INVESTIGATIONS

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WOMBAT STEW

Read *Wombat Stew* by Marcia K Vaughan and Pamela Lofts to your class, and play The Wombat Stew game (learning focus: number patterns and probability) and engage in the Wombat Stew challenging task (learning focus: number patterns, multiplication/ division and problem-solving).

WOMBAT STEW GAME

To play, you need a 20 sided dice, and 5 cards marked with Mud, Feathers, Flies, Creepy Crawlies and Gum Nuts

Players take turns being the dingo.

On their turn, the dingo decides which ingredients to add to their stew before they taste it. The more ingredients they add, the more points they can earn, but the more chances they have of rolling a 'poison number'. If you roll a 'poison number' on your turn, you score zero points.

Play with a 20 sided dice.

Add Mud 1 point - Multiples of 10 are poison numbers.
Add Feathers 2 points - Multiples of 5 are poison numbers.
Add Flies 3 points - Multiples of 3 are poison numbers.
Add Creepy crawlies 4 points - even numbers are poison numbers.
Add Gumnuts 5 points - odd numbers are poison numbers.

For example, choosing the gumnuts and flies on your turn would earn you 8 points, if you could avoid rolling an odd number or a multiple of 3 (if you roll a number falling into either of these categories, you would score zero for your turn). The first player to 31 points wins. You may wish to create multiple sets of cards with different rules around poison numbers so that players have to reconsider their strategy each time they play a game.

WOMBAT STEW CHALLENGING TASK

There's a whole lot of disgusting creatures floating in Dingo's wombat stew including some flies (with two wings each) and some beetles (with four wings each). He looks inside the stew and counts 32 wings. How many of each creature might he have? How many different possibilities can you find?

ENABLING PROMPT

If there was one fly and three beetles in the wombat stew, how many wings would there be altogether? Draw a picture to show how you know.

EXTENDING PROMPT

Dingo puts another big handful of creepy crawlies in his stew. He now has some insects (six legs), some juicy spiders (eight legs) and some slimy slugs (one leg). If he counts 60 legs what combination of creatures does he have? How many different possibilities can you find?
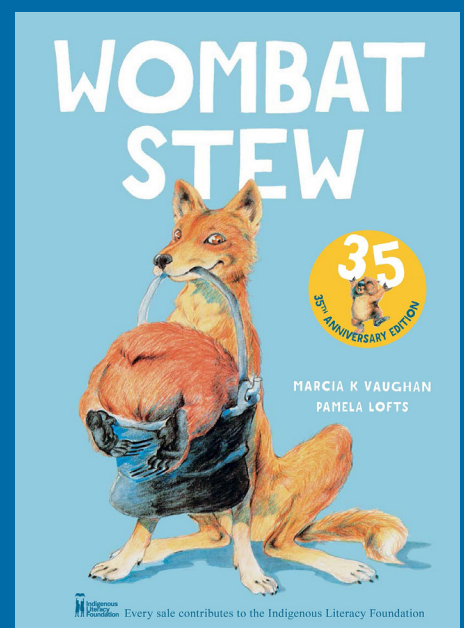
How did students in your class approach the above investigation? Share your class's experience with the *Prime Number* editorial team (office@mav.vic.edu.au), for the opportunity to have it published in *Prime Number* as a resource to share with other teachers and students. If possible, try and include photographs of work samples, as well as of students engaging in the task.