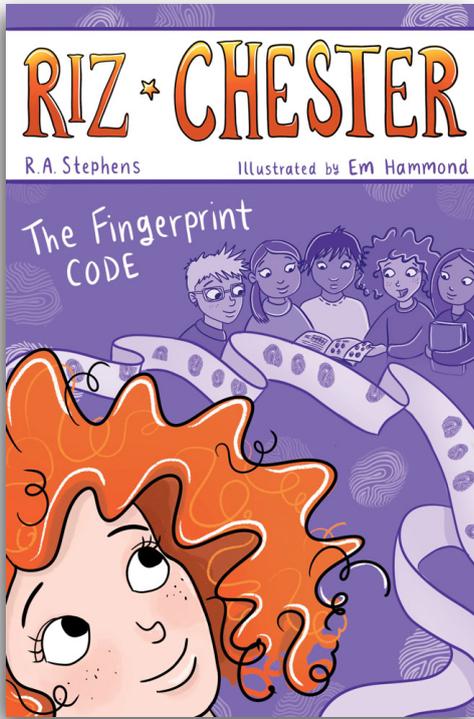


---

# Teachers' Notes

---



## RIZ CHESTER: THE COUNTERFEIT BUST

R.A. Stephens / Em Hammond

**ISBN:** 9781761111181

**Recommended retail:** \$12.99

**Reading level:** 6 to 8

---

### BOOK SUMMARY

Riz and her band of friends have been enjoying trading trivia facts before school now that they all hang out. But on their way into school on Wednesday they get distracted when they notice a commotion outside the music rooms. Someone has stolen some music equipment.

Mrs. Calloway, the music teacher, tells Riz not to get involved but with her forensics log and the new fingerprint kit the detectives gave her, it's hard to stay out of it. Disguising their detective work as a school project, they try to match the new fingerprints to someone they know. They use logic, science and smarts to piece clues together. Can they crack the case?

---

### THEMES

Friendship • Problem solving • Confidence • Mystery • Science

## CONTENTS

Book Summary.....	1
Themes.....	1
About the Author.....	3
About the Illustrator.....	3
Reasons For Studying This Book.....	4
Key Curriculum Areas & Learning Outcomes.....	4
Teaching Points and Activities.....	6
Knowledge and Literal Understanding.....	6
Discussion Questions.....	7
Activities.....	10

**DISCLAIMER:** These notes may be reproduced free of charge for use and study within schools and other educational institutions, but they may not be reproduced (either in whole or in part) and offered for commercial sale.

Light the Dark Pty Ltd, Trading as Wombat Books  
Wombat Books, PO Box 302, Chinchilla, Queensland 4413

ABN: 30 137 345 941  
admin@wombathriza.com.au

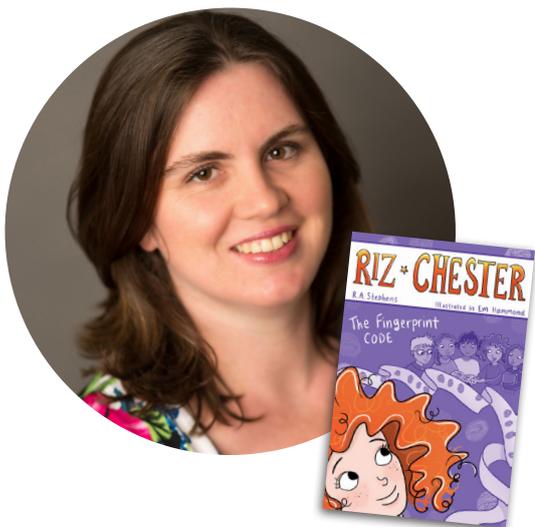
**R.A. Stephens is available for author talks and workshops.  
Contact Wombat Books for more information.**

*Riz Chester Teachers' Notes can be used in schools (independent learning, small groups, and whole classes); at home with caregivers; and as part of mental health support programs facilitated by counsellors, psychologists, children's charities, etc.*

**Connect with Wombat Books**

[www.wombathriza.com.au](http://www.wombathriza.com.au)

[www.facebook.com/wombatbooks](https://www.facebook.com/wombatbooks)



*These notes may be reproduced free of charge for use within schools, but not offered for commercial sale.*

---

## ABOUT THE AUTHOR

---



Rochelle Stephens is the Director of Wombat Books and Rhiza Press. With qualifications in teaching, counselling, editing and publishing, Rochelle brings expertise and knowledge to her work in publishing and editing. Since pioneering Wombat Books, Rochelle has been actively involved in every aspect of story development and book production.

Rochelle has written for science textbooks and other educational texts and is passionate about making science and maths real for children. While Rochelle loves genres like fantasy, she believes that when it comes to science and maths there is so much to appreciate without any fantasy needed. In her experience there is fun to being observant and planning out how to approach a curious query - such as counterfeit money!

---

## ABOUT THE ILLUSTRATOR

---



Em Hammond is an Autistic Artist and Illustrator from the Hunter region, NSW. She is also a busy mum to three young kids, and a Speech Pathologist specialising in neurodiversity-affirming practice.

Em loves spending her spare time creating images and stories that spark imagination and whimsy. She grew up reading the magic that was Roald Dahl and Enid Blyton, and knew that she wanted to create magic between pages someday. She definitely spent a lot of time drawing in the margins of her schoolbooks when she should have been learning about mathematical concepts.

Em dreams of one day writing and illustrating picture books and middle grade fiction that shine a bright light onto Neurodivergent characters and experiences. Books are a special kind of magic and she hopes to make big, beautiful change in the world with her words and pictures.

*These notes may be reproduced free of charge for use within schools, but not offered for commercial sale.*

---

## REASONS FOR STUDYING THIS BOOK

---

Just like in the first Riz Chester book, Riz continues to notice things that most people don't. But this time, her observant brain already has a solid crew of friends to help her out and make her feel less self-conscious of her special observant skills. They use forensic skills, comparing fingerprints, to investigate a crime.

This series is great for beginner to intermediate readers and introduces readers to forensics and science concepts they might otherwise be unfamiliar with. Forensics is not usually introduced at such a young age but students generally really enjoy it once it is. Forensics is about more than just solving graphic crimes, it's about lifting anything from a crime scene that could help – a shoe print, facial recognition, tyre marks, or animal poop. Children can access mini detective kits to explore forensics and to introduce students to science.

---

## KEY CURRICULUM AREAS & LEARNING OUTCOMES

---

### YEAR ONE

English, Humanities and Social Science

ACELA1444	ACELA1451	ACELT1582	ACELY1656
ACELA1787	ACELA1452	ACELT1584	ACELY1788
ACELA1447	ACELA1458	ACELT1586	ACELY1660
ACELA1449	ACELT1581	ACELT1832	ACELA1454
ACHASSI022			

Science

ACSHE021	ACSHE022	ACSIS027	ACSIS213
ACSIS029			

### YEAR TWO

English, Humanities and Social Science

ACELA1461	ACELA1463	ACELT1833	ACELA1454
ACELA1462	ACELT1591	ACELY1665	
ACHASSI038			

Science

ACSHE034	ACSHE035	ACSIS039	ACSIS040
ACSIS041	ACSIS042		

*These notes may be reproduced free of charge for use within schools, but not offered for commercial sale.*

---

## YEAR THREE

English, Humanities and Social Science

ACELT1594	ACELY1676	ACELA1488	ACELY1675
ACELT1596			
ACHASSK093	ACHASSI059	ACHASSK070	ACHASSI080
ACHASSI060	ACHASSI056		

Science

ACSHE050	ACSHE051	AC SIS054	AC SIS055
AC SIS057	AC SIS215	AC SIS058	AC SIS060

## YEAR FOUR

English, Humanities and Social Science

ACELA1489	ACELA1491	ACELA1498	ACELT1603
ACELT1605	ACHASSI073	ACHASSI074	ACHASSI075

Science

ACSSU074	AC SIS064	AC SIS065	AC SIS066
AC SIS068	AC SIS216	AC SIS069	AC SIS071

---

## TEACHING POINTS AND ACTIVITIES

---

This book may be used in whole class, small group or independent learning activities in schools.

Please note, the following suggestions and activities are suited to a variety of year levels spanning Foundation to Year 6 primary aged children. Some activities may be applicable to early secondary school students, as well.

## KNOWLEDGE AND LITERAL UNDERSTANDING

---

### PRE-READING QUESTIONS

1. Show the cover to the class and ask the students what they think the book might be about.
1. Read the back cover blurb. Does this give them more of an idea of what the book could be about?
1. Ask students if they can recognize the setting of this story from the cover image.

### AFTER-READING QUESTIONS

1. Ask students if Riz or her friends remind them of anyone they know: a friend, a sibling, themselves perhaps.
1. What is their first impression of Riz? If they have read the first book and, has this book changed their opinion on Riz?
1. How do Riz and her friends change over the course of the story? See if you can use descriptive words to explain the change, e.g. confident, involved, thoughtful, energetic
1. Ask students what Riz' situation was. Does she overcome the challenges in the end?

---

## DISCUSSION QUESTIONS

---

### GENERAL

- Which character do you relate to most: Riz, Lachie A, Lochie C, Sabrina, Jenny, or Pieter? Do you find that you have interests in science or technology or music? Do you speak another language? Have you had to repeat a grade? Did it help you understand the story better when you saw it from one character specifically?
- If you could pick anyone else and read the story from their perspective who do you think it would be? Why? What special view would they bring to the story?
- Do you think something like this could really happen? Why or why not? Do young students often end up solving crimes?
- Are you very observant? Do you keep a log? Name something you noticed that no one else did.
- What area of science are you most interested in? Forensics combines many different areas like biology, chemistry, and physics! You need them all to solve mysteries sometimes.
- What do you think of the forensics log? Does it help the children solve the mystery easier? Have you ever kept anything like the forensics log?
- Take five to ten minutes to research one of the instruments talked about in the novel. Find out one interesting fact about your instrument and take it in turns as a class or small groups to share your fact.

### FRIENDSHIP

- Before the story begins, Riz and her friends sit outside school and share 'Did you know' facts. What do you do with your friends before school? Do you change activities depending on who you do things with?
- At the end of the book, Riz gets all her friends Forensics' logs of their own. She says her friends make her thinking feel normal. Do you have any weird habits your friends make you feel normal about? How important is it to have people who make you feel not weird? What do people do to help you feel not weird? Are they supportive? Do they agree?
- How does Riz's friendships develop through this book? She continues to get closer to her original friends but they also add in someone new. Is it hard to add someone new when you've known people forever? How do they change the dynamic? Adding someone new broadens your ideas of the world. What was the last new thing a new friend told you that changed your life?
- Riz's new friend is a little older than her. How can having friends of different ages help us? What changes when a friend is a little older than us? Or younger than us?

### PROBLEM SOLVING

- Riz and her friends hear that something is missing and want to help solve the problem. Do you ever go out of your way to solve things for people you care about? Does it make them happy or sad? Has anyone ever solved a problem for you? How did that help?

*These notes may be reproduced free of charge for use within schools, but not offered for commercial sale.*

- 
- When you have to solve a problem is it easiest to do it alone or with other people? Why do you think that is? Are teams better at finding solutions? Why?
  - As Riz and her friends explore the missing equipment they get told new information about the missing piano and broken guitar. How does this new information adjust their plan? Does it mean they don't need to look at specific things?
  - When you have a problem to solve what are the first steps you take? Do you ask for help or do it all yourself? Do you have a specific method? Do big problems and small problems get different steps to solve them? What do you gain from doing your steps to solve problems?

## CONFIDENCE

- Would you be confident enough to try to solve crime like Riz? What does Riz do to help build her confidence and believe in herself further? Is her confidence boosted due to her friends? How might other people, like your friends, help build your confidence?
- Do you think of yourself as a confident person? Why or why not? Are you more confident in different places than others? Why might that be? Does it help when you know more information to make you more confident?
- Are there certain things that make you feel more confident? Riz seems to be gaining confidence with science. Do you have a talent or skill that makes you feel confident? Are they things you do in school or are they things you do outside of school? Why do these things make you feel more confident?

## MYSTERY

- Redesign the cover for this novel. How could you leave some clues as to what the book would be about? How would you show that the book is a mystery before you read it?
- Think about the mystery genre in books. There are elements such as:
  - a puzzle or mystery that must be solved, such as a crime.
  - main character, sometimes a detective, who tries to solve the mystery.
  - suspects, with motives, that you must evaluate.
  - clues that are more obvious and easy to see (sometimes called 'overt clues').
  - clues that aren't easy to grasp and can appear as unimportant details (sometimes called 'hidden evidence').
  - missing information and gaps in the story. Mysteries don't give you all the information and it's up to the reader to put clues, evidence, logic and details together to connect the dots. (Sometimes these gaps are called 'inference gaps').
  - suspense is often used to build up the story, raise tension and stakes, and keep the reader gripped. Suspense is the term used for parts of a story where you're waiting with anxiety and excitement as to the solution of an event or problem.
  - foreshadowing, which is where an author gives a hint, suggestion or warning about what might happen later in the story. It usually happens at the beginning or earlier section of the

*These notes may be reproduced free of charge for use within schools, but not offered for commercial sale.*

---

story. Sometimes an author uses it to prepare a reader, or to create a twist in the story.

- red herring, a type of foreshadowing. Red herrings are famous in mystery stories. This kind of foreshadowing is meant to make a reader come to the wrong conclusion so they can be surprised later, such as thinking one suspect is guilty when it's really another.
- Now that you've discussed the different elements of mystery stories, think about Riz Chester: The Fingerprint Code and what elements it uses in its story. Are there suspects? What were their motives? What clues were 'overt clues' and what were 'hidden evidence' i.e. what were easy to see clues and what was information that became important later but didn't seem important at the time? Were there moments of suspense? Was there foreshadowing? What was foreshadowed? Were there red herrings? Did you put information together to solve the case before Riz? How did you do that, and what 'inference gaps' did you fill?
- Design your own mystery book or movie and make a cover for that. What was the mystery you created? Can you leave some clues in the cover of that one? How will your characters solve the mystery in the end? Would you use any forensics – or maybe even other sciences? Show your work to a small group and discuss your mysteries together.
- Try to write an alternative clue that would have helped point Riz and her friends in the right direction earlier. Did you notice any early signs that they could have picked up on?

## SCIENCE

- Forensics is a blend of lots of different types of science like biology, chemistry, and physics. Consider fingerprints and how it uses different sciences to analyse the prints. What science would you expect to be most helpful in solving mysteries?
- What has been your favourite type of science to explore so far at school? Do you prefer biology, geology, chemistry, or another kind of science? How do you think that science could have been used to solve this mystery? Would you be able to use it in different mysteries?
- Do you think you would be interested in exploring forensics in the future? Why or why not? Did reading about Riz and her friends solving things with forensics shape your view? What do you think would be the most exciting way to catch someone with forensics?
- If you want to learn more about fingerprints try watching [this video](#). Did you learn anything new from this video? Jot down your favourite facts to share in a small group.

---

## ACTIVITIES

---

### FINGERPRINTING

Try watching [this video](#) on fingerprints. It's a good prep for types of fingerprints, and 'invisible' fingerprints.



- There are three types of fingerprints: loops, whorls and arches. Fun fact: The arch is seen as the rarest fingerprint pattern, with only about 5% of the world's population having arches.
- Some fingerprints can be seen easily and other fingerprints aren't visible. Those that can be seen easily are called 'patent prints' and those that aren't are called 'latent prints.' Patent prints are made in things like paint, ink, etc. Latent prints are ones that are made by sweat, grease and residue on our skin and come off on surfaces (sometimes you see them on glass or mobile phones!). Detectives and forensic analysts try to collect these latent prints at crime scenes. In the activities today we're going to collect both patent prints and latent prints.
- First let's do some patent prints. Take the fingerprints of everyone in the class using an ink pad and put them on a poster together. For a couple of minutes analyse the board. Does your class have all three of the types of fingerprints? How many whorls? Arches? And loops? Can you calculate a percentage just like Pieter did? Were some fingerprints harder to distinguish? Were some of them harder to collect? Talk about all the places you could lift fingerprints off of.
- For some more patent prints take home some ink and paper and fingerprint your family at home. What kind of fingerprints do they have? Are there any similarities between you and your family members or are they all wildly different? Discuss how fingerprints develop.
- For some latent prints use a small jar or bottle, some gloves, a small bowl, some kind of brush (like a floofy paint brush or a make up brush), some tape, a piece of paper, and some baby powder or cocoa powder. If using baby powder the jar or bottle needs to be dark in colour, like blue or black, to get the contrast from the baby powder. However if you use a dark powder, like cocoa powder of some kind you can have a light or clear jar or bottle. Handle the bottle or jar with your bare fingers to put lots of fingerprints on it. Then put the gloves on. Pour the powder into the small bowl and get a little of it on the brush. Too much powder will ruin the results so just get a small amount. Pick up your jar or bottle and begin dusting lightly, brushing the powder onto the surface of the bottle or jar. After a bit of effort across the surface fingerprints should show. When you're finished, very gently and delicately and from about ten centimeters away, blow on the surface to get rid of excess powder. Then you can lift it! Get your tape, apply it over the fingerprint and then pull it off in one motion. Put it down on a piece of paper, if using baby powder use a dark piece of paper, and you have a collected latent print.

*These notes may be reproduced free of charge for use within schools, but not offered for commercial sale.*

- 
- With some help from an adult, do some research on a time fingerprints were successfully used to help catch someone. Do you think you would have thought of using fingerprints? What would you have thought of first? Think of ways you could avoid leaving fingerprints. Why might people leave fingerprints instead of being careful? Why is fingerprinting a beneficial science tool to have access to when trying to solve crimes?
  - Included on the next two pages are worksheets for fingerprinting that can be printed out.

## MYSTERY BUILDING

- Try coming up with a mystery together as a class. Brainstorm some mystery ideas together and decide on one as a class. It can be something as simple as a missing pet or as big as a bank robbery. Remember to keep in mind what clues would help your detective to solve your mystery. Come up with five to six clues that can lead your detective to solve the case, some of these can be overt clues and some can be hidden evidence.
- Write the mystery in simple terms e.g. where is Mr Whiskers the cat?
- Then write the clues out e.g. Clue 1 - Michael saw Mr Whiskers go into the yard next door
- After several clues write the solution in simple terms e.g. Mr Whiskers likes to get extra food from the neighbour down the street
- If you want to take it a step further each member of the class can come up with a setting, character, and situation. These can be completely at random and not make sense. Cut out each suggestion and put one of each type into a paper bag or a hat. Pick one out for each category and try to build your mystery around the ideas.



Loop

Whorl

Arch

Riz found out that even though her friends, Jenny and Sabrina, are identical twins they have individual fingerprints!

Fingerprints can be very helpful tools in solving crimes. They can also be used in identification circumstances, like in your phone which is called biometric security.

In Australia the classification system used now is based off a system by Edward Henry in 1896. The Australian Police Force uses the Australian National Automated Fingerprint Identification System created in 2001. The database has 2,600,000 records that are uploaded by State and Territory Police Agencies.

## How to Identify

**Loops** - ridges that curl back on themselves to make a loop shape. The most common fingerprint type.

**Whorls** - the ridges create circular or spiral patterns. Less common but still occur about 35% of the time.

**Arches** - these ridges form wave-like patterns. Least common fingerprint type, only 5%.

## Which are which?

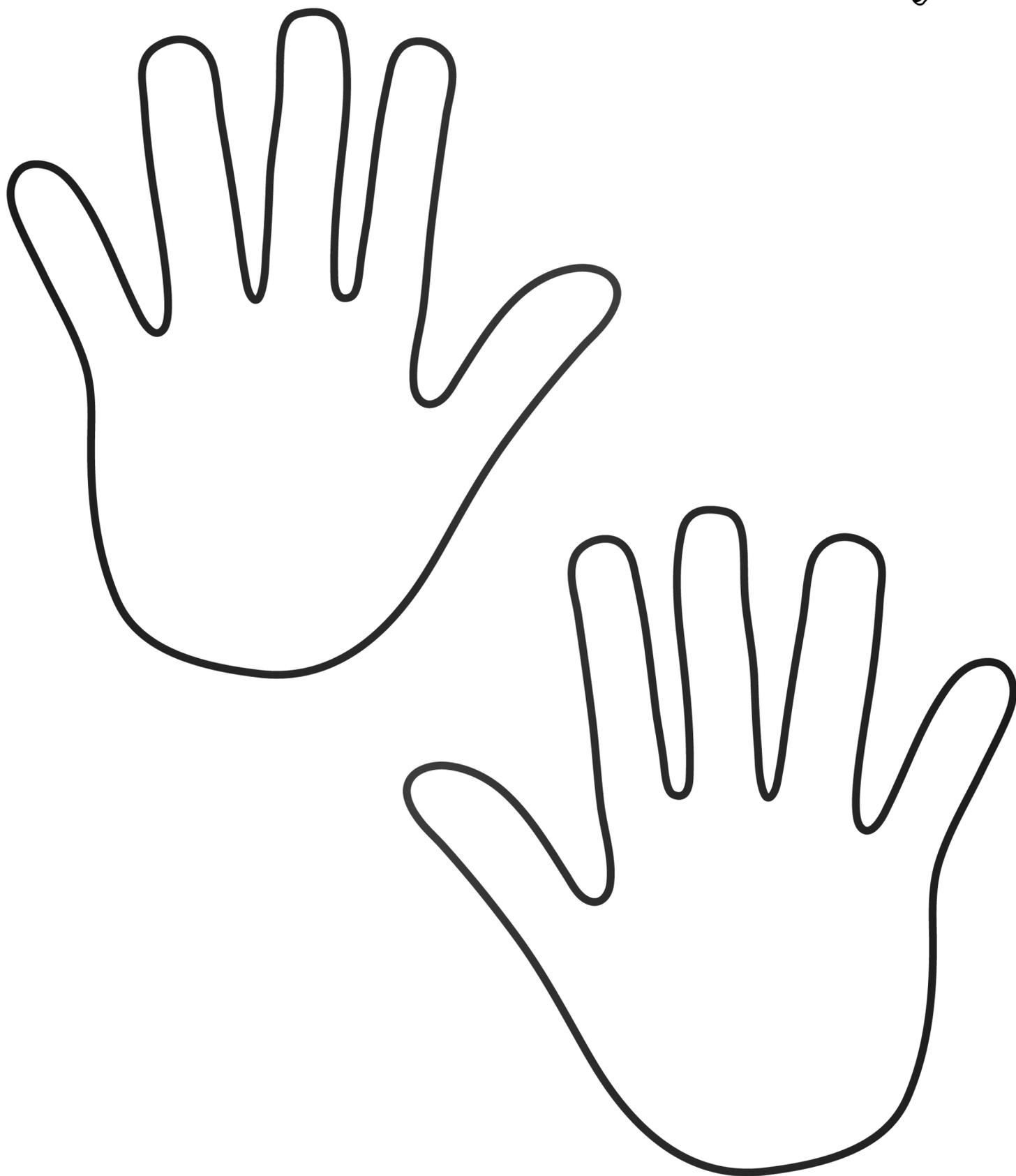


One of the above fingerprints is not like the others. Can you tell which of these were made by humans and which by a koala?

Some animals have fingerprints too, like chimpanzees and gorillas. But so do koalas! A trained expert may struggle to work out which fingerprint is a koala's, and which is a human's, even with a microscope. They're just so similar.

RIZ \* CHESTER

Detective Thinking



Use ink to fingerprint each of your fingers onto the handprints.