



Teaching Notes & Resources

For students age 9+
NOTES FOR KS2 AND KS3 TEACHERS

Explore Themes of: Action and adventure | Space exploration
| Climate change | Inventions

Subject Checklist: English | Science | Art | Design technology
| Philosophy | Geography

The activities included here are suitable for the classroom or library sessions.

[Purchase Transcendent](#)

About Transcendent

JOIN THE TEAM. SAVE THE WORLD.

Twin geniuses Jacob and Kira are recruited to take part in a high-tech mission to protect the planet . . . but will their dreams of adventure come true, or is the threat too great to handle?

Jacob and Kira live in the heart of Mbale, Uganda with their conservationist mother and navigate life as unsuspecting geniuses; Kira with hopes to explore outside the hot terrains of Uganda, and conspiracy theorist Jacob, whose fear often holds him back from the answers he so desperately wants to uncover.

But when they discover that someone has been watching their every move in the hopes to enlist them in a top-secret agency called Transcendent, their lives are turned upside down.

Soon the twins are hurtled from the luscious landscapes of Mbale, to the sleek streets of London, where - alongside other selected protegees - they must undertake three rigorous trials, each more difficult than the last, to be accepted into Transcendent. If they are successful, they will be launched into space to complete a high-stakes mission to fight the greatest threat the world has ever seen.

Only, the twins soon realise they have more to contend with than they bargained for . . . is there a more sinister reason they have been chosen?

Two kids, one top-secret agency and an epic mission to save the world.



Contents

Book Cover Prompts

Theme 1 - Action!

Activities: Create a comic strip.

Objectives: Make predictions about characters, events and actions based on details stated and implied.

Theme 2 – Space Travel

Activities: Write an opinion piece about the future of space travel.

Objectives: Express opinions clearly, supported by reasons and evidence.

Theme 3 – Scientists and Inventors

Activities: Research young scientists and inventors; design an invention to help the environment.

Objectives: Consider some of the environmental challenges facing planet Earth; think creatively and develop problem-solving skills; feel inspired to use STEM skills to make a difference to the world.

Further Activity Ideas

Book Cover Prompts

- When you look at the front cover, which elements grab your attention?
- What do you like about the cover design?
- What genre do you think this book might fit within?
- How old do you think the main characters might be?
- Can you find out what the word 'transcendent' means?
- What does the subheading, 'Join the Team. Save the World' suggest? What themes do you think the book might explore?
- The book is set between Uganda and the UK. Can you find these two countries on a map of the world?



Theme 1: Action!

Discussion Questions

Read extract 1 and consider the following questions

- How would you describe the atmosphere?
- Can you find a simile that describes Bomber Jacket's appearance? How does it help you build up a picture of him in your mind?
- How does the author show that the motorbike is travelling fast?
- Based on the story so far, what impression do you have of Jacob and Kira? How would you describe their characters?
- How do you think Jacob feels when he looks back and sees the Cherokee? Use evidence in the text to support your answer.
- The author, Patrick Gallagher, has enjoyed reading cartoons and comic strips since he was a child. Based on what you've read so far, how do you think his writing might be influenced and inspired by comics?

Activity: Create a Comic Strip

What do you think might happen next in the story? Will Kira and Jacob escape the Cherokee or will it catch up with them? Will Spider help them or hinder them? Who is Bomber Jacket and what does he want?

Using template 1 create a comic strip to show what you think will happen next . Consider which illustration techniques you might use to help convey the action. For example, you could use sound effects, motion lines, speech bubbles, close ups or long-distance shots. When you have finished, share your ideas with a partner. Then read on to find out if any of your predictions come true!

Theme 1: Action!

Extract 1

Jacob looked back at Bomber Jacket, who was starting to look less and less surprised and more and more angry. His hands were curling into fists the size of plump, market chickens.

'OK. Off we go,' said Jacob.

He darted to the Yamaha but Spider had already hopped onto the back, thin arms wrapped snugly around Kira's waist. Jacob could see the hairy body of the tattooed spider nestled on the boy's neck. Two of its eight legs crept up to his ear.

'He's coming too, is he?' asked Jacob in exasperation.

'Do you want to leave him here?'

The boy blinked mutely up at Jacob, who glanced back at Bomber Jacket.

'Good point. Let's go.'

Jacob had just enough time to leap on and put his arms around Spider and Kira before his sister released the throttle and kicked the Yamaha into third gear. The 123cc engine screeched. The back wheel spun, spraying dirt. They sped down the road. Hot air rushed over them. Jacob's shirt hugged his chest and rippled across his back. Sweat that had been creeping vertically down his face slowly turned horizontal. Pedestrians, cars and market stalls hurtled past in a blur, inches away on either side. A dog yowled and dashed out of their path.

'Kira, slow down!' yelled Jacob over the bellow of the engine and the howl of the wind.

'Do you really want me to do that?' Kira yelled back. Squinting to keep the biting dust out of his eyes, Jacob twisted round to look back down the road. His stomach wrenched itself into a knot.

The Cherokee was following them. Its gigantic, black form could be seen over the tops of the other cars. The traffic was flowing much faster and there were large enough gaps between vehicles for the Cherokee to navigate its way around them to keep up with the Yamaha.

'Speed up! Speed up! Speed up!' Jacob shouted, facing forward again

Theme 1: Action!

Template 1

Theme 2: Space Travel

Discussion Questions

Read extract 2 and consider the following questions

- What do you imagine the 'Garden' looks like?
- Can you define the words 'orbit', 'sophisticated' and 'breakthrough'? What do they mean in this context?
- Why do you think Eunata feels 'conflicted'? What thoughts might be going through her mind?
- Do you trust Yang when he says that Jacob and Kira have nothing to fear?
- If you were invited to take part in the Transcendent trials, would you accept the invitation? Why, or why not?
- What do you know about the history of space exploration? Can you name any astronauts?

Activity: Consider the Future of Space Travel

In the novel, there is a rocket launch facility close to most major cities. Yang even describes going into space as 'just like popping to the shops'.

Do you think it would be a good thing if going to space were to become as quick and easy as 'popping to the shops' in real life? What might the advantages of this be? And what might the disadvantages be? Discuss with your class and write your ideas in a table with two columns, one for advantages and one for disadvantages.

Reflect upon the points you have gathered in the table. Would you like to see space travel become quicker and easier? Write a short opinion piece explaining your thoughts on the issue. Give reasons to support your point of view. When you have finished, share your opinion piece with a friend and discuss where you agree or disagree

Theme 2: Space Travel

Extract 2

'So, what is it RanaTech wants with my children, Mr Yang?'

Yang took a deep breath and leaned back on the sofa. It creaked under his weight.

'Jacob and Kira have been chosen as candidates to try out for Transcendent, an initiative that will equip the best and brightest minds with the most advanced scientific tools on the planet. If you all agree to take part and the twins are successful in the trials in London next week, they will be launched to Rana Tech's private space station, the Garden, in low Earth orbit. Onboard the Garden is the most sophisticated laboratory this planet has ever seen. With minds like theirs, the breakthroughs and discoveries Jacob and Kira could make would be beyond anything we can imagine.'

'You want to shoot my children into space?' Eunata said slowly.

'They would be launched from Rana Tech Spaceflight's facility in Cornwall, yes,' said Yang. 'If they are successful in the trials.'

'Into space,' Eunata said again. She could not believe she was even saying the words.

'Like a lot of large companies, RanaTech is beginning to abandon the planet's surface and do business in orbit,' said Yang. 'With all the recent environmental changes, a lot of the planet that was hospitable even a few years ago is now inhospitable. There are, I think, around a hundred space stations in low Earth orbit right now. There's a launch facility close to most major cities. Even the process of preparing for launch has been radically streamlined and can happen in a matter of days. It's just like popping to the shops, really.'

Yang's black, glinting eyes examined the conflicted expression on Eunata's face. He leaned forward again. When he spoke, there was a kinder note to his voice.

'What I mean to say is, it's not as scary as it sounds. Amira Rana oversees Transcendent and she is one of the wealthiest, most famous and successful women in the world. Jacob and Kira have nothing to fear.'

Theme 3: Scientists and Inventors

Discussion Questions

Read extract 3 and consider the following questions

- Why did RanaTech recruit Lulu?
- Do you know what coral bleaching is and what causes it?
- What do you think the adverb 'sheepishly' means? Why does Kira feel sheepish and how does Sakari reassure her?
- What kind of device is Sakari developing?
- What do Lulu and Sakari have in common?
- Imagine you were offered the chance to work as a scientist on Lulu's project in the Southwest Pacific or Sakari's project in Alaska, which would you choose and why?

Activity Part 1: Research Young Scientists and Inventors

Carry out some research into real-life young scientists and inventors working to protect the natural world, such as Muraki Kazumi, Fionn Ferreira and Xóchitl Guadalupe Cruz López. How do their inventions help the environment? Which young inventor inspires you the most?

Activity Part 2: Become and Inventor!

Carry out some research into real-life young scientists and inventors working to protect the natural world, such as Muraki Kazumi, Fionn Ferreira and Xóchitl Guadalupe Cruz López. How do their inventions help the environment? Which young inventor inspires you the most?

Theme 3: Scientists and Inventors

Activity Part 2: Become an Inventor

Become an inventor yourself just like Jacob, Kira, Lulu and Sakari! Your challenge is to design an invention that will help protect planet Earth.

Begin with a class discussion about the environmental issues facing the natural world today (such as climate change, habitat loss, air pollution and plastic waste). What do you know about these issues? Is there an environmental issue that you are particularly passionate about or a particular species or habitat you would like to save?

Now, think about how you might you design an invention to help. Perhaps you could invent a vehicle that runs on renewable energy? Maybe you could design some clever plastic-free food packaging or come up with an innovative way of recycling an old product so that it doesn't end up in landfill?

Your idea can be as big or as small as you like. You could go global and invent a new way to clean the oceans or prevent ice bergs melting. Or, you could think local and invent a new method of preventing littering in your local park or providing habitats for wild birds in your area. All environmental problems are worth solving!

Draw and label your invention and write a description of how it works. Share your invention with your classmates. Why not hold a class competition and vote for the most ingenious planet-saving invention?!

Theme 3: Scientists and Inventors

Extract 3

Kira nudged Jacob and pointed at a teenage girl hovering in the corner of the central hall. Lulu Laei was also fourteen and looked so overjoyed to be there that she did not know how to contain it. She was wearing a flowery dress and seemed to immediately recognise Jacob and Kira as other Transcendent candidates. Beneath black, curly hair, her sun-kissed face broke into a wide, warm smile. Her eyes, brown but just as sunny, were magnified and made even sunnier by the thick lenses of gold-framed spectacles.

‘I’m a marine biologist,’ said Lulu excitedly after introducing herself. ‘RanaTech recruited me for the Transcendent trials after they saw my work reversing coral bleaching around the Solomon Islands in the southwest Pacific.’

‘That’s incredible!’ Kira grinned.

‘How are you guys feeling?’ Lulu asked. ‘This is all pretty crazy! You must be nervous, right?’

‘No,’ Jacob lied.

‘I suppose you guys are all here for Transcendent as well, then.’

Jacob, Kira and Lulu turned to see another boy and girl. The girl looked to be their age but the boy seemed older, around sixteen. The girl was wearing a lace dress. Her straight hair was jet black, her face pale, slight and serious. She was very pretty. Her eyes were also black and glittered like gemstones.

‘Sakari Ekho.’ She smiled a slight smile, hesitantly offering her hand to shake.

‘Nice to meet you, Sakari!’ Kira and Lulu shook her hand vigorously, one after the other. When Jacob took Sakari’s hand, he felt the strange flutter of something inside himself that he had not experienced before. Sakari was the same height as he was, which made avoiding her sparkling eyes difficult. After Lulu explained her work in the Solomon Islands, Sakari turned to Jacob and Kira.

‘What about you two?’ she asked. ‘Are you biologists as well? Would I have heard of some of your projects?’

Theme 3: Scientists and Inventors

Extract 3 Continued

'No,' said Kira, a little sheepishly. 'We just build things.'

Sakari smiled again at that and appeared to relax a little. Her black eyes flicked between the two of them, eventually settling on Jacob. His cheeks burned.

'That's how I started out,' she said. 'I've been developing a device that will refreeze melted ice caps and restore the habitats of displaced bowhead whales. I'm based on the Alaska North Slope, north of the Arctic Circle, so the temperature in London is actually warmer than what I'm used to.'

'That's amazing!' Kira beamed.

'Seriously impressive,' Jacob said shyly.

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Theme 3: Scientists and Inventors

Further Activity Ideas:

Build and test a rocket just like Kira does on page 42–45! You can find instructions for a rocket made from an old plastic bottle here: www.bbcearth.com/news/how-to-build-a-rocket. (Make sure you ask an adult to supervise your rocket launch!) How high will your rocket travel? Kira's rocket doesn't work the first time she tries it (even super geniuses need to test and improve their designs!). How could you adapt and improve your rocket?

Imagine you are chief scientist and engineer at RanaTech. Make a presentation explaining how a rocket is launched into space. You might like to read this article to help you with your presentation: spaceplace.nasa.gov/launching-into-space. Can you answer the following questions: What happens when a rocket is launched? How does Newton's third law of action and reaction explain how a rocket is launched? Why does a rocket keep going rather than falling back down to Earth?

Read the description of the 'Other' on page 122 and draw a picture of the creature using details in the text to help you. What questions do you have about the Others? Can you make any predictions about who or what they are and what role they might play in the story?

Design a horrifying fictional creature of your own! Write a description of your creature. You could use expanded noun phrases to add terrifying details, just as Patrick Gallagher does on page 122. When you have finished, read your description to a partner. Will they be as repulsed by your creature as Jacob and Kira are by the Other?!

On page 298, Eunata says, 'Saving the world does not just happen in books. In reality, everyone has the chance to save the world every single day.' What can you do every day to help save the world? Create an action plan with your class.

Theme 3: Scientists and Inventors

Further Activity Ideas:

The novel is set between Uganda and the UK. Can you find out more about young climate activists from Uganda and the UK such as Vanessa Nakate, Leah Namugerwa, Mya-Rose Craig and Amy and Ella Meek? In what ways are they taking action to help planet Earth?

Jacob and Kira will return in the next book in this action-packed series. What do you think will happen in this book? Design a front cover and write the blurb for book two in the series!