

QUERIES



How does the author show you that everyone in the school is excited about this assembly?



Why did the author describe the hands that went up to ask the first question as a 'forest'?



What happened earlier in the book that appears again in this chapter?



Look at the highlighted paragraph: why do you think that the author has put this into the story?

PREDICTION

AFTER READING THIS CHAPTER, WHAT DO YOU THINK WILL HAPPEN DURING DAD'S SPACEWALK?



QUERIES - ANSWERS



All the children are crammed in the hall, along with the adults huddling around the edges – everyone who can be there, is there!



Because every hand went up, it looked like a dense forest with trees everywhere – you wouldn't have been able to see through the hands there were so many.



The Year 1 boy (Harrison) appears again and asks the same question he asked Jamie at the start of the book: How does an astronaut go to the toilet in space?



To show the dangers present when an astronaut does a spacewalk. This builds the tension because we know that the spacewalk is happening on the next day.

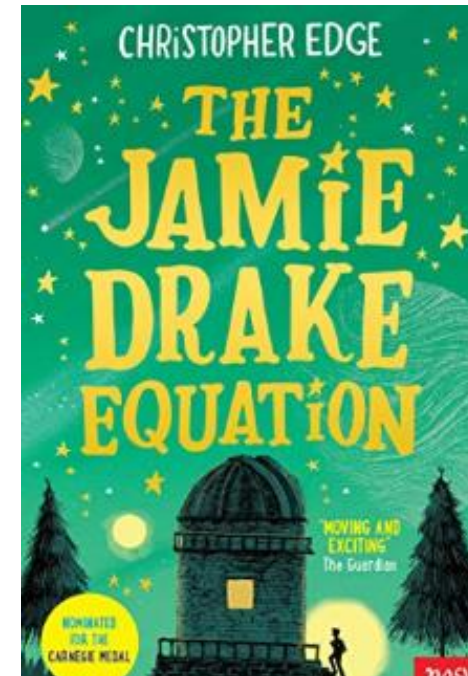
PREDICTION

AT THE BEGINNING, WE THOUGHT THAT SOMETHING WOULD GO WRONG ON THE SPACEWALK AND THE STORY SEEMS TO BE HEADING TOWARDS THIS HAPPENING.



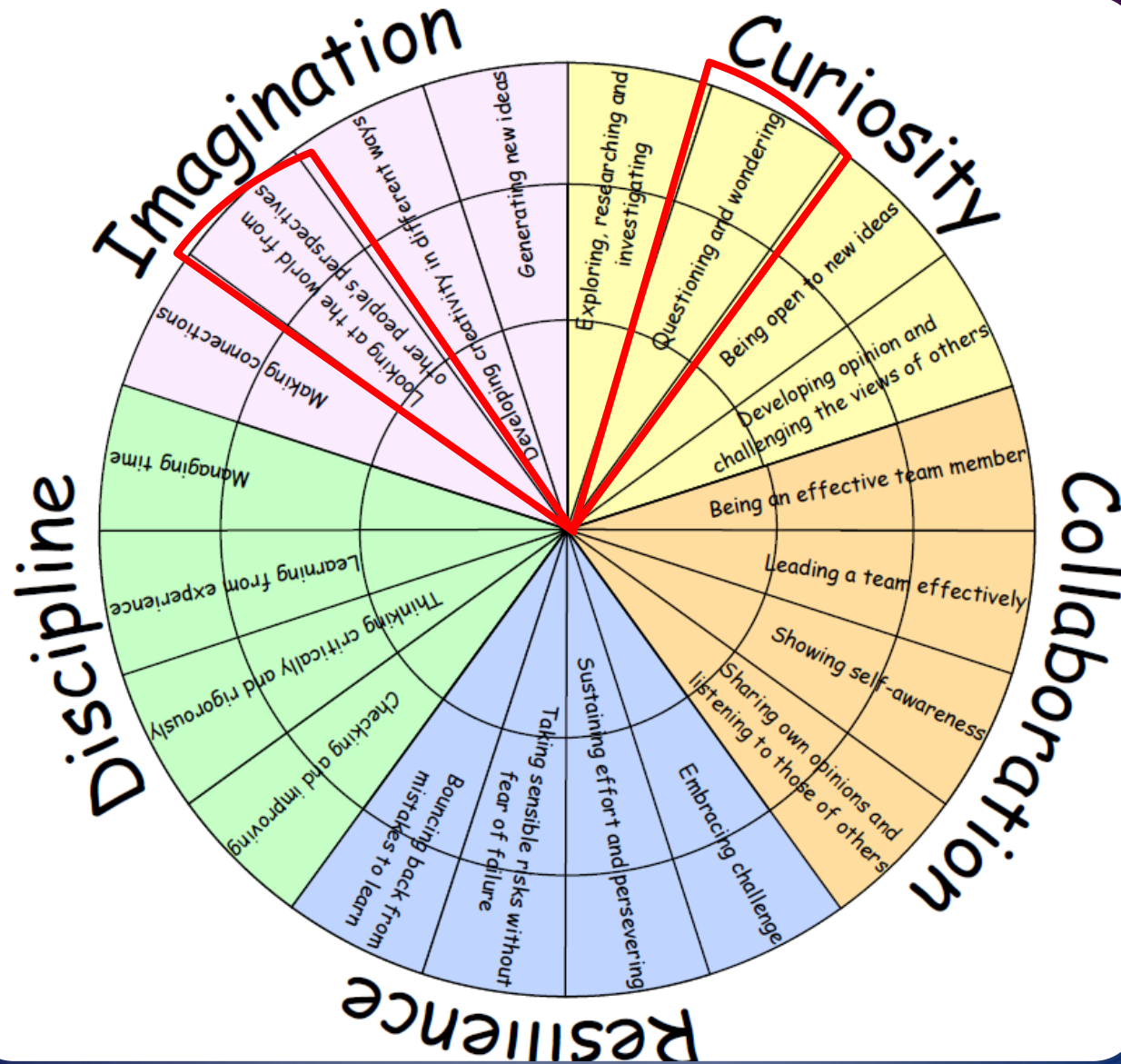
THE JAMIE DRAKE EQUATION

BY CHRISTOPHER EDGE



RESPONDER (15II)

- I can articulate personal responses to literature, identifying how and why a text affects the reader due to authorial intent



LEARNING HABITS

- What do you think is the most important Learning Habit?
- Is it one of your strengths or is it something you need to develop?
- How will you know that you have practised that Habit during the lesson?



Nestled on the sofa in between Mum and Granddad, I stare at the TV screen. The picture is frozen, showing a blank blue screen as Hayley talks on the phone to Mission Control. I glance over at the clock on the wall. It's just past eight – time for Dad to set off on his spacewalk to the Lux Aeterna launch platform. My birthday cards are all lined up on the mantelpiece, but I'm saving opening my presents until Dad has completed his mission.

Charlie bounces up and down on Mum's knee.

"Where's Daddy?" she asks for what seems like the millionth time.

"He'll be there soon," Mum says, tilting her head towards mine with a smile and giving my hand a reassuring squeeze. "There's nothing to worry about."

She was so mad at me when she got back home yesterday, but then Granddad said I'd been worrying so much about Dad's spacewalk that the live link had got too much for me and that was why I'd run out of school. Mum calmed down a bit after that, telling me there was no need to worry. She said that Dad has been training for this mission for years and he knows exactly what to do.

I glance down at my silent mobile, the phone still switched off. I wish I could switch off too.

Then Charlie screams excitedly as the blue screen disappears and is replaced with what looks like a handwritten sign. The picture is slightly blurry at first, but as this shifts into focus I can read the words written there.

Happy Birthday, Jamie!

The world is watching Dad's every move on this mega-important mission, but he's still found time to show he's thinking of me. My fingers tighten around my mobile phone. Right now, I just wish I could call Dad and take back what I said yesterday, but I don't think he's free to pick up the phone.

On the sofa Mum gives me a hug, then Dad's astronaut glove lifts the sign out of shot and we all gasp as the darkness of space fills the screen.

It's the blackest black I've ever seen, the inky darkness studded with thousands of stars. And in the centre of the TV screen I can see the silver outline of the Lux Aeterna launch platform, its spiral of petal-like panels facing out into the void.

Dad's voice crackles out of the TV speakers.

"Mission Control, this is Commander Drake. I'm clear of the ISS now and have visual on the Lux Aeterna platform. Request permission to engage the AMMU propulsion system to begin my ascent to its orbit."

With a burst of static, we hear Mission Control's reply on the radio.

"Copy that, Dan. Please ensure the Light Swarm probes are safely stowed before engaging propulsion system."

The picture on the screen shifts as Dad looks down and his helmet-cam shows the square silver

case that's strapped to his spacesuit. Inside this are the Light Swarm probes, all ready to begin their one-hundred-and-eight-trillion-kilometre journey to Tau Ceti.

"All present and correct," Dad says, a slight buzz on his words as they echo across space. "I just hope we get some air miles with these probes as they're taking a pretty big trip."

Next to me, Mum laughs at Dad's cheesy joke. Then I hear the smile in the voice of Mission Control's reply.

"Negative, Dan. No air miles, but they'll be flying first class with your help. Permission granted to engage propulsion system."

"Engaging primary thrusters."

The picture on the screen bobs slightly as we hear the whoosh of the propulsion system. At first I don't think it can be working properly as the distant shape of the launch platform remains fixed in the centre of the TV screen, but then I realise as the seconds tick by that this is growing ever so slightly larger against the background of stars. This change is so gradual that it feels to me like Dad is almost frozen in space, but then the spiral panels start to glint as the launch platform moves into sunlight and I can tell that Dad is closer now.

In the background I can hear a strange humming sound. I look down at my mobile phone, but it's still switched off – I've got enough to worry about at the moment without Buzz piping up. But the buzzing noise from the TV is now a constant drone as Dad's helmet tilts and I see for the first time the sleek silver module at the base of the launch platform. Dad's final destination.

I glance across at Hayley, who's standing watching with a look of concentration on her face.

"What's that buzzing noise?" I ask her.

Hayley smiles reassuringly.

"That's just the sound of the fan circulating oxygen through your dad's suit. Don't worry, Jamie – everything's going to plan."

"That's a relief," says Granddad, fiddling with his ear. "I thought this hearing aid was playing up again."

Then Dad's voice crackles over the radio.

"I've got visual on the HabZone airlock. Estimated rendezvous in approximately twelve minutes."

"Copy that, Dan. All systems' diagnostics are green – looking good for rendezvous."

I can see the circular airlock at the end of the HabZone module, its porthole window staring back at me like a tiny silver face surrounded by the darkness of space.

Mum's holding my hand tightly now, Charlie sitting absolutely still on her knee. As we listen to the sound of Dad's breathing over the radio and watch the Lux Aeterna launch platform slowly fill the screen, we all just stare at the TV, spellbound.

Once Dad gets inside the launch platform module, he'll perform the final checks on the Light Swarm probes. Each tiny spacecraft will be slid into the delivery system that will propel them into position, ready for Dad to press the button that will fire the Lux Aeterna laser and launch them to the stars.

Dad's voice comes over the radio again.

"Rendezvous in five minutes."

He's closing in on the airlock now, the petal-like shapes of the launch platform's solar panels disappearing from view as the HabZone module fills the screen entirely. I catch a glimpse of Dad's face reflected in its silvered surface, his astronaut's helmet framed by the blue of the world below.

My heart thumps in my chest. Dad's on top of the world and I feel so proud.

His voice crackles out of the speaker again.

"Engaging retro thrusters."

I hear another whooshing sound – two quick blasts followed by a softer swooshing noise, the picture on the screen tilting as Dad's spacesuit brakes kick in to slow his approach. But as the airlock door fills the screen, the voice of Mission Control crackles from the speaker.

"Mission abort. Repeat. Mission abort. Initiate emergency protocols for shelter in event of systems failure."

Charlie turns towards Mum with a puzzled frown.

"What's a 'mer-jen-sea'?"

From the TV speaker comes a burst of static and then we hear Dad's reply.

"Everything's fine here." Dad's breathing sounds slightly laboured as he reaches out to turn the airlock handle. "All systems normal. Mission Control, can you elaborate?"

"Urgent warning received from the Space Weather Centre in Colorado. They're reporting an X-class solar flare heading straight towards the Earth."

The voice of Mission Control usually sounds so calm, but as these words echo across space I'm sure I can hear a note of panic.

I look across to Hayley for reassurance, but all the colour seems to have suddenly drained from her face as she stares at the TV screen.

Dad is now trying to open the airlock's hatch, his bulky astronaut gloves grappling with the release handle.

"Do we have an ETA on that solar flare?" he asks, grunting out the words as he turns the handle clockwise.

"Negative. The NASA ACE satellite has been completely destroyed by the flare. You need to get inside the HabZone now!"

"What's going on?" Mum says, casting a panicked look in Hayley's direction as Charlie fidgets on her lap.

"It's a solar storm," Hayley replies, her gaze still fixed to the television. "A bad one. An X-class solar flare is an eruption of super-heated particles from the Sun's upper atmosphere, travelling towards Earth at almost the speed of light."

I grip my mobile phone tightly in my hand. Buzz said there was a storm coming, but I didn't listen...

On the TV screen, the airlock hatch starts to swing open.

"Copy that, Mission Control. Initiating emergency—"

Then the picture freezes, Dad's voice suddenly silenced and replaced by a dead dial tone.

Charlie wails.

"Where's Daddy?"

As Mum hugs her tight, I turn towards Hayley, our family liaison now frantically tapping at her mobile phone.

"Dad's going to be OK," I say, raising my voice above the sound of Charlie's crying. "He can just take shelter until the storm passes, can't he?"

Hayley looks up from her phone, her features set in a tight-lipped smile that doesn't fool me at all.

"That's what Mission Control has told him to do. Your dad will follow emergency protocols until the impact of the solar flare is known."

"I'm sure everything will be OK," Granddad says, resting his hand on my shoulder. "Your dad's trained for situations like this."

I look up at the TV screen, its frozen picture still showing the airlock door starting to open, but with Dad stuck outside in the vacuum of space. I remember exactly what he said when Aaron asked his stupid question yesterday: "*Space is a dangerous place.*" Then the frozen image starts to break up, disintegrating in an avalanche of pixels before being replaced by a blank blue screen.

I feel a wave of nausea rising up in my throat, my stomach tumbling over and over as though I'm the one falling through space. Shaking Granddad's hand from my shoulder, I push myself up off the sofa.

"I feel sick. I need to get some fresh air."


Pressing my thumb against the power button on my phone, I head for the door. Behind me I can hear Hayley talking to Mission Control while Mum tries to comfort Charlie. Running through the kitchen, I push the back door open, bright sunlight hitting my face as I step out into the garden.

Fighting to keep my breakfast down, I feel my phone vibrating in my hand. On the mobile screen the golden spiral spins and I hear Buzz's voice rise into the cloudless sky.

"The storm is here."

A shiver runs down my spine.

"How do you know?" I ask, holding up the phone as I stare at the sky. The sun looks just the same as it does every day – no sign of any solar storm – just gentle warmth shining down on my face.

The top section of the page has a purple background. It features faint, stylized celestial patterns, including concentric circles and arcs, some with arrows indicating direction. There are also small, scattered white dots resembling stars.

“Your eyes only see a tiny fraction of the true light from your star,” Buzz replies. “Less than a thousandth of one per cent of the full spectrum of rays that shine down on your planet every day. But we are the Hi’ive and can see all the brightness that surrounds you.”

On the screen of my phone a picture of the sky above me appears – the yellow-white sun suspended in a bright blue sky. But then I gasp as the sky on the screen suddenly comes alive with a kaleidoscope of colours. I see crimson and green streaks shooting in every direction, spirals of pink and orange eddying across the horizon. Purple haloes spot the screen as these colours twist into strange new shapes. It’s like when you rub your eyes when they’re closed – colours bursting across my vision. But my eyes are wide open now. The sky is ablaze – burning with a rainbow of fire.

It looks like a video I saw of those strange lights that they get in the sky near the North Pole. The Aurora Borealis, or the Northern Lights. But those only come out at night and, as I lift my eyes from

the phone, all I can see is broad daylight.

“What is this?” I murmur, my brain unable to process what Buzz is showing me on the screen.

“The solar flare erupted from your star with a force equal to a billion nuclear explosions. Its super-heated particles are hitting your planet’s atmosphere, each photon of light giving off a unique colour as the storm heats the sky.”

On the screen the colours dance and swirl, so beautiful in their fury, as an icy-cold fear grips my heart.

“But my dad’s up there—”

The sound of a shriek from inside the house spins me round. It sounds like a wild animal caught in a trap, but then I hear Mum’s voice screaming out a single word.

“No!”

The bottom section of the page has a dark blue background. It features faint, stylized celestial patterns, including concentric circles and arcs, some with arrows indicating direction. There are also small, scattered white dots resembling stars.

QUERIES



How does the author make Jamie's dad look like a nice person?

How does this conflict with what Jamie is feeling at the moment?



In the highlighted section, why do you think the author used the phrase 'on top of the world'?



Why do you think the author used this phrase just before something goes wrong?



What effect is the author trying to create when he says that the colour had drained from Hayley's face?

DEDUCTION

What do you think has happened at the end of the chapter? Why is mum screaming out the single word 'No'?

HOMEWORK

LISTEN TO CHAPTER 21 ON PODBEAN:

<https://www.scotholme.com/podcasts>

