they did them well.
- 21. 每件事都有积极面和消极面,美国有一句俗语说:"杯子是半满或半空"
- 22. , 看你怎么想。Everything has a positive/optemistic side and a negative/pessimistic side, the US has a saying: "The glass is half full or half empty."
- 23. 如果告诉朋友你不同意他的看法,会有正面或反面的影响:他可能认为你是一
- 24. 个好朋友,或者他可能会觉得你不是他的朋友。If you tell a friend you do not agree with him, there will be a positive or negative effect: He may think that you are a A good friend, or he may feel that you are not his friend.
- 25. 不要因为工作而忽略了家庭生活。Don't ignore family life because of work.
- 26. 很多人没有意识到,人类对环境有很多负面的影响。Many people are not aware of the negative impact humans have on the environment.
- 27. 如果你不快点儿采取行动,就会影响下一步计划。
- 28. If you don't take action quickly, it will influence the next steps.
- 29. skip
- 30. 我们要好好利用时间做功课。We should make good use of the time to do homework.
- 31. 有些老师会在课堂上提供时间让学生做功课。Some teachers provide time in class for students to homework.
- 32. 我们一定要采取措施保护水源。We must take measures to protect water sources.
- 33. 下雨不足,水供应不够,所以大家都去店里买水。Due to rain shortage, water supply is not enough, so we all went to the store to buy water.

- 34. 今年夏天会很热,水的需求会增加,所以供应就会变不足。This year's summer will be hot, which will lincrease water demand, so supply will become inadequate.
- 35. 面临困难的时候,我们要冷静面对。Faced with difficult times, we must be calm.
- 36. 可持续发展在中国是一个新的话题。Sustainable development is a new topic in China.
- 37. 节约是一个好习惯。Conservation is a good habit.
- 38. 因为今年雨量不足,政府呼吁民众节约用水。Because of lack of rainfall this year, the government urged people to conserve water.

#### **Grammar:**

- 根据....., According to...
  - 根据《某某杂志名》杂志2005年9月的文章《文章标题》, 受气候变化影响最大的区域是太平洋中的小岛国家。According to *Magazine Name* magazine's September 2005 article XXXX, the areas most influenced by climate change are the island countries in the Pacific.
- ......(大约)增加/减少.....: reduce/increase 这个世纪,世界用水量增加了一半。This century, world water consumption increased by 50%.
- ……,其中……among them??
   中国是个能源大国、有煤、石油、天然气等,其中煤最便宜。China has many resources, including coal, petroleum, natural gas, among them, coal is the least expensive.
- 会、要 will, want/should 如果我们现在不保护环境,将来会有很多的问题。If we do not protect the environment now, there will be a lot of problems in the future.
- 不得不.....: have to...
   过了不久, 人类不得不去找另外一个家。Soon, human beings have to find another home.
- ……只能……; can only…
   森林只能为一部分的人提供氧气、水和食物。The forest can only provide oxygen,
   water and food to part of the population.

#### 候补:

- \*不但/仅...... 而且.....: Not only...
- 不(但/仅)不.....,还......
- \*尽管...... 但是.......
- 无论......
- 和.....

### **CULTURAL CONNECTIONS**

- 1. Students can compare and contrast the different global sustainability issues that China and the US are currently facing.
- 2. Students will discuss the environmental protection policies of both China and the US and how the policies affect people's everyday life.