

INVESTIGATIONS

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TIDDALICK

Read the Dreamtime story to your class - or watch an online animated version - to launch these mathematical investigations. You may wish to encourage students to do some online research to support their mathematical work. You might also like to connect these investigations to the Uluru image taks in this edition.

http://www.redpixels.com.au/dreamtime-stories-tiddalick-the-frog/ and https://www.youtube.com/watch?v=VVODbc7j6OM



CHALLENGING TASK 1: YEARS 3 AND UP

At the beginning of the story, Tiddalick was already a big frog. In fact, he was much bigger than a regular frog: three times taller, four times longer and five times wider! Thinking about the size of an ordinary frog, estimate how big Tiddalick might be. Can you draw a picture of Tiddalick next to an ordinary frog?

ENABLING PROMPT

An Australian Green Frog grows to around 10cm long, 4cm high and 5cm wide. Using this information, how big is Tiddalick at the start of the story?

EXTENDING PROMPT

Based on his size at the start of the story, can you estimate how much heavier Tiddalick might be than an ordinary frog? How much do think Tiddalick might weigh?

CHALLENGING TASK 2: YEARS 5 AND UP

- He drank all the water from a river.
- He drank the water from the billabongs.
- He drank the water from the lakes.

He drank until the last drops of water from the land had disappeared into his vast mouth.

First, Tiddalick drank all of the Murray River! Next, he drank all the water from the billabongs, which was equal to one quarter of the Murray River. Finally, he drank all the water from the lakes, which was six times the capacity of the billabongs. Estimate how much water he drank?

ENABLING PROMPT

Assume there are 12,000 gigalitres in the Murray River. Now have a go at the question above.

EXTENDING PROMPT

After Tiddalick drank all the water, do you think Tiddalick weighs more or less than Uluru? Explain your reasoning.

SHARE YOUR EXPERIENCE

How did students in your class approach the above investigation? Share your class's experience with the *Prime Number* editorial team (james.russo@monash.edu), for the opportunity to have it published in *Prime Number* as a resource to share with other teachers and students. If possible, try and include photographs of work samples, as well as of students engaging in the task.