

上海外语教育出版社



In this unit, we are going to

- ▶ describe scientists and their work;
- ▶ deepen an understanding of challenges faced by scientists from different cultures and their achievements;
- ▶ analyse and evaluate people's attitudes towards difficulties;
- ▶ identify the author's feelings in reading, and write a descriptive essay.

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《高中英语》（上外版）

选择性必修第二册第一单元

Scientists

授课教师：方维芊

《高中英语》（上外版）

选择性必修第二册第一单元

课时	授课内容
1	Getting Started/ Reading A
1	Reading A/ Vocabulary Focus
1	Reading A/ Grammar in Use
1	Listening, Viewing and Speaking
1	Reading B and Culture Link
1	Critical Thinking
1	Writing
1	Further Exploration/ Self-assessment



学习目标 Learning Objectives:

At the end of the lesson, you will be able to ...

1. 能通过回顾钟扬、霍金和富兰克林所面对的困难和他们的应对，梳理三位科学家的精神品质；

summarize qualities of Zhong Yang, Stephen Hawking and Rosalind Franklin by reviewing the difficulties they faced and their responses to these difficulties;

2. 能通过将科学家所遇到的困难根据其类型分类，并梳理相应的精神品质，理解科学家的工作和所应具备的精神品质；

understand scientists' work and qualities by categorizing their difficulties into major obstacles and identifying the qualities needed to deal with the obstacles;

3. 能通过分享自身科学探索的经历，发现自己或同伴身上所具备的科学家品质；

identify scientists' qualities in themselves and their peers by sharing relevant personal stories about exploring science;

4. 能通过讨论单元大作业评价量规中的具体细节，理解单元大作业的要求。

familiarize themselves with the requirements of the final project by discussing important details in the rubric for the final project.

A word on the assignments:

feelings

Glad
Proud
Honored
Surprised
Not very excited

suggestions

Never give up/lose heart
Persist in your work
Have an optimistic attitude
Have a passion for science
Have courage, faith, and determination
Seize opportunities
Take up challenges head-on
Don't dwell on fame

THE SCIENTIST ASSEMBLY: Q&A SESSION

Role Play:

1 student: the host

(organize the activity; summarize the qualities)

3 students: the scientists

(Zhong Yang, Stephen Hawking, Rosalind Franklin)

2 students: the audience

(What were the difficulties the scientists faced/how they dealt with the difficulties/...)

	What difficulties they faced	How they dealt with the difficulties	What qualities they had as scientists
Zhong Yang			
Stephen Hawking			
Rosalind Franklin			

Major Obstacle

adverse natural
environment

physical challenge

social
discrimination

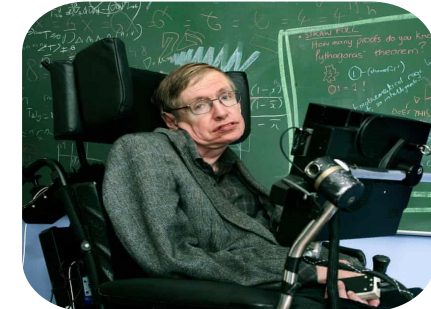
Other Important Qualities (+reasons)

physical strength/willing
to endure hardship/...

will power/
free/...

indifference to wealth
and fame/
resilience/...

Scientist



Brainstorm more major obstacles, cite a scientist's experience or certain scientific research as an example, and think about what important qualities are displayed or are needed to deal with these obstacles.

e.g. Copernicus; the earth revolves around the sun; cognitive limitation; courage to challenge authority



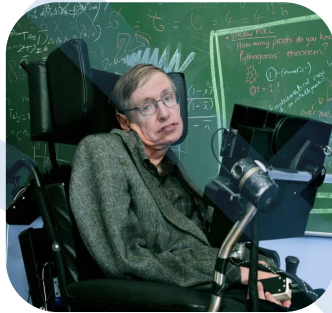
Anyone Else?

SCIENTISTS

HE/SHE Represents...



**common
scientific
researchers**



**world-famous
scientists**



**female
scientists**





I SEE THE SCIENTIST IN YOU!



- Work in groups of six
- Tell stories in your life that reflect some scientist's qualities.
- Choose one story within your group and share it with the whole class.

Assignments



1. The science society in your school is celebrating its 4th anniversary next month. You are asked to **write about a personal experience of your scientific exploration** in at least 60 words.

Rubric for the Final Project

	Excellent (3)	Good (2)	Not Good Enough (1)	Score
Content	<ol style="list-style-type: none"> 1. The booklet is given a title that can grab the readers' attention. 2. The booklet introduces three to four scientists with common features stated with enough justification. 3. All the key information for each scientist as required is included and presented in the right form. 4. The topics or opinions are stated clearly and adequately supported by concrete details. 	<ol style="list-style-type: none"> 1. The booklet is given a title. 2. The booklet includes three to four scientists with common features stated but less adequately justified. 3. All the key information for each scientist as required is included but not always presented in the right form. 4. The topics or opinions are stated clearly and supported by less concrete details. 	<ol style="list-style-type: none"> 1. The booklet is not given a title. 2. The booklet includes fewer than three scientists. 3. There is more than one missing piece of key information. 4. The topics or opinions are stated unclearly and supported by few details. 	
Language	<ol style="list-style-type: none"> 1. The writing contains a variety of simple, expanded, and complex sentences. 2. The writing contains carefully selected words or structures appropriate for the context to convey meaning. 3. The writing contains minimal or no errors that obscure meaning. 	<ol style="list-style-type: none"> 1. The writing contains simple, expanded, and complex sentences. 2. The writing contains words or structures appropriate for the context to convey meaning. 3. The writing contains a few errors that occasionally obscure meaning. 	<ol style="list-style-type: none"> 1. The writing contains mostly simple sentences. 2. The writing contains words or structures less appropriate for the context to convey meaning. 3. The writing contains many errors and unclear words that often obscure meaning. 	
Design	<ol style="list-style-type: none"> 1. The overall layout of the booklet is neat. 2. Words vary in typeface and colour where appropriate to direct readers' attention and add appeal to the booklet. 3. Interesting decorations are present to make the booklet more visually attractive. 	<ol style="list-style-type: none"> 1. The overall layout of the booklet is mostly neat with a few messy places. 2. The booklet is full-colour but lacks variety in words or interesting decorations 	<ol style="list-style-type: none"> 1. The overall layout of the booklet is messy in general. 2. The booklet is in black and white. 	

Total score: / 9

Rubric for the Final Project

	Excellent (3)
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Assignments



1. The science society in your school is celebrating its 4th anniversary next month. You are asked to **write about a personal experience of your scientific exploration** in at least **60** words.
2. Discuss the rubric and start designing the final project

Thank you !