

Kidding Around

ACTIVITY

You need: several counters of one colour, one counter of a different colour

The Morunga family has a small goat farm. One very hot day in January, they herd all the goats from one paddock into the yards for dosing.

1. Gussy the goat doesn't like being at the back of the queue. So every time 1 of the goats is dosed, she manages to sneak past 2 of the goats ahead of her.
 - a. i. If there were 3 goats in front of Gussy, how many of them would be dosed before her?
 - ii. What if there were 6 goats in front of her?
 - b. Copy the table below and, for each given number of goats in front of Gussy, work out how many goats are dosed before Gussy gets her dose.

Number of goats in front of Gussy	8	9	12	16	18	25	33	42	46	100
Number of goats dosed before Gussy										

- c. If you know how many goats are in front of Gussy, can you predict the answer? Explain how to do this.
2. Gussy gets really impatient and sneaks past 4 goats each time 1 of the goats is dosed.
 - a. Copy and complete the table above for Gussy sneaking past 4 goats each time.
 - b. In the scenario in 2a, what do you notice about the number of goats ahead of Gussy in relation to the number of goats dosed before her?

