

Greedy birds math

Syllabus focus area and content group

Multiplicative relations A

- Determine products and factors
- Use partitioning and place value to multiply 2-, 3- and 4- digit numbers by one digit numbers
- Select and apply mental and written strategies to multiply 2- and 3- digit numbers by 2-digit numbers
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Suggested outcomes

- MAO-WM-01
- MA3-MR-01

Resources

- Bean bags labelled with numbers 1 – 20 (4 sets)
- Hoops (1 hoop per group of 3 plus 2 for centre ‘nests’)
- Chalk or pencil and workbook

Activity set up

Set up 2 games of Greedy birds math (same as Rob the nest set-up) for a class of 25 - 30 students

- Evenly spread 5 hoops around a center hoop.
- Place 2 sets of numbered bean bags into the center circle. (bean bags are numbered 1 – 20)

Organise students into pairs.

Learning task

- Students stand behind a hoop in groups of 2.
- On the whistle, one student from each nest will run to the center circle and collect one bean bag at a time, returning each one back to the nest without dropping or throwing it.
- Once all bean bags have been retrieved from the center, players are then allowed to take bean bags from other nests.
- Blow the whistle at a time when all nests have at least 2 bean bags each.
- Once the whistle has been blown, students must freeze and then arrange their bean bags to create a multiplication number sentence (bean bags can be grouped to make 2- or 3-digit numbers).
- Students solve the multiplication number sentence using an efficient strategy.
- Once solved, bean bags return to the middle and play resumes on the whistle.

Suggested challenges when whistle blown:

- Make the largest product
- Make the smallest product
- Make an odd product
- Make an even product
- Make a target product

Talking and thinking like mathematicians

How was your and your partners thinking the same and different? What was the most efficient strategy? What can you do differently next time to be more efficient? How did you decide what numbers to collect to make the smallest product? Largest product? Target product? Odd product? Even product?

