



Proficient MYP English

Language Acquisition

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OXFORD

5 Life on Mars

Concepts

Global context: Scientific and technical innovation

How do we understand the world in which we live?

In this chapter we will explore the creativity of scientists and astronauts; for example, how potential space travellers might use technology creatively to adapt new environments to their needs. We will also examine the value and risks of such creative scientific innovations, and discuss how we understand them.

Key concept: Creativity

Creativity is the process of generating new ideas and considering existing ideas from new perspectives. Scientific creativity includes the ability to develop innovative responses to problems. **Creativity** is also developed through the process of learning and acquiring language, and taking risks and experimenting when expressing ourselves in English in order to interact with the English-speaking world.

Related concepts: Point of view and Bias

A **point of view** is the position or vantage point from which events are observed and presented to us. A first-person narrator “I” tells the story from his or her point of view. A third-person narrator is “outside” the story or the text. The **point of view** also includes the writer’s particular perspectives and attitudes.

Bias is found in deliberately unfair or exaggerated opinions. **Bias** is often used to express a very limited point of view, such as a prejudice.



Ans

Statement of inquiry

Writers use their **creativity** and **biases** to influence people’s **point of view** about **innovation**.

Unit plan

- ATL focus: Social skills
- Inquiry 1: What is the connection between space exploration and human **creativity**?
- Inquiry 2: How does the **point of view** of the writer influence our ideas about space travel?
- Focus on communication skills: Debates and reviews
- Synthesis: Key and related concepts – **Creativity** and **Point of view**
- Inquiry 3: How can we detect **bias** in a text?
- Reflection: Listening skills and debatable questions
- Summative assessments: Listening, Speaking, Reading and Writing
- Theory to practice: Action and service

Inquiry 1: What is the connection between space exploration and human creativity?

Conceptual question

Formative listening and speaking skills: Understanding and explaining connections

How much do you know about our attempts to live on Mars? Share your answers in class.

With a partner, examine the picture from a work of science fiction written 80 years ago.

Discuss these questions in pairs and share your ideas in class.

How has the artist used creativity to bring this imaginary world to life?

What scientific solutions are needed before people can live on Mars?

Can a creative artwork accurately represent future scientific developments?



Key concept: Creativity

Creativity is the process of generating new ideas and considering old ideas from new points of view.

Creativity is also the act of turning new and imaginative ideas into reality. It includes recognizing the value of new ideas, developing new responses to problems and finding new solutions.

Creativity is essential to science and art. For instance, we can see it in the amazing developments in space travel and also in the imaginative stories created by science fiction writers.

Language learning is also a creative process; we have to think and communicate in new ways, taking risks and expressing ourselves in new ways in order to interact with a new culture.

Formative speaking and reading skills: Understanding implicit information

The Mars One project is conducting a search to find the best candidates for the first human mission to Mars. The potential astronauts must be intelligent, creative, psychologically stable and physically healthy. You are about to read an interview with one potential astronaut, Maggie Lieu.

The table lists five more characteristics that all the candidates must have. In pairs, read the text and decide whether Maggie possesses any of these necessary characteristics. Justify your answers with evidence from the text.

Characteristics required for the Mars mission	Maggie is ... (Yes/No/Maybe)	Evidence in the text
Resilient		
Adaptable		
Curious		
Trusting		
Creative		

ATL Research skills

Do you think that people will be living on Mars in the near future? If so, what do you think living conditions on Mars might be like in the year 2050? Use the research resources available to you to find sources of information. Categorize the information you find under different headings, such as housing and food.

On a One-Way Ticket to Mars

Maggie Lieu discovered yesterday that she was on a shortlist of 100 volunteers for the four places on board a one-way mission to the Red Planet. Why on earth would she want to do that?

5 **Rachael Pells finds out.**



A 24-year-old astrophysics student at Birmingham University was today named on the shortlist of candidates selected to set up the first human colony on Mars – on a one-way mission that, if successful, would represent one of the greatest achievements in human history.

10 Along with 50 men and 49 other women, she has been selected to spend the next decade learning everything she needs to know to live on the Red Planet as part of the Mars One project.

If her training is successful, she could make the team of 40 chosen to leave Earth. The first spacecraft, carrying two men and two women, is due to depart in 2024.

20 With nothing to build on but dusty rock and craters, the astronauts will have to become self-sufficient. They will have to build everything themselves and take all the food and oxygen they will need to keep them going. This means learning everything from plumbing to medical care.

25 Luckily, learning is what drives Ms Lieu more than anything else. “I’ll finally have time to read all those textbooks,” she says.

Ms Lieu is studying for a PhD in astrophysics at Birmingham University. Becoming an astronaut would make her childhood dream a reality. “It’s exciting because we all have so much to learn from each other,” she says, speaking of her future co-inhabitants. 30

Ms Lieu has already made headlines for admitting that she’d like to be the first to have a child on Mars. But with so much risk, doesn’t she think that bringing a baby into such a hostile natural environment might be selfish? 35

“I think it would be really exciting to have a child because it would be the first real Martian. I don’t know what race or nationality it would be because there are no countries on Mars – yet.” 40

Members of the Mars One project have been warned that the prize is strictly a one-way ticket. Launching into space in groups of four, each trip will cost around \$6bn. A return journey is considered economically and practically impractical due to the lack of infrastructure on Mars. 45

But Ms Lieu is optimistic about the possibility of a return to Earth. “Technology is advancing so quickly. Who knows what might be possible later on?” 50

That said, she’s not so sure she’d want to come back. She would be physically disabled back on Earth after years of muscle and bone wastage. 55



Ms Lieu is confident that a model community could be built on Mars. “There’d be no legal system or parliament so it would be really
60 fascinating to see how we work out our lives. With no rules, might there be chaos?”

What worries Ms Lieu most is that the habitations designed for the astronauts are inflatable. “They’re built to be light, but what if they burst?”

65 “Even if I don’t make it to Mars this time, I’ll be happy just knowing that the project is getting people excited about science. To be curious is to be human and that’s what it’s all about.”

Adapted from: http://www.nzherald.co.nz/world/news/article.cfm?c_id=2&objectid=11403254



Formative speaking and reading skills: Understanding explicit and implicit information

With a partner answer these questions. Choose the correct answer from A, B, C or D. Record your answers on a separate sheet of paper.

1. The text is:
 - A. a blog
 - B. an interview
 - C. a news report
 - D. a review.
2. The writer of the text is:
 - A. a scientist
 - B. a journalist
 - C. an advertiser
 - D. a science fiction author.
3. The main purpose of the text is to give the point of view of:
 - A. Maggie Lieu
 - B. the directors of the Mars One project
 - C. the opponents of the Mars One project
 - D. the general public.
4. The other purpose of the text is to:
 - A. persuade readers to support the Mars One project
 - B. inform the readers about the Mars One project
 - C. support the opponents of the Mars One project
 - D. make fun of the Mars One project.
5. The style used in the text is mainly:
 - A. persuasive
 - B. factual
 - C. poetic
 - D. exaggerated.

ATL Social skills

You use your social skills to work with others and learn to cooperate.

The reading exercises in this section are designed to help you to further develop your social skills. Complete all the reading exercises about Maggie Lieu with a partner and share your ideas. As you do so you will:

- work collaboratively
- listen actively to your partner’s point of view
- encourage your partner to contribute to the exercise
- help each other to succeed
- share responsibility for your decision-making
- manage and resolve conflicts
- negotiate effectively
- build consensus
- reach an agreed outcome.

SCIENTIFIC AND TECHNICAL INNOVATION: LIFE ON MARS

True or false? With your partner, reread the text carefully and identify true and false statements. Record on a separate sheet of paper whether each of the sentences below is true or false then justify your answer with a relevant brief quotation from the text. Both are required for one mark.

		True	False
Example:	Maggie Lieu is one of 50 people chosen to go to Mars.		✓
Justification:	"she was on a shortlist of 100 volunteers for the four places"		
		True	False
6.	Maggie Lieu is not at present a fully qualified scientific researcher.		
Justification:			
7.	The purpose of the Mars One mission is to set up a permanent base on Mars.		
Justification:			
8.	It can take successful candidates about 10 years to complete the training for the mission.		
Justification:			
9.	In 2024 the first 40 astronauts will travel to Mars.		
Justification:			
10.	The first astronauts to land on Mars will have to take almost all the basic materials with them.		
Justification:			
11.	These first astronauts will all be well trained for a survival mission.		
Justification:			

Key concept: Creativity

Now that you have read something about the Mars One project, discuss the following question in class.

To what extent is creativity an essential characteristic for anyone who wishes to be an astronaut?

Formative listening and speaking skills: Finding a group consensus

In this chapter you are going to practise debating.

Debating is often a team or group activity. Therefore, before you debate as a team, it is essential that you can all agree on a single point of view.

This exercise will help you to develop some of the skills you will need in a debate.

In small groups, study the statements in the table below.

Do you think they present sensible arguments for going to Mars? Rate the ideas below on a scale of 1 to 5, where 1 is “not at all sensible” and 5 is “extremely sensible”. Discuss your responses and find answers that you can all agree on. You can use a table like the one below to record your answers.

When you have finished the exercise, come to an agreed position. Are you for, or against or undecided about the Mars One project?

Share your conclusions in class. Justify your opinions.

ATL Social skills

Finding an agreed point of view

Here is an opportunity for you to practise the skills of:

- building consensus
- sharing responsibility for decision-making
- listening actively to other points of view
- encouraging everyone in the group to contribute
- helping all members of the group to succeed
- coming to an agreed conclusion.

Planning and scaffolding

	Your rating (1 to 5)	Justifications
Maggie thinks she will have time to read textbooks.		
She will have a lot to learn from the other members of the team.		
She could have the first baby on Mars.		
Maggie says she could bring up a child on Mars.		
The journalist thinks the cost of the project is \$6bn.		
The journalist thinks there is no chance to return from Mars.		
Maggie thinks she may be able to return.		
Maggie might not be able to return to Earth for medical reasons.		
They can live in a place where there are no laws.		
Their habitations may not survive the Martian climate.		
It is an exciting adventure for mankind.		

Formative writing skills: Organizing a review

A review is a form of journalism. The writer of a review reads or experiences a creative work such as a film, book, play or TV programme. A review can also be a critical assessment of an innovation, such as a scientific project. A review usually presents a reasoned argument by giving a summary of the content, offering an opinion about it and making a recommendation.

In this exercise you are going to organize a review of the Mars One project.

1. To start, answer this question: "Is the Mars One project a sensible idea?". Decide what your answer will be. This opinion becomes your thesis or "big idea".
2. Make three points to support your thesis. Justify each point with evidence, explanations and examples. Use evidence from the text "On a one-way ticket to Mars".
3. Write a conclusion.
4. End with a final thought such as an answer to one of these questions: Should the Mars One project be stopped now? Alternatively, should it be expanded and accelerated?

Use a table like the one below to help you plan your review.

	Your points	Evidence/explanation/ examples
Introduction Topic Thesis (big idea)		
Supporting point 1		
Supporting point 2		
Supporting point 3		
Conclusion Final thought		

Key concept: Creativity

Is writing a review creative? Some people say it is much easier to criticize than to create something original. Others argue that writing a review is as creative as writing a poem.

Here is a list of creative thinking skills needed for carrying out a creative task. According to this list, "evaluating" is the highest level of creativity and "knowing" is the most basic level.

Levels of creativity: Examples

Evaluating involves:

- comparing and interpreting ideas
- making choices based on reasoned argument.

Synthesizing involves:

- relating ideas from different places
- drawing conclusions.

Analysing involves:

- seeing patterns
- recognizing hidden meanings.

Applying involves:

- using information
- using methods, ideas and theories.

Understanding involves:

- interpreting, comparing and contrasting information
- inferring causes and effects.

Knowing involves:

- observing and recalling information.

In your opinion, how many of these creative skills are needed in English Language Acquisition?

Discussion and debate

Why would people want to live on Mars?

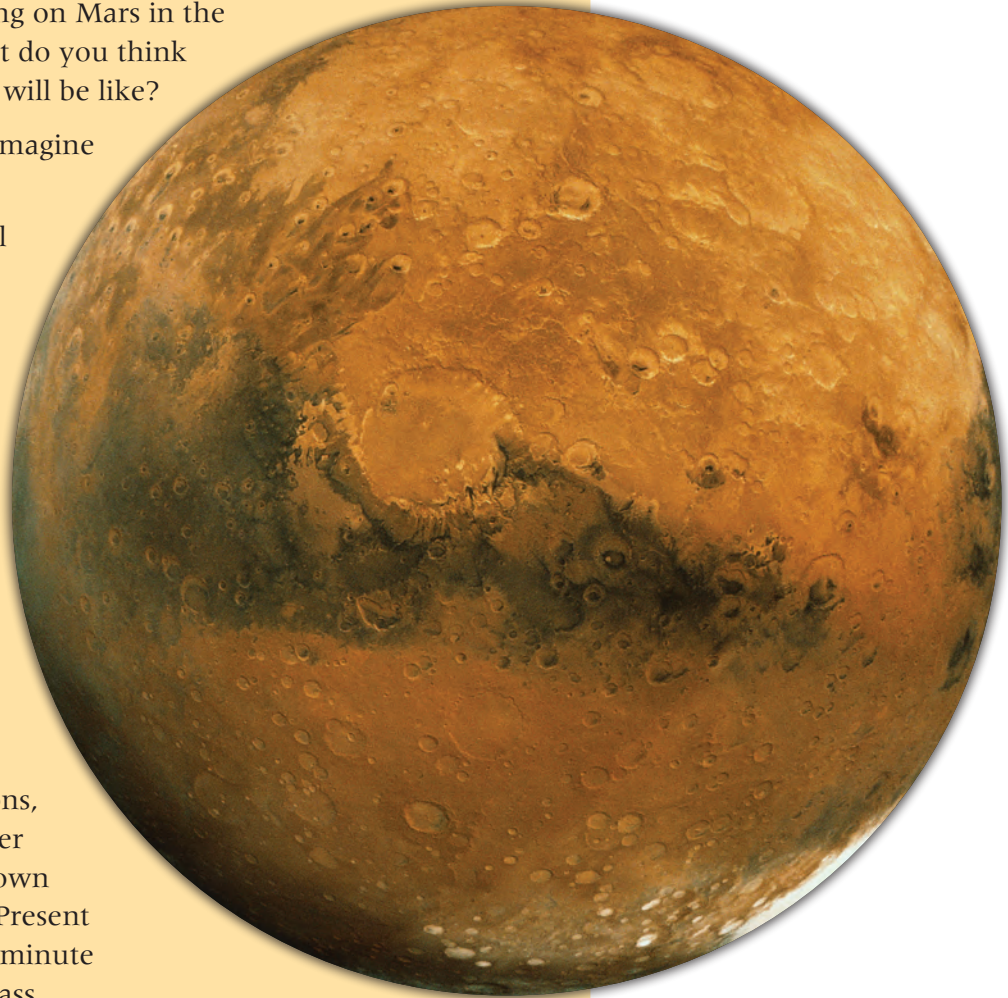
Having almost completed this section, do you think that people will be living on Mars in the near future? If so, what do you think living conditions there will be like?

Use your creativity to imagine life on Mars.

To begin, work in small groups to create a set of questions. Here are three questions to start your discussion.

- How will people produce enough food and water?
- Where will people live?
- How will they deal with loneliness?

When you have a complete set of questions, work together to answer them and create your own vision of life on Mars. Present your findings in a 4–5-minute presentation to your class.



Reflections on Inquiry 1: What is the connection between space exploration and human creativity?

Now that you have completed this section, what is your answer to the inquiry question?

Inquiry 2: How does the **point of view** of the writer influence our ideas about space travel?

Conceptual question

Formative listening and speaking skills: Understanding and communicating implicit ideas and connections

The next text is a review of projects such as Mars One. In the review, the writer has a negative **point of view** about the project. The writer offers the readers ten reasons why a Mars mission might be too dangerous.

Imagine that you and a partner have been chosen to become the first teenage astronauts on the Mars One project, and are enthusiastic supporters of the mission. How would you react to negative criticism about the project?

With your partner, read each of the ten opinions listed below and record your reactions to each of them. Share your ideas with your teacher and the rest of the class.



The writer's negative point of view

1. The journey to Mars is too dangerous.
2. There is a grave danger of radiation poisoning.
3. You don't know if you can survive on Mars.
4. Your space suit might rip.
5. There could be problems with your machinery and electrical equipment.
6. There could be problems with your transport.
7. Your doctor might die.
8. You could be extremely bored.
9. You could become very homesick.
10. You could become the only person alive on Mars.

Related concept: Point of view

Point of view refers to the perspectives and opinions held by a speaker or writer. For instance, a point of view can be in favour of or against an idea, such as space exploration.

A point of view is also the position from which we view events and ideas. For example, we could see a mission to Mars from an enthusiastic astronaut's point of view or a strong critic's point of view.

Formative reading and speaking skills: Understanding connections and conventions

With your teacher or a partner, read the text and then answer the questions on the next page.

10 Reasons Not To Go To Mars

Once the excitement of being a Mars One colonist wears off, the realities may start to set in. Being part of the Mars One colony is not only extremely dangerous, it is a recipe for a science fiction horror story. Here are the top 10 reasons why you shouldn't be a 'colonist' with Mars One:

1. High-risk travel

Space travel is high risk. During the launch, you will be strapped on top of a massive rocket that could explode. During the flight, you could smash into space debris. But a crash landing on Mars is probably the most dangerous event of all. Your risk of a violent or even terrifying death is extremely high.



2. Radiation poisoning

Flying to Mars may take over a year to complete and during that time you will face serious health risks from two main types of radiation: cosmic rays and energetic particles from the sun. Both types of radiation can damage DNA and greatly increase your risk of cancer.

3. Survival as experiment

Once you arrive on Mars, your survival is all a big experiment. No one has done this before. You have to create oxygen and food literally from the rocks. Your life support equipment could fail. Will you all die together, or will you decide the survival of the colony (and your own life) is worth a few murders?

4. Ripped suit

Over the decades, it's very likely your suit will rip at some point. If your suit rips, a number of horrible things will happen. First, CO₂ will rush in and mix with your oxygen, instantly poisoning you and causing you to stop breathing and choke.

5. Maintenance problems

Over the decades, the machinery and electronics at your colony will experience natural wear and tear. We hope it will be easy to fix, but over many decades things will break

down. Do you know how to fix your laptop? Or how about the oxygen system? And what if the airlock jams?

6. Rover breakdown

If you're going to Mars for the rest of your life, you may want to explore. At first, you may just walk. But if you get a rover you can explore further. Over many decades, your rover will experience wear and tear and may break down. If it breaks down while you're exploring, you may be too far from home to walk before your oxygen runs out. That's a nightmare.



7. What if the doctor dies?

We'll assume you'll have a professional doctor at your colony. But what if that doctor dies before you? Maybe you could do a videoconference with a doctor, but do you really trust your fellow colonists to perform surgery guided by a video?

8. Extreme boredom

You will live in a small pod, about as large as a jail cell. Because going outside is a process more complicated than scuba diving, you will probably spend most of your time in your pod. Over the years, the novelty of going outside will wear off. You may find yourself spending months at a time lying in bed alone playing video games or just staring up at the ceiling.

9. Homesickness

You will never again feel the breeze on your face. You will never again dip your toes in the ocean. You will never again see blue skies with white fluffy clouds. You will never again see your family and friends.

10. Last man standing

Over the decades, people in the colony will die and there is no guarantee that more people will come to replace them. In time, there will be only one person left on the entire planet. If that person is you, it will be very lonely indeed. That is truly the stuff of nightmares.

Choose the correct answer from A, B, C or D. Write your answers on a separate sheet of paper.

1. The text is:
 - A. a blog
 - C. a news report
 - B. a magazine article
 - D. a review.
2. The writer of the text is:
 - A. a scientist
 - C. an astronaut
 - B. a journalist
 - D. a science fiction author.
3. The main purpose of the text is to give the point of view of:
 - A. the author
 - B. the directors of the Mars One project
 - C. the opponents of the Mars One project
 - D. the general public.
4. The other purpose of the text is to:
 - A. support the Mars One project
 - B. inform the readers about the Mars One project
 - C. advertise the Mars One project
 - D. make fun of the Mars One project.
5. The style used in the text is mainly:
 - A. persuasive
 - C. poetic
 - B. factual
 - D. exaggerated.
6. The author of the text speaks to the audience using:
 - A. the first-person voice
 - C. the third-person voice
 - B. the second-person voice
 - D. direct address.

Formative listening and speaking skills: Understanding a point of view

Each point in the text discusses a specific danger. With your partner, identify the exact phrases in each of the ten points that either explains or gives examples of each possible danger. The first point is done for you. This exercise will give you a clearer understanding of the writer's point of view. You can use a table like the one below to record your joint responses.

Reasons why the Mars expedition is a bad idea	Evidence or example
1. High-risk travel	"rocket that could explode" "you could smash into space debris"
2. Radiation poisoning	
3. Survival as experiment	
4. Ripped suit	
5. Maintenance problems	
6. Rover breakdown	
7. What if the doctor dies?	
8. Extreme boredom	
9. Homesickness	
10. Last man standing	

Discussion and debate

Having analysed the writer's ten criticisms, would you still want to go on a mission to Mars?

In preparation for the debate, choose the three strongest arguments for and against travel to Mars.

Justify your answers.

Formative listening and speaking skills: Debating a point of view

Debate preparation

Now, with your partner, reread the text to understand the writer's point of view in more detail. Each point made discusses a specific danger. Find phrases in each of the 10 points that either explain or give an example of each danger. Use a table like the one below to record your joint responses and justifications. Having analysed the writer's ten criticisms, have you changed your opinions about space travel? For instance, having read the article, would you still want to go on a mission to Mars?

Why the Mars expedition is a bad idea	Agree with the writer/ Disagree with the writer/Not sure	Reasons
1. High-risk travel		
2. Radiation poisoning		
3. Survival as experiment		
4. Ripped suit		
5. Maintenance problems		
6. Rover breakdown		
7. What if the doctor dies?		
8. Extreme boredom		
9. Homesickness		
10. Last man standing		

When you have finished the exercise, choose the three strongest arguments for and the three strongest arguments against travel to Mars.

ATL Social skills

Evaluating the arguments

Making a speech in public can be a very stressful process. However, if you work together in pairs or as a group, you are much more likely to succeed.

In groups, construct two arguments: one against and one in favour of living on Mars.

Make a checklist or draw a diagram to plan your two arguments.

Are both arguments equally strong? If not, how can you improve the quality of the weaker argument?

Make sure that everyone contributes to the evaluation process.

Formative writing skills: Preparing a review

What is your opinion of the text “10 reasons not to go to Mars”. Is the text wonderful, good, indifferent, poor, unrealistic? Would you recommend it to others?

Write a review of the text. Write 300–400 words. Your review will appear in a science magazine aimed at young people called *Scientists of the Future*.

You may wish to use a table like this to help you plan your thoughts.

	Your points	Evidence, explanation and/or examples
Introduction Topic: “10 Reasons Not to Go To Mars” My point of view “big idea”		
Supporting point 1		
Supporting point 2		
Supporting point 3		
Conclusion Final thought		

You are writing for a science magazine and your piece will be aimed at young people. Will the language and style you use be:

- formal
- semi-formal
- informal
- slang?

Reflections on Inquiry 2: How does the point of view of the writer influence our ideas about space travel?

Now that you have completed this section, what are your answers to the following questions?

- Were you convinced by the author’s ideas in this section?
- How do these ideas compare to the point of view of someone enthusiastic about space travel such as Maggie Lieu?
- How would you construct a convincing point of view about space exploration?

Planning and scaffolding

As you write your review of the text, follow the instructions below.

- Make sure your introduction grabs your readers’ attention and write from a clear point of view.
- Find evidence, explanations and/or examples for each you make.
- Make at least three points in favour of your point of view.
- Remember to write a final thought – your recommendation to your readers.

ATL Social skills

What other reasons are there for not undertaking the mission to Mars?

With a partner, conduct your own research on the Internet and make a list of further points against such an expedition. With your partner, sort the arguments against an expedition to Mars into different categories, such as Costs, Physical health and Mental health. When you have finished, share your ideas with the rest of your class.

Focus on communication skills

Formative listening skills: Answering short answer questions

In MYP English Language Acquisition, short answer questions are one of the assessment types you must learn how to answer. Click the headphones icon on the right to find out more about short answer questions.

You will also find an audio recording for this chapter on the topic Life on Mars and a related listening exercise to practise responding to short answer questions.



Formative listening and speaking skills: Conducting a debate

You are about to conduct a debate. In class, discuss what you already know about debates and debating.

What is a debate?

A debate is a discussion in which two teams express and justify two opposing points of view on an issue. A debate is a formal speaking situation and has certain rules.

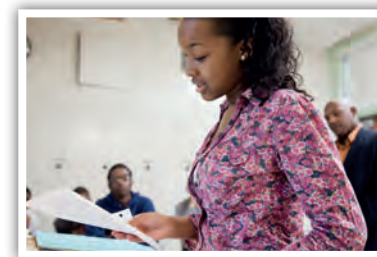
The moderator: this person manages the debate. The moderator may be your teacher or a student. The moderator introduces the debate topic and allows students to speak.

Organization: each team could have five prepared speeches, using these headings.

- Opening statement
- Supporting point 1
- Supporting point 2
- Supporting point 3
- Closing statement

Opening statements: students from both teams make opening statements. The debate begins with an opening statement from those who agree with, or are in favour of, the issue (these people are the “pro” side), followed by an opening statement from the opponents (the “against” side). Opening statements should include each side’s opinion with a brief overview of the supporting points the speaker wishes to make.

Supporting points: three different team members present the three main supporting points or arguments for their team. Teams speak alternately. Each person should make a clear supporting point with evidence, explanations and examples.



Planning and scaffolding

Testing your arguments

Making a speech in public can be a very stressful process.

However, if your group, understand both sides of the argument you are debating, you are much more likely to succeed.

In your group, construct two arguments: one against and one in favour of living on Mars.

Each argument should consist of three points.

Examine each point carefully. Make a note of the strengths and weaknesses of each point.

Use these notes to strengthen your point of view and attack the views of your opponents.

Remember that the more you prepare your argument, the more confident you will feel.

Closing statements: the debate ends with closing statements from both sides. As with the opening statement, members of the “pro” side speak first, followed by the opponents. The closing statements should restate the opinions with a strong final thought.

Open debate and vote: members of the audience have the opportunity to state their points of view. The moderator will decide how much time is available. At the end of the debate the audience votes in favour of or against the debate question.

Rules

- Only one person speaks at a time.
- The moderator decides who speaks.
- Speak only when the moderator indicates you should.
- Be polite and courteous.
- Listen attentively.
- Be respectful and supportive of peers.
- Do not monopolize the debate.
- Allow others to express their opinions.

The best responses will use specific technical vocabulary relevant to the topic.

Formative listening and speaking skills: Debating

Use the information above to conduct a class debate. **The topic will be, “Should human beings attempt to settle on Mars?”**

Organize your debate according to the rules and procedures set out above. Remember to behave and speak politely at all times.



Discussion and debate

In this chapter you will develop debating skills.

To see how a debate is conducted in middle school, watch the following video:

<https://www.youtube.com/watch?v=Vv1S9QPblv0>

ATL Social skills

Being on a debating team is a fantastic opportunity to practise the skills of:

- sharing responsibility for planning and decision-making
- listening actively to other perspectives and ideas
- encouraging everyone to contribute
- helping all members of the group to succeed
- negotiating effectively
- building consensus
- reaching an agreed outcome.

As your team organizes its contribution to the debate, use the list above to assess your personal contribution to your team’s success.

Formative writing skills: Planning a film review

As we have seen, a review is a form of journalism. Reviews can be found in magazines, newspapers and blogs. In a review you share your opinions about a media product; for example, a book, a film, a video or a concert.

Point of view

A good review is a creative piece of writing as you show that you can entertain your audience with your point of view. Nevertheless, whatever the subject matter that you are reviewing, your opinions should be based on evidence: facts and details. Otherwise your review will simply be an opinion without real credibility.

Audience

You need to think about the type of publication you are writing for and its audience. If you are blogging for an audience of your peers, you could use informal, familiar language. If you are writing for a school magazine and writing for your peer group then you will want to sound informal but still show that you have expert insightful ideas. In contrast, if your task involves writing for a magazine where you do not know the audience, so you do not have a personal relationship with the readership, then you are going to have to be more formal.



Voice and tone

We know that English has different registers. These registers or levels of familiarity go from the very formal (for example “A most enjoyable musical experience”), to the informal and familiar (“A cool show – awesome!”).

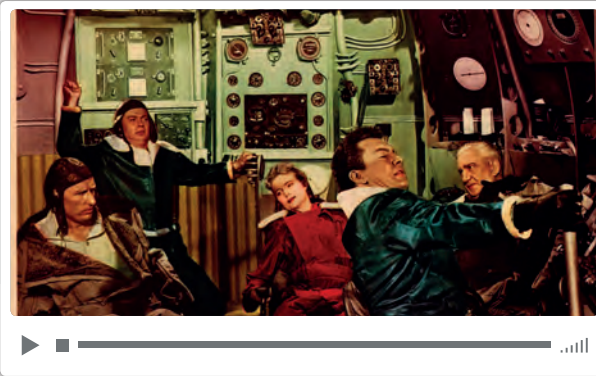
A review of a film or book is an analysis usually written in the present tense. However, you should write a review of an event (such as a concert or drama performance) in the past tense, as it has already taken place.

Formative writing skills: Writing a film review

On this page you will find information about the 1951 science fiction film *Flight to Mars*.

For more information on the film, you can go to Wikipedia.

Write a review of the film of 300–400 words, either for your school magazine or for your personal blog.



Flight to Mars trailer

You can watch the original trailer to the film *Flight to Mars* here:

<https://www.youtube.com/watch?v=9nvEtDbTPK8>

Flight to Mars

You can watch the original film here:

<https://www.youtube.com/watch?v=FIW56bJzyx8>



Planning and scaffolding – structuring a film review

You could divide your film review into different paragraphs.

1. Grab the readers' attention with a question to connect them to the film. "Have you ever wondered ... ?"
2. In your introduction to the film, give an overview of what it is about. You should include the name of the film, the type of film (for example, comedy, adventure, drama) the prominent stars and the basic setting (time and place).
3. Do not reveal the ending.
4. Analyse other aspects of the film, such as the:
 - a. acting
 - b. costume design
 - c. photography
 - d. soundtrack.
5. Describe your overall reaction to the film as well as your opinion of its quality. Include your recommendations for your readers.
6. You are writing for your school newspaper. Who is your audience? Will the language and style you use be:
 - formal
 - semi-formal
 - informal
 - slang?

Here are some other points to consider.

Will you write in the first person or the third person? Give reasons.

Will you address your audience directly or not? Give reasons.

Key concept: Creativity

Here is an opportunity to use your creative thinking skills.

Based on the information available, write a review of the film.

First, decide on your **point of view**.

- How will you present the film to your audience?
- Will you be positive or negative?
- What reasons would the audience have to watch such an old-fashioned film today?

Then choose three **aspects of the film to** support your point of view. Some aspects you could mention are the:

- storyline
- characters
- quality of the acting
- costumes
- special effects
- technology
- realism of the film sets.

Make guesses, ask yourself "What would be ... ?" questions. Be inventive. What might you say about each of the three aspects you have chosen?

Finish with a strong conclusion and final thought. For example, give:

- a really good reason for watching the film
- a really good reason for not watching it.

Synthesis: Key and related concepts – Creativity and Point of view

Here is an excellent opportunity to examine the concepts of Creativity and Point of view.

The poet Craig Raine wrote a poem entitled “A Martian sends a postcard home”. The poem is written from the point of view of a Martian trying to describe what he sees on Earth. The Martian finds life on Earth very strange and so he frequently describes nature and man-made objects in terms of machines. For example, he does not know the word “book”, so he describes them as “mechanical birds with many wings”.

The effect of describing the world in this way allows us, the readers, to see things on Earth the way that an outsider or an alien might see them.



A Martian Sends a Postcard Home

Caxtons are mechanical birds with many wings
and some are treasured for their markings –

they cause the eyes to melt
or the body to shriek without pain.

I have never seen one fly, but
sometimes they perch on the hand.

Mist is when the sky is tired of flight
and rests its soft machine on the ground:

then the world is dim and bookish
like engravings under tissue paper.

Rain is when the earth is television.
It has the properties of making colours darker.

Model T is a room with the lock inside –
a key is turned to free the world

for movement, so quick there is a film
to watch for anything missed.

But time is tied to the wrist
or kept in a box, ticking with impatience.

In homes, a haunted apparatus sleeps,
that snores when you pick it up.

If the ghost cries, they carry it
to their lips and soothe it to sleep

with sounds. And yet, they wake it up
deliberately, by tickling with a finger.

Only the young are allowed to suffer
openly. Adults go to a punishment room

with water but nothing to eat.
They lock the door and suffer the noises

alone. No one is exempt
and everyone’s pain has a different smell.

At night, when all the colours die,
they hide in pairs

and read about themselves –
in colour, with their eyelids shut.

Source: (Craig Raine, 1978)

Formative reading and speaking skills: Analysing a poem

In groups of three discuss the following questions. The purpose of the exercise is to find answers you can all agree on.

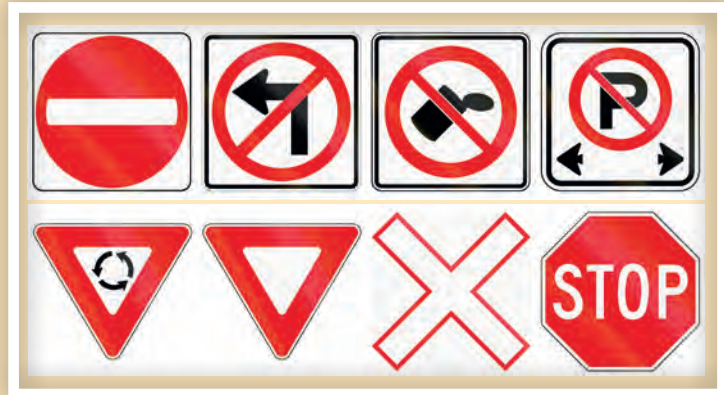
Multiple-choice questions

Discuss the answer options A, B, C or D. When you have agreed which answer is correct, record your answers on a separate sheet of paper.

- The text is:
A. a description
B. a review
C. a report
D. a story.
- The poem is written from the point of view of:
A. an Earthling on Mars
B. a Martian on Mars
C. a Martian on Earth
D. a Martian in space.
- The Martian is trying to explain what he sees to:
A. people on Earth
B. himself
C. his family
D. other Martians.
- The speaker addresses the audience using:
A. the first person
B. the second person
C. the third person
D. the fourth person.
- The purpose of the text is to:
A. see the Earth from a new point of view
B. see Mars from a new point of view
C. persuade other Martians to come to Earth
D. make fun of life on Earth.
- The style used in the text is:
A. persuasive
B. factual
C. poetic
D. exaggerated.
- When he looks at things on Earth the Martian:
A. understands everything perfectly
B. misunderstands everything
C. explains things as best he can
D. exaggerates his experiences.
- From the Martian's language we guess that Mars is full of:
A. machines
B. animals
C. plants
D. monsters.

Thinking about point of view and creativity

These traffic symbols have clear messages. In the first picture the designers have used their creativity to make their point of view very clear. Take a moment to decide what each sign means.



Understanding ambiguity

Sometimes words and symbols can be ambiguous – they can have two or more meanings. Alternatively, the messages can be contradictory. In such cases we do not know exactly what the meaning is.

When there is no clear answer, we have to use our creativity to solve the problem. For example, what is a driver supposed to do in the photograph opposite?



A limited point of view

Similarly, the Martian in the poem does not understand the conventions on Earth. It has a limited point of view.

As a result, the Martian either misunderstands ambiguous phrases, or uses the wrong word to describe the objects it finds on Earth. It has to be creative to explain ideas for which it has no appropriate words.

With a partner, reexamine the poem. Which “Earth words” correspond to the name given by the Martian? Make a copy of the table on the next page and fill in your answers.

- A baby
- Cars
- Books
- A toilet
- Sleeping
- A watch
- Fog

In groups or pairs decide why the Martian has used the “wrong” word or phrase. Create a table like the one below and write your answers in the column “Possible explanations”.

Martian name	Earth name	Possible explanations
Caxtons		
Mist		
Rain		
Model T		
Time		
A haunted apparatus		
A punishment room		
They hide in pairs		

Formative writing skills: Creative writing

Imagine you are writing from the point of view of a Martian on Earth and write your own 300–400-word message home. You can use the postcard below for ideas. Alternatively, use the skills you have learned in this chapter to write a review of the poem “A Martian Sends a Postcard Home”.



ATL Social skills

What is the advantage of using creative or ambiguous language?

For example, what could the following phrases mean?

- “Caxtons ... cause the eyes to melt”
- “Mist is when the sky is tired of flight”
- “a box, ticking with impatience”
- “when the colours die”
- “read about themselves in colour”

Would it be better if we only communicated using clear, literal and unambiguous language? What do you think? You might like to debate this topic in class.

Inquiry 3: How can we detect bias in a text?

Conceptual question

Formative listening and speaking skills: Understanding and using a range of vocabulary

You are about to read a review of the film *The Martian*. It is a science fiction film about an astronaut stranded on Mars.

With a partner decide which words in the list below:

- are related to film-making
- are related to writing reviews
- show positive bias
- show negative bias.

acting	drama	plot	special effects
amateurish	enjoyable	point of view	storyline
background	fantastic	rating	subjective
comments	lighting	recommend	tension
crude	magical	scenes	value
dislike	outstanding	second-rate	
directed	opinion	set	

When you have finished, share your ideas and add additional words to each list.

Related concept: Bias

Bias is an opinion or judgment based on a personal point of view.

In this section we will examine the bias in a review of the film *The Martian*. We will:

- identify evidence of the author's biased thinking
- examine the role of word choice in revealing bias
- identify the author's purpose in writing the review.

Formative speaking and reading skills: Understanding explicit information

Before examining the bias in the review, first work in pairs and check your understanding of the main ideas in the review. Read the text and then answer the questions that follow.

The Martian Movie Review

by Ahmed H.



The Martian is a sci-fi drama film directed and produced by Ridley Scott. It stars Matt Damon as Mark Watney and features other familiar faces like Jeff Daniels and Sean Bean. 1

The story takes place sometime in the near future, when human technology has improved and outer space travel to Mars has been achieved. Mark Watney and the other members of his crew are on an expedition on Mars when a storm hits and the team is forced to evacuate, accidentally leaving Watney behind. 5

The whole movie is about Watney trying to survive and NASA trying to contact him. The movie jumps back and forth between the two settings. 10

Obviously with a situation like this, tension runs high throughout the film, and indeed there are several thrilling moments.

15 However, the high points of the film for me are the intimate, thoughtful moments that show the psychological and emotional stress Watney goes through during this crisis.

It's these quiet and well-presented scenes
20 that make this movie so memorable and special. I grew to care about Watney and his struggle. Matt Damon does a phenomenal job at bringing Mark Watney to life from the novel,
25 with some of the best acting of his career.

The Martian also has a very unexpected aspect: comedy. Mark Watney himself

has a very good sense of humor, further increasing his likability. He is very optimistic and upbeat about each situation.

30

Overall, I found *The Martian* to be a really great movie. The special effects are not hugely spectacular, nor does it have the action of *Interstellar* or *Gravity*, but rather it focuses on smaller moments, whether
35 emotional or comic. It does these things very well, and I recommend this movie to anyone who enjoys drama/thrillers, or science fiction films.

Adapted from: <https://mviteenvoice.com/2015/11/28/the-martian-movie-review/>

True or false? The sentences below about the review are either true or false. Record on a separate sheet of paper whether each of the sentences below is true or false, and then justify each answer with a relevant brief quotation from the text. Both are required for one mark.

		True	False
Example:	The movie's principal actor is Mark Watney.		✓
Justification:	"The movie's lead actor is Matt Damon"		
		True	False
1.	Mark Watney was on a one-man mission to Mars.		
Justification:			
2.	The story is a conflict between man and nature.		
Justification:			
3.	The story has a single climax.		
Justification:			
4.	The film focuses on Mark Watney's ability to deal with problems.		
Justification:			
5.	The film is based on an original script.		
Justification:			
6.	The writer was surprised to find that the film had funny moments.		
Justification:			
7.	The writer is very enthusiastic about the film.		
Justification:			
8.	The writer recommends the film to people who like special effects.		
Justification:			

Formative speaking and reading skills: Understanding conventions and connections

As you carry out the task, remember that working on a text together can be a stressful process. Some people hold strong opinions. Others may try to dominate the group. Some people may be too shy to speak.

However, you are much more likely to help everyone to succeed if you can understand that the process of decision-making is as important as the final result.

Some of the very useful skills you can develop during this exercise are:

- building consensus
- sharing responsibility for planning and decision-making
- listening actively to other perspectives and ideas
- encouraging everyone to contribute
- helping all members of the group to succeed.
- reaching decisions that everyone can agree to.

1. Examine the list below of vocabulary taken from the review of the film *The Martian*. From the list, identify the words that show bias.

drama	well presented	comedy
tension	memorable	movie
thrilling	scenes	special effects
intimate	struggle	spectacular
thoughtful	phenomenal	action
stress	acting	thriller
crisis	unexpected	science fiction

Choose the correct answer from A, B, C or D. Write your answers on a separate sheet of paper.

2. The reviewer expresses his bias through his choice of:

A. verbs	C. adjectives
B. nouns	D. all of these.
3. The reviewer's bias can be described as:

A. indifferent	C. critical
B. enthusiastic	D. sympathetic.
4. As evidence to support his opinions, the reviewer uses:

A. specific examples from the film	C. the opinions of other critics
B. his personal feelings	D. his biased point of view.



Discussion and debate

Discussing bias

- Why is it really important to be able to recognize bias in the material we read and watch?
- How can we recognize the difference between an objective and a biased text?
- How can evidence help us to distinguish between reasonable opinions and irrational prejudice?

Formative speaking and reading skills: Understanding implicit information and bias

Related concept: Bias

Study the image below (on the left) of the astronaut from the film *The Martian*. In pairs, discuss these questions.

- What words and phrases come to mind when you describe the astronaut's situation?
- Why has the film director chosen to portray the astronaut like this? How are the audience supposed to feel about the astronaut?
- Is the image free from bias? Justify your answers.



Now study the picture of the Martians above (on the right) and discuss these questions.

- What words and phrases come to mind when you see the Martians arriving like this?
- Why has the artist chosen to draw the Martians like this?
- Is the image free from bias?

Discussion and debate

What does the bias in the two images suggest about the concepts of “them” and “us”?

Formative writing skills: Organizing and presenting a review

Write a **biased** review of a film that you have seen recently. Your review should be either very positive or very negative. Write 300–400 words.

Planning and scaffolding – structuring a film review

Divide your film review into paragraphs. Your review could have a positive or negative bias.

1. Grab the readers' attention with some information or a question to connect them to the film, such as "Have you ever wondered what it would be like...?"
2. Introduce the film. Include the name of the film, the type of film (for example, comedy, adventure, drama), the prominent stars and the basic setting (time and place). Give a brief, but biased, summary of the plot, the characters, and their situation.
3. Do not reveal the ending.
4. Using the same biased point of view, describe other aspects of the film. You might consider the quality of the:
 - a. acting
 - b. costume design
 - c. photography
 - d. soundtrack.
5. Describe your overall reaction to the film and include your biased recommendations for your readers.

Formative listening and speaking skills: Debating

In small groups, study the two photographs and ask yourselves these questions.

- What message is each text communicating?
- What is the point of view of the person who created each image?
- Are these images free of bias?

Divide your group into two teams.

Use the skills you have developed in this chapter to organize a debate around this statement.

"It is impossible for a text or an image to be free from bias."

To revise your debating skills, consult the "Focus on communication skills" section earlier in this chapter.



Reflections on Inquiry 3: How can we detect bias in a text?

Now that you have finished this section, what is your answer to the inquiry question?

Reflection: Listening skills and debatable questions

Reflections on the ideas and content of this chapter

What have you learned so far about the theme of life on Mars?

As a class activity, make a list of the most important ideas you have learned so far in your inquiries.

At this stage, are there any points you would like to investigate further? Make a list of points and discuss them with your teacher.

Audio-visual text

The following are audio-visual texts to use in this section.

A. "If I die on Mars"

<https://vimeo.com/119124588>

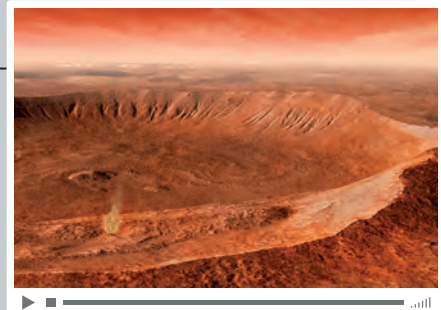
B. First Mars mission by the United Arab Emirates

<https://edition.cnn.com/2020/07/19/middleeast/uae-mars-hope-launch-intl-hnk-scn-scli/index.html>

C. "Maggie Lieu Q&A: Mission to Mars" Maggie Lieu speaks to schoolchildren in a question and answer session.

<https://www.youtube.com/watch?v=uQRSx4Qmhow>

Note: Alternatively, you could use an audio-visual stimulus of your own choosing related to the theme of life on Mars or space travel.



Before you watch the video

Read through the exercises below to make sure you know what to look and listen for. You may need to watch the material several times and discuss possible answers in class after each viewing.

Formative listening skills: Understanding explicit and implicit information

Answer the following questions, writing your answers on a separate sheet of paper.

1. The video is related to which of these MYP global contexts?
 - A. Identities and relationships
 - B. Orientation in space and time
 - C. Personal and cultural expression
 - D. Scientific and technical innovation
 - E. Globalization and sustainability
 - F. Fairness and development

Justify your answer with evidence from the video.

2. Create a table like this to summarize the main points of the video. You may wish to add examples and explanations, as necessary.

Subject matter		
Thesis		
	Main idea	Examples and/or explanations and/or details
Supporting point 1		
Supporting point 2		
Supporting point 3		
Supporting point 4		
Conclusions		

Multiple-choice questions

3. What is the format of the audio-visual stimulus?
 - A. Presentation
 - B. Conversation/discussion/interview
 - C. Debate
 - D. Story
4. The purpose of the audio-visual stimulus is to:
 - A. narrate a story
 - B. describe a situation
 - C. explain a problem
 - D. argue a point of view
 - E. give instructions/guidelines.
5. The point of view in the audio-visual stimulus is:
 - A. balanced
 - B. one-sided.
6. How much does the audio-visual stimulus use graphics?
 - A. A lot
 - B. Quite a lot
 - C. Once or twice
 - D. Never
7. Which techniques are used in the audio-visual stimulus?
 - A. Voiceover
 - B. Special lighting techniques
 - C. Music and sound effects
 - D. Special visual effects
 - E. All of the above

Formative listening and speaking skills: Debating

Debate: Is space exploration a terrible waste of money?

ATL Social skills

Before you conduct the debate, think about the wider issue of space exploration. In small groups, discuss the questions we asked at the beginning of the chapter. For example, is there any value in sending spacecraft to orbit the Earth or exploring the rest of the universe? Are there good scientific or economic reasons for sending robots to other planets or conducting research in space? Would the money be better spent here on Earth?

Now divide your class into two groups. One group should research the possible value of space exploration. The other group should research the economic and scientific arguments against space exploration. For example, how much does it cost to send a rocket into space? How could that money be spent otherwise? Would governments be better spending money on solving social problems rather than scientific adventures? Why explore space when there is so much we do not know about Earth?



Discussion and debate

Conduct a class debate using this question: Is space exploration a terrible waste of money?

The purpose of this debate is to discuss the content of the video you have watched in groups. You may also wish to add ideas from your own research.

Divide each group into two teams. Using evidence and/or examples from the words and images from the video and other material from this chapter, each team should create and make a series of debate points. You may also wish to make use of other information you have researched.

One team should present the points of view in favour of space exploration.

One team should present the costs of space exploration and the alternative uses of the money involved.

Planning and scaffolding

You should use the knowledge and skills you have learned in this chapter to help you organize your debate in the most effective way. Before you start, review what you have learned so far about the rules for conducting a debate. Are there any points that are unclear? If so, now is the time to ask.

What is the best way to organize your speech? How do you make an effective speech? Make a list of all the points you have learned so far about constructing a persuasive argument.

Formative writing skills: Organizing and producing a review

Write a review of your reactions to the video you have watched.

Planning and scaffolding – structuring a review

Divide your review into different paragraphs.

1. Grab the readers' attention with some information or question to connect them to the film, for example "Have you ever wondered ...?" You could also mention the reason or context for watching the video.
2. Introduce the video: give an overview of what the video is about. You should include the name, the type of video (for example, interview, presentation, discussion, debate, fictional narrative or drama) and the participants.
3. State the main purpose of the video. Describe the organization of the content.
4. List the arguments, ideas and opinions expressed in the video. You can use the table from question 2 above to help you.
5. Describe your overall reaction to the video and the extent to which it interested you. Give your opinion on the quality of the ideas presented and the extent to which you agree with them. Include your recommendations for your readers.

ATL Social skills

Structuring a review is a complex task. Why not work on it as a group activity and share ideas?

By working collaboratively you can:

- understand other perspectives and ideas
- share responsibility for decision-making
- help each other to succeed.

Reflection: Debatable questions on topics and concepts

These debatable questions will allow you to evaluate some of the big ideas you have examined in this chapter about the topic of **Life on Mars** and the global context of **Scientific and technological innovation**.

They will also allow you to develop your own ideas about the concepts you have explored: **Creativity**, **Point of view** and **Bias**.

To demonstrate your understanding of these concepts, discuss these questions in small groups and afterwards share your conclusions with your class.

Life on Mars

Debatable question 1: Is the topic of **Life on Mars** central to the global concept of **Scientific and technological innovation**?

Debatable question 2: Can we learn useful lessons from the study of life on Mars?

Creativity, Point of view and Bias

Debatable question 1: Is it easy to recognize the point of view and bias in a text?

Debatable question 2: Is there such a thing as an unbiased text?

Debatable question 3: Is it useful to create a text using more than one point of view?

Debatable question 4: Is there a connection between creativity, point of view and bias?

Summative assessments: Scientific and technological innovation

Statement of inquiry

Both **point of view** and **bias** can affect a writer's **creativity**.

In these summative assessments you will be assessed on your use of the four communication skills you have developed in this chapter: Listening, Reading, Speaking and Writing. In each assessment, you will also have an opportunity to show your understanding of the topic for this chapter, **Life on Mars**.

- The Listening assessment requires you to respond to a video. It assesses your understanding of explicit and implicit information, and the conventions and connections in the text.
- The Reading assessment requires you to respond to a multimodal text. It assesses your understanding of explicit and implicit information, and the conventions and connections in the text.
- The Speaking assessment requires you to respond to a multimodal text and this debatable question. **Debatable question 1: Can we create an informative image that has no point of view?**
- The Writing assessment requires you to respond to a multimodal text and this debatable question. **Debatable question 2: Does the context in which we write affect the meaning of what we say?**

Summative assessment A: Listening

Assessment criterion A: Listening

At the end of the proficient level, you will be able to:

- identify explicit and implicit information (facts, opinions, messages and supporting details)
- analyse conventions
- analyse connections.

Watch and listen to the following text and then answer the questions.

Listening activities: notes on marking

The listening recordings are short. Each recording is assessed using two activities which are made up of eight questions in total.

1. In an MYP summative assessment, grade using the Grading criteria given on the left.
2. If using this assessment for MYP eAssessment practice (MYP 5 only): 16 marks is the maximum score for the listening component of the MYP eAssessment. Award 2 marks for each correct answer. This mark scheme gives the Listening section the same weighting as the equivalent reading, speaking and writing assessments in the eAssessment.

Mars: When will humans get there?

<https://www.youtube.com/watch?v=ticaLyuePjA>



Search words: mars humans economist



Watch from the start to 01.00 to answer these questions.

1. What is Mars' other name?
2. Name the two similarities between Earth and Mars that are related to time.
3. Name two geographical features that show that Mars once had flowing water.
4. Watch from 01.00 to the end of the video. Identify the **five** true statements.
 - A. Astronauts on Mars will receive new supplies from Earth.
 - B. By 2024 NASA hopes to have sent humans to Mars.
 - C. It will take nine months to travel from Earth to Mars.
 - D. Life forms have been detected on the surface of Mars.
 - E. NASA will send humans to Mars within two decades.
 - F. Scientists think life may have existed on Mars in the past.
 - G. Scientists have discovered underground lakes on Mars.
 - H. Some astronauts may die before the end of the mission.
 - I. The journey to Mars should take around 26 months.
 - J. Water has been detected on the surface of Mars.

Additional Listening practice for Summative assessments

Click on the icon below for further listening practice on the topic for this chapter.



At the link, you will find both an additional video and an additional Summative listening assessment.

Summative assessment B: Reading

Assessment criterion B: Reading

At the end of the proficient level, you will be able to:

- i. identify explicit and implicit information (facts, opinions, messages and supporting details)
- ii. analyse conventions
- iii. analyse connections.

Read the following text and answer the questions.



IB Student Hopes to be First Woman on Mars

A 17-year-old American student is using her IB education to fulfill her dreams of visiting the red planet.

5 Alyssa Carson has resolved to be on the first human mission to Mars. This IB student from Louisiana, USA, may only be 17 years old but, should Mars space flights become a reality in the 2030s, she's convinced she'll be one of the very first human beings to set foot on the red planet.

10 Much of her life is devoted to becoming an astronaut. As a youngster she attended NASA space camps and space shuttle launches. This summer she is going to train to be an aeroplane pilot.

15 In her spare time she follows a course at an astronaut and space scientist academy in Florida, which has involved spacesuit testing, making emergency exits from aircraft and sea survival, and most exciting of all, zero gravity flights.

20 On one particular flight she encountered zero gravity on 11 occasions for around 20 seconds each time. Not many 17-year-olds can boast about that.

25 Her school studies, meanwhile—at Baton Rouge International School—are all targeted towards a



future university degree in astrobiology. As soon as she reaches the minimum age of 18 next year, she plans to apply for NASA's astronaut selection programme.

Alyssa says her IB education is helping her enormously in her vocational goal. She is currently following a Diploma Programme and, before that, she completed a Middle Years Programme. 30

"All my IB projects have encouraged me to do other space-themed projects," she says. For her extended essay, for example, her plan is 35

40 to choose a Mars-themed subject. One idea is to attempt to grow bacteria under Mars-like conditions.

As part of her physics higher level studies, she wants to examine the luminosity of stars. Her other higher level subjects are mathematics and biology.

45 The IB Diploma Programme is, she believes, the perfect preparation for her transition to university. There's an undergraduate course in astrobiology on offer at a college in Florida that she has her eyes on.

50 "If I end up going to Mars I can see myself investigating soil and water samples and the atmosphere of Mars in order to search for signs of bacterial life."

Alyssa says the international nature of her IB studies is giving her a well-rounded and global outlook that would be invaluable on any future Mars mission. Since kindergarten level she has been studying French, Spanish and Chinese, and is fluent in all three foreign languages.

60 "Astronauts would come from many different countries," she says. "The worldwide education I'm getting is great for a global project like going to Mars."

Adapted and abridged from: <https://blogs.ibo.org/blog/2018/05/07/ib-student-hopes-to-be-first-woman-on-mars/>

Choose the correct answers and write them on a separate sheet of paper.

1. The main purpose of the text is to:
 - A. describe Alyssa's NASA space camp training to the readers
 - B. persuade readers to take an interest in space travel
 - C. inform readers about Alyssa's interest in space travel
 - D. give advice to younger readers with an interest in space travel.
2. The text uses a photograph of Alyssa to illustrate:
 - A. Alyssa during her training to become a pilot
 - B. the uniform that Alyssa would wear in space
 - C. the day Alyssa successfully completed her training
 - D. Alyssa on a course at a space science academy.
3. Alyssa says that her ambition to become an astronaut:
 - A. developed out of her interest in the luminosity of the stars
 - B. has been made easier because of her choice of Diploma Programme subjects
 - C. developed out of her interest in her Middle Years Programme and Diploma Programme subjects
 - D. has resulted from her interest in her extended essay topic.
4. The text concludes by suggesting that there is a connection between:
 - A. an IB education and having an internationalist outlook
 - B. the IB and the study of astrobiology at university level
 - C. the IB and the ability to undertake vocational training
 - D. an IB education and the ability to learn languages easily.

Read lines 1 to 23. What do the following words mean in the text? Choose the appropriate words from the list on the right and note your answers on a separate sheet of paper.

- | | |
|--------------------------|----------------|
| 5. resolved (line 4) | A. decided |
| 6. devoted (line 10) | B. defined |
| 7. involved (line 17) | C. attempted |
| 8. encountered (line 20) | D. insisted |
| | E. included |
| | F. experienced |
| | G. contained |
| | H. dedicated |

Read lines 24 to 44. The following statements are either true or false. Choose the correct option for each statement then justify it using words as they appear in the text. Both parts are required for one mark.

9. Alyssa has already joined the NASA astronaut programme.
10. Alyssa is undertaking vocational courses as part of her IB education.
11. Her IB studies have motivated her to do her own research.
12. Her extended essay will focus on the study of bacteria on Mars.

Find the words that complete the following sentences. Answer using the words as they appear in lines 45 to 63.

13. Alyssa thinks her IB education has prepared her to make the _____ .
14. There is a really interesting course at a college in Florida that Alyssa _____ .
15. On Mars, Alyssa's main scientific goal would be to look for _____ .
16. Alyssa has studied French, Spanish and Chinese and is now _____ .

Summative assessment C: Speaking

Examine **one** of the images. Explain how it relates to the topic of Life on Mars.

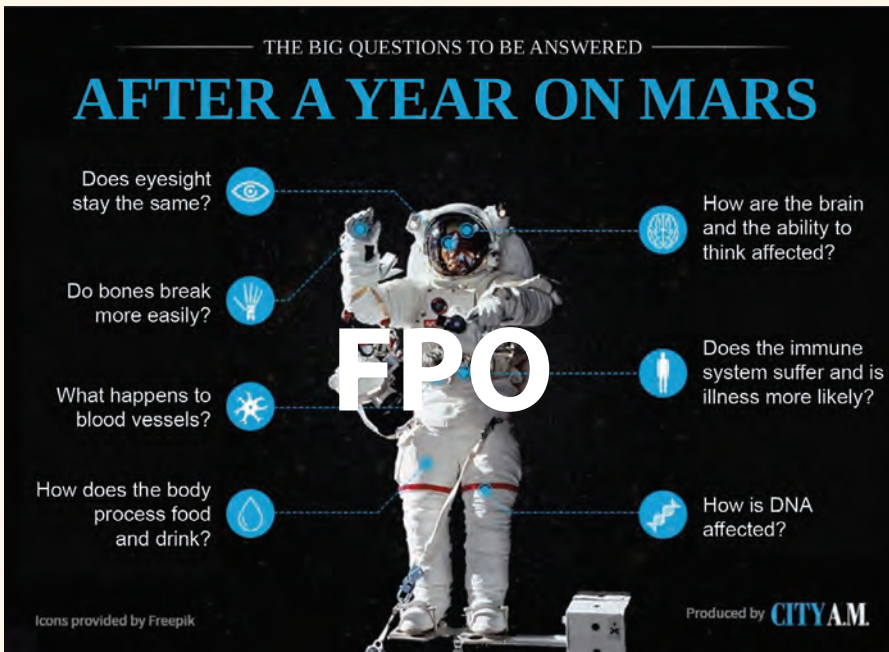
Present the contents of the image to your teacher.

After your presentation, use the image to discuss this debatable question with your teacher.

Debatable question 1: Can we create an informative image that has no point of view?

You should speak for 4–5 minutes in total.

Image A

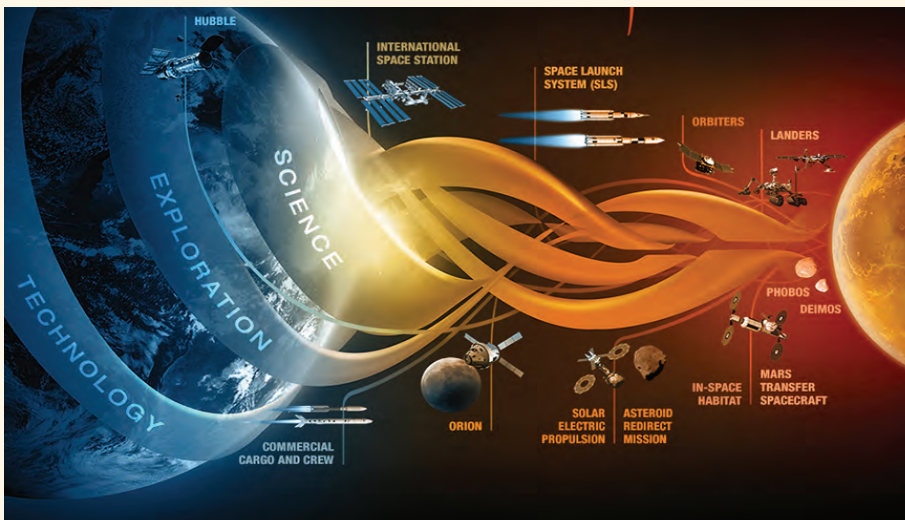


Assessment criterion C: Speaking

At the end of the proficient level, you will be able to:

- i. use a wide range of vocabulary
- ii. use a wide range of grammatical structures generally accurately
- iii. use clear pronunciation and intonation in a comprehensible manner
- iv. communicate all the required information clearly and effectively.

Image B



Summative assessment D: Writing

Consider this debatable question and then complete the task.

Debatable question 2: Does the context in which we write affect the meaning of what we say?

Study the image.

A Space Academy is preparing a team of young people to become trainee astronauts to travel to Mars later next year. Your job is to encourage young people to apply to the Space Academy to become astronauts.

Write a positive review of the Mars One programme, describing some important benefits of space exploration and persuading young people to apply to the Space Academy to become trainee astronauts.

Write 300–400 words.



Now is your chance to go into space
Take a trip to Mars

Assessment criterion D: Writing


At the end of the proficient level, you will be able to:

- i. use a wide range of vocabulary
- ii. use a wide range of grammatical structures generally accurately
- iii. organize information effectively and coherently in an appropriate format using a wide range of simple and complex cohesive devices
- iv. communicate all the required information with a clear sense of audience and purpose to suit the context.

Going beyond the chapter

In this chapter you have explored the interaction between scientists and the idea of space travel, and how space travellers might use technology to adapt strange environments to their needs. You have also debated the value and risks of such potential scientific innovations, and discussed what impact they could have on our lives. You have understood that language used to describe scientific and technological matters can tell us as much about human behaviour as it does about science. Now make use of the information you have learned and the communication skills you have developed in this chapter for practical purposes beyond the classroom.

Test yourself – Five key characteristics of an astronaut

Characteristic	Examples	
Endurance	Clear-thinking Persevering and productive Optimistic Indefatigable A “Can do!” attitude.	 <ul style="list-style-type: none"> • Consider the characteristics and compare them to your own skills, abilities and interests. • Do you think you would make a great astronaut? • Think about what skills, characteristics and intelligences you possess. • What profession do you think you would be best suited to? • For more information about becoming an astronaut look here: https://www.mars-one.com/faq/selection-and-preparation-of-the-astronauts/what-are-the-qualifications-to-apply
Adaptability	Adaptable to people and situations You know your limits Open-minded Tolerant of ideas different to your own Open to other cultures	
Curiosity	You ask questions to understand ideas A good communicator A good learner A good teacher Not a show-off	
Trust	Self-confidence Good judgment Trust others' judgments A team player Reflective	
Creativity	Flexible problem-solver Creative perspectives to problems and solutions Good sense of humour Playfulness Possess multiple intelligences	

Action and service

Speak to your MYP coordinator or action and service coordinator to find out what your school's expectations for action and service are in your particular grade or year.

These ideas relate to service learning outcomes for students to:

- become more aware of their own strengths and areas for growth
- discuss, evaluate and plan student-initiated activities
- persevere in action
- work collaboratively with others
- develop international-mindedness through global engagement, multilingualism and intercultural understanding
- consider the ethical implications of their actions

Ideas for service

In the text, "A Martian Sends a Postcard Home", the poet Craig Raine makes the familiar (life on earth) different, by presenting it from the perspective of an alien.

How would a visitor from another planet describe some global issues to other aliens? For example, consider:

- global warming
- child labour
- deforestation
- poverty.
- racism or xenophobia
- violence towards women

Use a creative approach to raise awareness of a social or political issue that is important to you. This could be as part of a student-led initiative or club you are already involved in (for example, an international charity, an environmental club or an animal rights group). You could do this in the form of a diary entry, letter, email, blog or vlog (in costume, perhaps).



Further reading

If you enjoyed this chapter, you might also enjoy this further reading.

The Hitchhiker's Guide to the Galaxy by Douglas Adams

The Martian Chronicles by Ray Bradbury

2001: A Space Odyssey by Arthur C. Clarke

The War of the Worlds by H.G. Wells

Invasion by Jon S. Lewis

Legend by Marie Lu

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