

CRACK IT! THINKING CRITICALLY



DESCRIBE

What?
Who?
Where?

**TOPIC,
QUESTION,
ISSUE ...**



ANALYSE

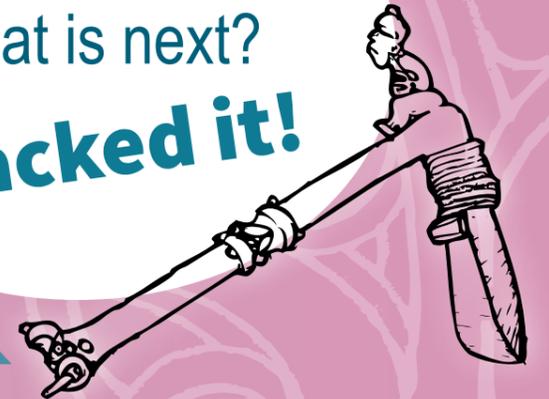
Can ...?
Why?
Why not?
How?



EVALUATE

How well ...?
What if ...?
To what effect ...?
How would ...?

CONCLUDE
So what?
What is next?
Cracked it!



TEACHER NOTES

Topics and Issues

Critical thinking is an essential skill in the 21st century. As teachers, we need to provide opportunities for students to think deeply, logically, clearly, rationally, and with an open mind about a range of topics. Here are some topics, issues, and questions to stimulate your own ideas about concepts you might pose to give students practice in thinking critically.

Te Reo Māori	English	Mathematics ¹	Science	The Arts	PE and Health	Social Sciences
Tōku whānau. Tētahi mahi tino pai ki a au. Tō mātou rohe. He kōrero mō tētahi tangata rongonui. “Ahakoa he iti, he pounamu.” “Tamaiti ākona i te kāinga, tū ki te marae tau ana.” Whāia ngā kōrero a ō tīpuna.	What I would do if I won Lotto. The driving age should be raised to 18. How effective was the author in achieving the purpose of the text? How, and to what effect, is symbolism used in the text? Write a personal response to a short written text. Text messaging has led to a generation of poor quality users of English. “A rose by any other name would smell as sweet.”	Explain the strategy you used to solve this problem. Draw a picture to represent the problem. Explain your picture. Why is the scale on the vertical axis of the graph shown in fives? Explain why time is a continuous variable. Which scale is most useful for this map? Why? Explain the usefulness of the Pythagoras theorem.	Five things you would put in your survival kit. How is a mirage created? Pollination sustains life. How can humans survive in outer space? Science knowledge is tentative. What have we learned from famous scientific ‘failures’ over the last 100 years? Scientific technology is both helpful and harmful to people.	Analyse a portrait from a Māori cultural context. Discuss an artist who consistently uses a special feature that you admire. Listening to music improves physical performance. Compare and contrast two different musical genres. When does kapa haka become creative dance?	Self-management strategies. Physical activity reduces stress. Obesity is a dying issue. Barriers to physical activity. Breakfast is the most important meal of the day. How effective is the advertising of healthy foods? Poverty creates poor health.	Do people change culture or do cultures change people? The changing face of Aotearoa. Justice today equals justice tomorrow. Inspiring leaders. Human rights are everyone’s concern. Conflict is part of human nature. Intermarriage breaks down cultures.

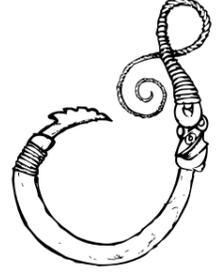
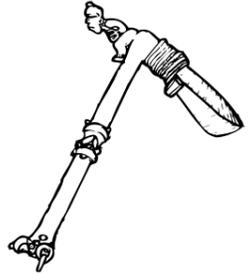
¹ Adapted from Christensen, I. (2010). *Te Reo Pāngarau*. Palmerston North: He Kupenga Hao i te Reo, pp. 372-385.

Cross-curriculum

- Te ao tōrangapū.
- Te ao taiohi.
- Ngā atua Māori:
 - Te wao nui a Tāne
 - Tangaroa
 - Tāwhirimātea
 - Rūaumoko.
- Ko au ko te awa, ko te awa ko au.
- Tā moko.
- He tapu tō te wahine, he tapu anō tō te tāne.

Questions

During the process, students will investigate their topic by responding to a range of questions designed to generate thinking. Key question words are presented on the front of this wallchart. These are only starters and can be extended into a wide range of questions appropriate to the topic or issue being considered. The following table presents a range of questions that will help students develop their thinking in various ways.

Describe	Analyse	Evaluate	Conclude
What is this about? What exactly does this mean? What do we already know about this? What is the context? What is the main point being looked at? What is the point of this question/topic? What is an example of that? What is another way to explain that? What are some of the problems? Who was involved? Who benefits from this? Who is affected? Who has an interest in the topic? Where is it happening? When does it happen?	 Why did things change? Why is that happening? Why was it done like that? Why did that occur? Why did ... happen when ...? Why do you think that would work? Why did that problem occur? How is this similar to that? How did that happen? How does one thing affect another? How does this relate to other things we know? How did you work that out? What was the problem with ...?	 What do you think about that? What else could we assume? What evidence is there to support what you are saying? What if there was a problem? What would the effect have been? What if ... happened? What if something changed? Why are you saying that? Is the change a good or bad thing? Do you believe that? How do you know? How would you feel if ...? How effective are ...? How would you have handled ...? How well was that achieved? How would you rate that? Why?	 So what has been learnt? So what might happen next? So what changes would you recommend? So what does this mean? How would you change things? Is there a better solution to ...? What are the lessons from this? What needs to be considered now? How could it be applied elsewhere? How would you improve it?