

WEEK 3 DAY 4

Frank Cottrell Boyce

Cosmic

it's one giant
leap for all
boy-kind



STARTER

Watch the clip and then answer the questions

<https://www.youtube.com/watch?v=7DtwCGclhAw>

What does Malfoy call Hermione?

How can you tell that this is a bad thing to say?

What do you think will happen next?

READ

CHAPTER 18 - ASTROGOSSIP

On the next slide is today's first chapter (it's only one page long)

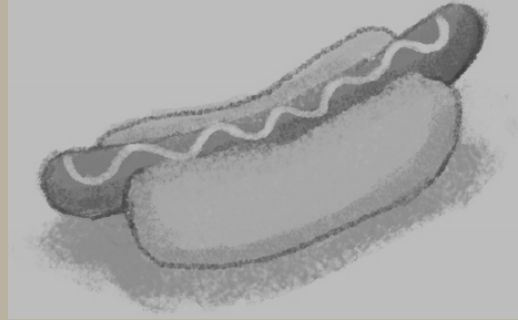
You need this and a copy of the comprehension questions.

(These are on the document with this PowerPoint.)

Complete the questions to the best of your ability either on the sheet or in your book.

Once you've finished the questions come back and read the next chapter "Gravity is not a trivial monster."

ASTROGOSSIP



That evening Florida really did spend lots of time on Wikipedia trying to find out more about gravity and space travel.

She looked on all the right pages, but she has a brain that turns everything into daytime TV. So she accidentally invented a whole new field of knowledge – astrogossip. She'd say stuff like, 'Valentina Tereshkova – she was the first woman in space – on Vostok 6 – and guess what? She married another spaceman . . .'

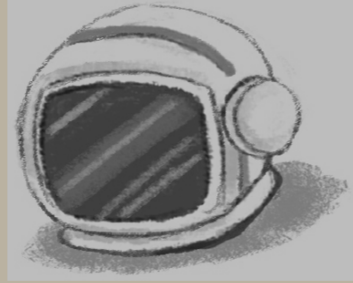
'Astronaut.'

'Cosmonaut. And they had a space baby! How cute is that?! A cosmonau-tette.'

I sort of preferred it when she was talking about Britney's ghost dog.

CHAPTER 19 — GRAVITY IS NOT TRIVIAL MONSTER.

GRAVITY IS NOT A TRIVIAL MONSTER



In the middle of Infinity Park is this dome, the 'Infinity Dome'. The outside is all mirrors, so that when you walk towards it, you see yourself walking towards you. The entrance is just a narrow door, with the mirrors bending inwards. As you get closer, you just melt into your own reflection, like entering a portal to another dimension or something. Inside it's completely cosmic. The dome is where all the best rides are. These are not rides like you've seen before. Their names are all to do with the history of space exploration: the Giant Leap, Lake of Fear, Sea of Storms. The biggest one – the Vortex – looks like a kitchen blender from the Land of Giants. When we arrived that morning, it was whirling round so fast on its spindle it looked like it might come loose and take off. There was an old man named Mr Bean in charge of it. I mean, he looked old but he also looked young – his eyes were bright and shiny and he walked like he was weightless. He gave us this big hello when we arrived, pressed some buttons and the Vortex slowed right down.

'You'll never guess what's in here.' Dr Drax smiled.

No one had any idea of what could possibly be inside a twenty-foot blender. Dr Drax nodded at Mr Bean. He winked at us, then pressed some more buttons. The door opened, a ramp appeared and down the ramp came . . . Shenjian.

Everyone gasped. 'You were in there?!' said Florida. 'How could you be in there? If they spun me round like that, I'd turn to soup.'

Shenjian bowed and then stood up straight to show she wasn't soup.

'The Vortex,' said Dr Drax, 'is really just a big washing machine. When you're ready, we're going to pop you inside and spin you round until you feel like old knickers. How does that sound?'

'Uncomfortable,' said Florida.

'It certainly will be. At first. But soon you will be able to cope with it, just like Shenjian. Look, she's not even dizzy.'

Shenjian bowed again, to show that she was not only not soup, she was not even dizzy.

'Yesterday we had great fun finding out what it was like to experience less gravity than usual. Today you're going to get a taste of what it's like to experience a lot *more* gravity than usual. That's what happens when we spin you in our centrifuge. Excited?'

Somehow being whirled in a massive washing machine didn't seem as appealing as floating around inside a big aeroplane.

Florida was still trying to get her mind round the whole gravity thing. 'If less gravity makes you float in the air,' she said, 'won't extra gravity make us sink into the ground?'

Samson Two giggled. Max tittered. Samson One rolled his eyes. Monsieur Martinet snorted.

A few days ago I might've laughed too, but now I felt different. I said, 'No, Florida, you won't sink through the floor but you'll feel heavy.'

'You are going to experience 15*g*,' said Dr Drax. 'That's fifteen times your normal gravity.'

That's more than three times as much gravity as you get on the Cosmic. I tried to imagine a version of the Cosmic that was three times as big as the one in Enchantment Land. The man who runs the Cosmic had said that lots of people passed out at 5*g*. We were going to hit three times that. This really was going to be a scary ride.

Mr Bean opened the steel doors wide. Inside was a big metal arm with a little seat on each end. If Orgimmar Doomhammer, Orc Lord of Durotar, had made a see-saw, that's what it would look like.

'So,' said Dr Drax, 'you'll weigh fifteen times more than you usually do.'

Florida put her hand up and said, 'Are you saying we're going to put on weight!?'

They all giggled again.

Florida didn't react. She knew they were going to laugh at her and she still asked the question. Because she wanted to know.

I said, 'You will put on weight, but you'll lose it again the moment you return to normal gravity. And then I said, 'OK, Princess?'

She beamed at me. 'OK, Daddy.'

Dr Drax went on. 'I know 15g sounds like absolutely heaps of gravity, but the body can take more than that. David Purley, the racing driver, once experienced 180g and lived to tell the tale. If he can do it, so can you.'

Samson One said, 'That seems like a lot of gravity in a car. How did he do that?'

'He drove straight into a brick wall with his throttle wide open. He was doing 107 miles an hour. Now then. Who's first?'

'Are you sure he survived?'

'Yes, he did. Or did he? I'm not sure. Anyway, rockets are much safer than cars.'

Samson Two said, 'Are you sure rockets are safer than cars?'

'Course they are,' said Florida. 'They don't have brick walls in space, do they?'

Monsieur Martinet wanted Max to go in first because 'that's what winning is all about'. But Max wouldn't budge. And when his dad tried to shove him in, he just kept shouting, 'No! I don't want to!'

Monsieur Martinet was hissing at him, 'You're embarrassing me.'

Eddie Xanadu tried to bribe Hasan to get in. Hasan wasn't moving either. His dad was snarling, 'You're making me look like a fool.'

Samson One tried to explain to Samson Two that gravity was just a natural force and nothing to be afraid of. That wasn't working either. Even though his dad was growling, 'Think of your reputation.'

I said to Florida, 'We should go on first. Show them what a good team we are.'

'I'm not going in there.'

'Did you ever go on the Cosmic?'

'No. I was too short, remember?'

'Pepsi Max?'

'Queue was too long.'

'Traumatizer?'

'Too scary.'

'Well, I've been on big rides – and this thing here, it's just a big ride. Do you want to know what the worst bit of a big ride is?'

'What?'

'The queue. The waiting. The anticipation. Watching everyone else screaming and turning green. That's way, way, way the worst thing. It's tons better to go first. And if we go first – all these others, all the people who were laughing at you before, they'll have to stand here, watching us and getting more and more scared.'

She liked the sound of that.

We strolled past Monsieur Martinet while he was poking Max in the chest, and Eddie Xanadu who was waving a wad of money at Hasan, and Samson One, who was drawing a diagram to prove to Samson Two that gravity wasn't scary. We walked past all of them right up to the machine.

'Florida Digby –' Dr Drax smiled – 'you certainly seem to have the Right Stuff to be a taikonaut.'

Mr Bean came into the Vortex with us and showed us how to strap ourselves into the seats – one at each end of the evil see-saw. My seat was – obviously – too small. I had to tuck my legs up really tight to get into the harness. Now that we were in there, I could see that Florida was starting to get nervous. I said, 'Mr Bean, has anyone ever died on this?'

'On this old thing? No, sir. Not a one.' He taped some wire things to the ends of our fingers.

'Please don't say, "But there's always a first time.'"

'Well now, I'm going to make sure that you're not the first. I'm going to monitor all your heartbeats and whatnot. You start to malfunction, I'll stop the whole thing.'

For a while nothing happened. It was just really, really quiet. Florida said, 'I'm really, really scared now.'

'But just think: if we're really, really scared, *they* must be really, really, *really* scared. And in a few minutes we won't be scared at all. You'll be all right, Princess.'

'Actually, you can stop calling me Princess now. It sounds weird when you say it. Thanks all the same.'

There was a deafening THUNK. We both screamed. Our chairs jumped sideways then stopped dead.

Phew! I thought. It's broken.

Then it started.

If you've ever been on the Cosmic, you'll know what *4g* is like – you feel a bit sick and scared, but if you spread your arms out and pretend you're flying, you feel better. As you blast into the air you can think, This is bad but this is as bad as it gets. It gets easier any second . . .

But the Vortex was different. On the Vortex, *4g* was only the beginning.

A voice came over the loudspeaker, telling us we were now at *5g*. You can't spread your arms out at *5g*. You can't move them at all. It feels like the air has turned to concrete and you're stuck in it. It's hard to breathe, but you think, We must be near the end now. We must slow down now. But we didn't slow down. We went faster.

The voice said we were at *8g*. Now my eyeballs felt like little shrivelled raisins. I couldn't see anything except a muddy blur. But still we didn't stop. We went faster.

At *12g* you feel flat, two-dimensional, like Itchy and Scratchy run over by a steamroller. I thought I was dead. I was even starting to enjoy being dead when I heard the voice again, saying we were now at *15g*. The sentence didn't come and go like an ordinary sentence. It seemed to stay in my ears,

steady, like the noise of a humming top. Then my chest exploded. But the air was so thick that all the bits of me couldn't fly away. They just stayed there. In the same shape but not connected any more.

Then we slowed down.

And that was just like Itchy and Scratchy too. When the steamroller's gone and someone comes along with a foot pump and pumps them back up to their normal shape. Amazing. For a minute I didn't say anything because I thought if I opened my mouth I might deflate again. I looked over at Florida and she said something like, 'Ha ha ha ha ha ha ha ha ha ha ha!!!! Whoooooo!'

And I said, 'Cock-a-doodle-doo!' which is not something I usually say.

The door opened. I was so proud of us that I tried to stroll out and swagger past the others. Unfortunately I seemed to have lost my swagger-control skills and ended up swaggering sideways.

'Sit down, Florida; sit down, Mr Digby. Take a rest. You've done very well.'

I think she probably meant us to sit down ON something, but as soon as she said it I let my legs go and so did Florida. We just sort of plonked ourselves down on the floor.

Monsieur Martinet was still hissing at Max.

Eddie Xanadu was pleading with Dr Drax to let Hasan be excused. 'Dear little Hasan really doesn't want to do it.'

'I'm afraid dear little Hasan will have to do it. Unless he doesn't want to go to space.'

I thought, Some people just have NO CONTROL over their children. And everyone went quiet and looked at me. Apparently I'd thought this out loud. Very loud.

'So,' snarled Monsieur Martinet, 'you think you can do better?'

'I think I already did.' I shrugged and pointed at Florida. She gave him a cheeky little wave.

I should've left it at that. But now that he'd said it, I DID think I could do better. Samson Two was now squealing, '*I'm not going. I'm not going. I'm not*

going. I'm not going.' And to think they'd laughed at Florida! It would serve his dad right if I could get his son to go in there when he couldn't.

I decided to Engage. 'Hey, Samson Two, what's the biggest ride you've ever been on?'

He looked blank.

'Have you been on an inverted roller coaster?'

'No.'

'An ordinary roller coaster?'

'No.'

'Inverted bungee?'

'I was on a see-saw once.'

'A see-saw?'

'Not a real see-saw – it was really a large model used for demonstrating the action of vectors around a fulcrum. But while my father wasn't looking I sat on it. Sorry, Father.'

'So there was no one on the other end of the seesaw?'

'No. But I solved that problem easily by propelling myself upwards with my legs repeatedly, in effect making myself into a vector.'

'And that's the only ride you've ever been on? A one-ended see-saw?'

'It was fun.'

No wonder he was scared. Imagine going on something like the Vortex if you've never even been on a proper see-saw. I tried to explain to him about rides, about how in a few months' time the dome would be full of people paying money, queuing up, desperately wanting to go on the Vortex. For fun.

'But why won't they be scared?'

'They will be scared. They'll be terrified. But they want to be terrified. It's a nice feeling. A tingly feeling. And they'll be with their friends, and their friends will be teasing them and daring them. You know, we're very lucky. We've beaten the queues.'

He looked over at the Vortex and said, 'OK, I'll go.' I grinned at Samson One, thinking, That'll teach you to laugh at us. Then Samson Two said, 'As long as you come with me.'

'What?'

'You say it's fun. You must want to do it again.'

'Well, I wouldn't . . . it wouldn't be fair on your dad if I took his turn.'

'I don't mind,' said Samson One a bit too quickly.

'Well, maybe Dr Drax wouldn't agree.'

'It's hard to fault the child's logic, Mr Digby,' said Dr Drax, 'and once you're rested there's no reason why you shouldn't go into the Vortex again.'

It wasn't so bad the second time. The only trouble was I was just thinking to myself, This seat is tiny. I'm really uncomfortable and I can't move, when we came to the bit where Time stands still. So that big, depressing thought just sat there in the front of my brain for ages and ages, blotting everything out and making it all seem worse. So if you ever have to endure a period of prolonged weightiness, my tip is that you try and have a happy thought.

When we'd finished it took Samson Two a moment to get his breath. Then he said, 'Is it over?'

'Yes. What did you think?'

'It was very . . . informative.'

'Informative?'

'Yes. Gravity's not a bit like it looks in the diagrams.'

When we came out, even though it felt like we'd been in there for years, nothing had changed – Hasan was still telling his dad that he wouldn't go in there, and Monsieur Martinet was still poking Max in the chest and calling him a loser. Max was taking no notice. Until he saw me. Then he said, 'I'll go in.'

'Good boy, Max,' said Monsieur Martinet, glancing at Mr Xanadu. You could see that when he said 'good boy', he really meant 'better than your boy'.

'As long as I go in with him,' said Max, pointing at me.

When I climbed into the Vortex for the third time I concentrated on happy thoughts of all the great stuff I'd done since deciding to be a grown-up – walking in the Gobi Desert and driving a car and flying in a plane when I should've been in Waterloo High playground. Max leaned forward in his chair and said, 'I voted for you last time.'

'You did?!' I wondered who had voted for me. I never thought for a minute it was him.

'I vote for you this time too. I vote for you because I want you to come with us. Not my father. I want you to come because you are a loser.'

'A what?'

'A loser.'

'I'm not a loser. I'm Gifted and Talented.'

'When you were running down the sand dune, that made me laugh,' he said. 'And when you were rolling on the floor in the spacesuit. Remember?'

'Not the details.'

'When you do stupid things—'

'They weren't that stupid. I just—'

'Will you do something stupid today? Please?'

'I'll give it my best shot.'

'Thanks for that.'

Then THUNK.

We were off again. Only this time when I got to the Forever bit, instead of thinking about flying and walking in the desert, the word 'loser' stuck in the front of my brain and stayed there.

When we came out Hasan was still saying he wouldn't go in. Dr Drax said, 'If the child needs more time to prepare himself mentally, perhaps this would be a good opportunity for the other dads to take their turn. Samson One and Monsieur Martinet can ride together, and then Mr Xanadu can go on with Hasan.'

They looked a bit unsure, but what could they say? They took their turn and this time I got to watch from the outside. To start with, the washing machine chugged round at something like the speed of a light woollens wash. Then it went up a gear to something like colour-fast cottons, and after that worryingly fast – like a spin dryer, and then it suddenly started to slow down again. I said, 'What happened? Has something gone wrong?'

'No,' said Dr Drax, 'that's the complete cycle. They've been in there just as long as you were.'

'But I was in loads longer than that.'

'They were in just the same time as you were – namely six minutes, including one minute at 15g.'

'One minute?!'

'Why?' said Dr Drax, examining her fingernails. 'Did it feel longer than that?'

It felt like a whole chapter of my life – say, about as long as I'd been at primary school.

When the dads got out of the Vortex, Florida was excited by the possibility that they might be sick. But they weren't.

When they were done, Hasan looked at me and said, 'Everyone else went on with you. I want to go on with you.'

'I'm a bit tired.'

'That's so unfair. Everyone else got to go with you. Why shouldn't I?'

Dr Drax said she really thought I had made my contribution already today.

Hasan said, 'Daddy, tell him he has to go on with me.'

'I'm afraid your daddy can't tell him that,' said Dr Drax, 'because it isn't true.'

Eddie Xanadu sidled up to me and said, 'How much to make it worth your while, Digby? A watch? A car perhaps?'

'A car? No, thanks.'

'I don't think you'll be able to bribe Mr Digby, Mr Xanadu,' said Dr Drax.

Then Hasan said to me, very quietly, 'Come on with me and I'll vote for you.'

And I realized that though Mr Xanadu couldn't bribe me, his son really could.

Knowing that the lifetime at 15g was only a minute made the fourth time easier. I was just starting to get my happy thoughts ready when Hasan said, 'There was a war in my country.'

'Oh yeah?'

'Soldiers came to our village. They wanted to take away all the children. But my father paid the most important soldier some money so that he wouldn't take me away.'

You could hear the engine warming up outside. Hasan started to talk more quickly. 'That's why he loves money. Because it can help.'

'Well, fair enough.'

'And the reason he always wants more money. I watched all my friends being taken away, all the children from my school. I watched our house burning down.'

He told me this. And then the engine started. And in my head I saw Glenarm Close, Bootle, all in flames, and Mum and Dad and Florida all being taken away by soldiers. That's what I was thinking when I got to the Forever bit.

I was still thinking about it when the ride was over. But Hasan was grinning. He said, 'That was FANTASTIC. I could do that again.' I suppose anything is fantastic compared to having your house burned down and your mates led away. He bounced out of the machine.

'Don't forget to vote,' I called after him.

| SCORES | |
|--------------|---|
| ME | 6 |
| EDDIE XANADU | 6 |
| M. MARTINET | 2 |
| SAMSON ONE | 2 |

Everyone had voted for me.