

An Astronaut's Diary

16 JUL 22, 15:00

Dear Diary,

It's finally here. Or close to being here anyway. Tomorrow, I will finally get to fulfil my lifelong dream: to travel into space. I have been training for this for most of my life, and now, it's finally here. I can't even describe how excited I am; words won't do my feelings justice. I need to get some sleep now. We'll be commencing before the sun comes up.

17 JUL 22, 05:00

Dear Diary,

Oh man, it's HERE! I'm squealing like a school girl. The others are looking at me like I've gone crazy, but they grin knowingly. Up to now, I've been professional and reserved, but I'm about to lose it. There's a palpable buzz around here. Everybody is just as eager as me, but they've done this before.

17 JUL 22, 13:35

Dear Diary!

Crikey, that was intense. This is definitely something you have to experience for yourself to truly understand the feelings and emotions you go through, but I'll try to explain it.

We start before dawn, then 45 minutes or so to get suited and booted in our specially designed gear, then getting strapped into the chairs... It takes a while. But then final checks are carried out and everything becomes real. There are four of us in the flight deck, all flat on our backs in the chairs, and we glance at one another and give a little nod. All the flashing, blinking buttons and switches are checked – more than 500 of them – and then the countdown begins. The ebb and flow of adrenaline from the last few days peaks. It's thrilling and terrifying all at once. It's like nearing the highest point on a rollercoaster and your gut is in knots. The countdown calls thirty seconds and we're ready. Fifteen seconds and the sparks ignite behind us (nothing worrying; they burn off any hydrogen that might have leaked into the shuttle). Six seconds to go and the engines light. My heart is thudding out of my chest at the thought of what I'm doing – actually leaving Earth for the moon and beyond! It isn't like popping to the shop! I allow myself a millisecond of panic, and then breathe deeply and let my training kick in. I've prepared for this. Vigorously. I'm ready. Three... Two... One....

The shuttle sways like a giant beast shifting under us as it's positioned for the vertical flight. The pilot pulls the throttle and injects the fuel. And then, as the engines fully kick in, we slingshot through the air. The shuttle weighs 2,000 tonnes, so the power required for lift-off is near unfathomable. In context, a standard car weighs a bit more than a tonne!

The acceleration rams my body into the chair and it feels like concrete being poured over me. My lungs feel like they're being pressed into my back. The shuttle is vibrating fiercely. My head in my helmet feels like the last stubborn penny in a piggy bank. I strain to lift it forward against the force so that my neck can absorb the vibrations instead of my head and I can concentrate on what I need to do. I'm checking the instruments, the interconnected systems, the gyroscope, the fuel gauge, the life-support, next, next, next.

After two minutes, we're above the air and the shaking stops: there's no friction here. The sheer speed and force of the continued journey would rip the shuttle in half, so the pilot pulls back on the throttle. The solid thruster rockets disconnect with a bump, then, after about eight and a half minutes, we're in orbit. Weightless. Floating. Training for this feeling meant spending hours underwater. It's the closest thing we can do for now, but that doesn't compare to this. I can feel a collective breath released by the crew. The radio crackles its communication with Earth and I know we've made it. We're one step closer to completing our mission.

We're allowed to take our belts off now, and as soon as the metal unclicks, we float around. The feeling is insane! I float over to the windows to have a look at what we're going to be exploring. The shuttle is hurtling around the earth; a kaleidoscope of colour rushing by. From here you can see clearly the curvature of the planet and it is truly awe-inspiring. My breath catches in my throat and I'm sure I'm about to cry. The voices of my team penetrate my daydreams and I'm brought back to reality.

Back to business. We still have a million checks to do. We have a saying in the astronaut business: 'There's no problem so bad that you can't make it worse.' Depressing, right? It keeps us aware that every decision we make can be life or death. When poring over all these buttons and switches, a lot can go wrong. Once one issue is resolved, we're on to the next or getting out in front of potential ones. What could kill us next? If something happens, what can I do to solve it?

21 JUL 22, 18:55

Dear Diary,

We've been up here for days now. We lost communications shortly after we started orbiting. Something has gone badly wrong. Morale is low, but we're fighters. Things are failing like dominoes. Commander Jenny saw something out in the inky black. Something that's heading towards us.

Vocabulary

1. What does the word 'commencing' mean in the entry on 16 Jul 22?
2. What does the word 'vigorously' mean in the entry on 17 Jul 22, 13:35?
3. Find a word that means that something cannot be fully understood.
4. Look at the paragraph beginning: *Back to business...* What do you think the word 'poring' means?

Summarise

1. Summarise the first two diary entries.
2. Briefly describe what happens from when the countdown begins until the shuttle takes off.
3. Summarise three things that have been described so far to keep astronauts safe during take-off.
4. Create a title for the entry on 21 Jul 22 which briefly summarises what it is about.

Retrieve

1. What is the author's lifelong dream?
2. How long does it take for an astronaut to get into their space suit?
3. How long does it take the space shuttle to get into orbit?
4. What saying do astronauts have about safety?

Infer

1. Give two pieces of evidence from the first two entries that suggest this is the author's first time travelling into space.
2. Why is the punctuation after 'Dear Diary' in the entry on 17 Jul 22, 13:35 different to the other entries?
3. 'I can feel a collective breath released by the crew.' What does this tell you about going into space?
4. Why does the author write 'I'm sure I'm about to cry'?

Predict

1. After reading the first two entries, predict how the author will feel during take-off.
2. Read the paragraph beginning: *Crikey, that was intense...* What do you think are some of the emotions the astronauts will experience? Why?
3. Read the paragraph beginning: *After two minutes...* What do you think the mission might be? Why?
4. What do you think will happen next? Why?

Effect of language

1. 'words won't do my feelings justice.' What impression does this give of the author's feelings?
2. The author describes the countdown to the take-off in the entry for 17 Jul 22, 13:35. How does this help the reader to better understand the launch?
3. What does the repeated language in the paragraph beginning: *The acceleration rams...* help to tell the reader?
4. The author says, 'We still have a million checks to do.' What effect does this have on the reader?

Link ideas

1. What feeling links the first two diary entries?
2. After reading page 2, describe the 'ebb and flow' mentioned in the diary so far.
3. Why are the similes used in this text so important for the reader?
4. 'Things are falling like dominoes.' How does this extract link to the paragraph beginning: *The acceleration rams...*?

Compare

1. Compare the author's mood with those around her. What is the same and what is different?
2. Compare the paragraph beginning: *Crikey, that was intense...* with the first two entries. Do you think the launch was what the author expected? Give evidence.
3. Read the paragraph beginning: *After two minutes...* and compare the different sensations felt travelling through the air with those felt above it.
4. Compare the tone of the entry on 21 Jul 22 to the tone in the rest of the diary.

An Astronaut's Diary

1. 'I have been training for this for most of my life.'
What does this tell you about the author's character?

1 mark

2. The author talks about the training that the astronauts
have received. Give one example of the training in action.

1 mark

3. On page 4, the author says, 'Back to business.' What does
this tell you about her?

1 mark

4. What impression do you get of the author of the diary?
Give two impressions using evidence from the text to support
your answer.

3 marks

An Astronaut's Diary

1. 'I have been training for this for most of my life.'
What does this tell you about the author's character?

1 mark for committed / determined etc.

1 mark

2. The author talks about the training that the astronauts
have received. Give one example of the training in action.

1 mark for checking instruments etc.

1 mark

3. On page 4, the author says, 'Back to business.' What does
this tell you about her?

1 mark for reference to author enjoying the trip, but being
able to quickly focus on tasks at hand. She is focused /
professional etc.

1 mark

4. What impression do you get of the author of the diary?
Give two impressions using evidence from the text to support
your answer.

3 marks for two acceptable points, at least one evidenced.

Acceptable points for impression e.g: adventurous /
intelligent / excitable / forward-thinking

Likely evidence: my lifelong dream: to travel into space / I'm
checking the instruments, the gyroscope, the fuel gauge,
the life-support, next, next, next / I'm squealing like a school
girl / If something happens, what can I do to solve it?

3 marks

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← QUESTION SELECTION BOX 1

Vocabulary (2a): What does the word 'commencing' mean in the entry on 16 Jul 22?

Retrieve (2b): What is the author's lifelong dream?

Summarise (2c): Summarise the first two diary entries.

Infer (2d): Give two pieces of evidence from the first two entries that suggest this is the author's first time travelling into space.

Predict (2e): After reading the first two entries, predict how the author will feel during take-off.

Link ideas (2f): What feeling links the first two diary entries?

Effect of language (2g): 'words won't do my feelings justice.' What impression does this give of the author's feelings?

Compare (2h): Compare the author's mood with those around her. What is the same and what is different?

Each question in this box is the first question in its respective section of the 'Questions by skill' sheet.

QUESTION SELECTION BOX 2 →

Vocabulary (2a): What does the word 'vigorously' mean in the entry on 17 Jul 22, 13:35?

Retrieve (2b): How long does it take for an astronaut to get into their space suit?

Summarise (2c): Briefly describe what happens from when the countdown begins until the shuttle takes off.

Infer (2d): Why is the punctuation after 'Dear Diary' in the entry on 17 Jul 22, 13:35 different to the other entries?

Predict (2e): Read the paragraph beginning: *Crikey, that was intense...* What do you think are some of the emotions the astronauts will experience? Why?

Link ideas (2f): After reading page 2, describe the 'ebb and flow' mentioned in the diary so far.

Effect of language (2g): The author describes the countdown to the take-off in the entry for 17 Jul 22, 13:35. How does this help the reader to better understand the launch?

Compare (2h): Compare the paragraph beginning: *Crikey, that was intense...* with the first two entries. Do you think the launch was what the author expected? Give evidence.

Each question in this box is the second question in its respective section of the 'Questions by skill' sheet.

17 JUL 22, 13:35

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3

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The acceleration rams my body into the chair and it feels like concrete being poured over me. My lungs feel like they're being pressed into my back. The shuttle is vibrating fiercely. My head in my helmet feels like the last stubborn penny in a piggy bank. I strain to lift it forward against the force so that my neck can absorb the vibrations instead of my head and I can concentrate on what I need to do. I'm checking the instruments, the interconnected systems, the gyroscope, the fuel gauge, the life-support, next, next, next.

After two minutes, we're above the air and the shaking stops: there's no friction here. The sheer speed and force of the continued journey would rip the shuttle in half, so the pilot pulls back on the throttle. The solid thruster rockets disconnect with a bump, then, after about eight and a half minutes, we're in orbit. Weightless. Floating. Training for this feeling meant spending hours underwater. It's the closest thing we can do for now, but that doesn't compare to this. I can feel a collective breath released by the crew. The radio crackles its communication with Earth and I know we've made it. We're one step closer to completing our mission.

← QUESTION SELECTION BOX 3

Vocabulary (2a): Find a word that means that something cannot be fully understood.

Retrieve (2b): How long does it take the space shuttle to get into orbit?

Summarise (2c): Summarise three things that have been described so far to keep astronauts safe during take-off.

Infer (2d): 'I can feel a collective breath released by the crew.' What does this tell you about going into space?

Predict (2e): Read the paragraph beginning: *After two minutes...* What do you think the mission might be? Why?

Link ideas (2f): Why are the similes used in this text so important for the reader?

Effect of language (2g): What does the repeated language in the paragraph beginning: *The acceleration rams...* help to tell the reader?

Compare (2h): Read the paragraph beginning: *After two minutes...* and compare the different sensations felt travelling through the air with those felt above it.

Each question in this box is the third question in its respective section of the 'Questions by skill' sheet.

QUESTION SELECTION BOX 4 →

Vocabulary (2a): Look at the paragraph beginning: *Back to business...* What do you think the word 'poring' means?

Retrieve (2b): What saying do astronauts have about safety?

Summarise (2c): Create a title for the entry on 21 Jul 22 which briefly summarises what it is about.

Infer (2d): Why does the author write 'I'm sure I'm about to cry'?

Predict (2e): What do you think will happen next? Why?

Link ideas (2f): 'Things are failing like dominoes.' How does this extract link to the paragraph beginning: *The acceleration rams...?*

Effect of language (2g): The author says, 'We still have a million checks to do.' What effect does this have on the reader?

Compare (2h): Compare the tone of the entry on 21 Jul 22 to the tone in the rest of the diary.

Each question in this box is the fourth question in its respective section of the 'Questions by skill' sheet.

We're allowed to take our belts off now, and as soon as the metal unclicks, we float around. The feeling is insane! I float over to the windows to have a look at what we're going to be exploring. The shuttle is hurtling around the earth; a kaleidoscope of colour rushing by. From here you can see clearly the curvature of the planet and it is truly awe-inspiring. My breath catches in my throat and I'm sure I'm about to cry. The voices of my team penetrate my daydreams and I'm brought back to reality.

Back to business. We still have a million checks to do. We have a saying in the astronaut business: 'There's no problem so bad that you can't make it worse.' Depressing, right? It keeps us aware that every decision we make can be life or death. When poring over all these buttons and switches, a lot can go wrong. Once one issue is resolved, we're on to the next or getting out in front of potential ones. What could kill us next? If something happens, what can I do to solve it?

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An Astronaut's Diary - Answer Matrix

by skill	by selection box			
<p>Vocabulary (2a) 1 What does the word 'commencing' mean in the entry on 16 Jul 22? Starting</p>	<p>Vocabulary (2a) 2 What does the word 'vigorously' mean in the entry on 17 Jul 22, 13:35? Doing something that requires a lot of strength or effort.</p>	<p>Vocabulary (2a) 3 Find a word that means that something cannot be fully understood. Unfathomable</p>	<p>Vocabulary (2a) 4 Look at the paragraph beginning: <i>Back to business...</i> What do you think the word 'poring' means? To read or study something carefully.</p>	
<p>Retrieve (2b) 1 What is the author's lifelong dream? To go into or explore space.</p>	<p>Retrieve (2b) 2 How long does it take for an astronaut to get into their space suit? 45 minutes</p>	<p>Retrieve (2b) 3 How long does it take the space shuttle to get into orbit? About eight and a half minutes.</p>	<p>Retrieve (2b) 4 What saying do astronauts have about safety? There's no problem so bad that you can't make it worse.'</p>	
<p>Summarise (2c) 1 Summarise the first two diary entries. Various answers, for example: The author is excited for tomorrow in the first entry because they'll be starting. The author is almost bursting with excitement in the second entry and is eager to get started.</p>	<p>Summarise (2c) 2 Briefly describe what happens from when the countdown begins until the shuttle takes off. 30 seconds means they're ready. At 15 seconds, the sparks ignite. At 6 seconds the engines start.</p>	<p>Summarise (2c) 3 Summarise three things that have been described so far to keep astronauts safe during take-off. Specially designed suits; lifting heads forward; checking instruments and buttons; the pilot eases off the throttle</p>	<p>Summarise (2c) 4 Create a title for the entry on 21 Jul 22 which briefly summarises what it is about. Various answers, for example: Something's coming.</p>	
<p>Infer (2d) 1 Give two pieces of evidence from the first two entries that suggest this is the author's first time travelling into space. Likely evidence: 'I will finally get to fulfil my lifelong dream' and 'but they've done this before'.</p>	<p>Infer (2d) 2 Why is the punctuation after 'Dear Diary' in the entry on 17 Jul 22, 13:35 different to the other entries? Various answers, for example: The author uses an exclamation mark instead of a comma to show utter excitement, like she is overwhelmed by it.</p>	<p>Infer (2d) 3 'I can feel a collective breath released by the crew.' What does this tell you about going into space? Travelling into space is dangerous and the astronauts might have been nervous and holding their breath.</p>	<p>Infer (2d) 4 Why does the author write 'I'm sure I'm about to cry'? Various answers, for example: the view from the window is awe-inspiring, so she could be about to cry 'happy tears' rather than crying because she is sad or upset.</p>	

An Astronaut's Diary - Answer Matrix

by skill	by skill	by skill	by skill
<p>Predict (2e) 1 After reading the first two entries, predict how the author will feel during take-off. Various answers, for example: I think she will still be excited because she's always wanted this, but she will also be scared or nervous because it is something new.</p>	<p>Predict (2e) 2 Read the paragraph beginning: <i>Crikey, that was intense...</i> What do you think are some of the emotions the astronauts will experience? Why? Various answers, for example: scared because it could be dangerous, happy because it something new, excited because it would be thrilling.</p>	<p>Predict (2e) 3 Read the paragraph beginning: <i>After two minutes...</i> What do you think the mission might be? Why? Various answers, which must be justified from the text. For example: It could be a mission to explore space because the author says 'to the moon and beyond' on page 2.</p>	<p>Predict (2e) 4 What do you think will happen next? Why? Various answers, which must be justified from the text. For example: Aliens will come and try to board the ship because the diary says 'something that's heading towards us'.</p>
<p>Link ideas (2f) 1 What feeling links the first two diary entries? Various answers, for example: Excitement</p>	<p>Link ideas (2f) 2 After reading page 2, describe the 'ebb and flow' mentioned in the diary so far. Various answers, which should acknowledge the range of emotions experienced in the diary so far.</p>	<p>Link ideas (2f) 3 Why are the similes used in this text so important for the reader? Various answers that refer to the fact that not many people will be able to travel into space or experience the feeling of a shuttle take-off, so the similes help the reader to picture unfamiliar sensations.</p>	<p>Link ideas (2f) 4 'Things are failing like dominoes.' How does this extract link to the paragraph beginning: <i>The acceleration rams...</i>? Various answers, which should reference the variety of instruments and interconnected systems mentioned.</p>
<p>Effect of language (2g) 1 'words won't do my feelings justice.' What impression does this give of the author's feelings? Various answers, for example: The author can't describe her feelings because it is something she has never experienced before so she doesn't think she'll be able to properly put it into words.</p>	<p>Effect of language (2g) 2 The author describes the countdown to the take-off in the entry for 17 Jul 22, 13:35. How does this help the reader to better understand the launch? Various answers, for example: It helps give the reader a clear image of the parts of the launch, and helps them to understand the timeframe.</p>	<p>Effect of language (2g) 3 What does the repeated language in the paragraph beginning: <i>The acceleration rams...</i> help to tell the reader? Various answers that should relate to the intense routine of training and practising.</p>	<p>Effect of language (2g) 4 The author says, 'We still have a million checks to do.' What effect does this have on the reader? Various answers, for example: Being an astronaut is something that few people have experience with, so they can see that it is a difficult job with lots to check and that could go wrong.</p>
<p>Compare (2h) 1 Compare the author's mood with those around her. What is the same and what is different? The author is really excited to start and is squealing like a school girl where the others are used to the feeling and look at her like she's gone mad. Everyone is excited, but not as much as the author.</p>	<p>Compare (2h) 2 Compare the paragraph beginning: <i>Crikey, that was intense...</i> with the first two entries. Do you think the launch was what the author expected? Give evidence. Various answers, for example: Yes because it was as exciting as expected. No as it was more intense than expected.</p>	<p>Compare (2h) 3 Read the paragraph beginning: <i>After two minutes...</i> and compare the different sensations felt travelling through the air with those felt above it. Various answers that should reference the vibrating and gravity below the atmosphere compared to the stillness and smoothness above it.</p>	<p>Compare (2h) 4 Compare the tone of the entry on 21 Jul 22 to the tone in the rest of the diary. Various answers that refer to the excitement and jolly tone of the rest of the diary, compared to the severe, serious tone of the 21 Jul 22 entry.</p>