

APPLE BOXES

THIS GAME IS DEVELOPED COURTESY OF **MICHAEL YMER**, MATHS LEGEND!

Learning Objective

This activity addresses the following principles:

- Subitising numbers up to 5
- Part-part-whole
- Numbers to ten

Curriculum Outcomes

Foundation

AC9M1N02

partition one- and two-digit numbers in different ways using physical and virtual materials, including partitioning two-digit numbers into tens and ones.

AC9MFN04

partition and combine collections up to 10 using part-part-whole relationships and subitising to recognise and name the parts.

Materials

- Two empty tens frames
- One complete tens frame (ten dots)
- Green (apple) counters (in plastic bowl*)
- Red (apple) counters (in plastic bowl*)
- Dot die (1 – 6)
- *Counting sticks for pointing
- *Grip mats for rolling die.

*Optional

Instructions

1. Students work in pairs.
2. Each student will need one empty tens frame and choose the colour of the counters they will be working with.
3. The complete tens frame will be placed in between the students and used as a scoreboard but also as a reference throughout the game.
4. *Explain to the students that the tens frame is an apple box, and they will need to fill up the box with their red or green apples.*
5. At every turn, a student will roll the die for their partner. This ensures that a student does not begin their turn while their partner is still completing theirs.

6. Student A will roll the die first and student B will place that number of counters (apples) on their tens frame.
7. If rolling a number greater than 4, invite the students to place their counters in groups of no more than 4 on their tens frame.
 - a. *This is to help support and develop subitising numbers to 5 and their part-part-whole knowledge of numbers to 10.*
8. Student B will now roll for student A and game play will continue.
9. If a student rolls a number higher than the number of empty places on their tens frame (apple box), they will need to roll again.
10. The student who completes their apple box first wins the round. This student places one of their coloured counters on the scoreboard tens frame and the next round begins.
11. The student who places all five of their counters in a tower on their half of the tens frame scoreboard, wins the game.

Notes

- Laminate the tens frames for re-use.
- Create like-ability pairings instead of mixed-ability for this game.
- Create mixed ability tables instead of like-ability tables.
- Avoid use of operational language such as plus, minus. Instead encourage the use of words such as more or less.

Assessment and Differentiation

- For extension, begin with a complete tens frame and ask students to take-away apples until they are left with zero.
- Once students have established 10 allow them to play with only six parts of the tens frame.
 - This will begin to consolidate part-part-whole of numbers less than 10.
- They can repeat the above process for 4, 5, and 8 parts on the tens frame.
- Encourage students to write down their part-part-whole statements after each die roll.
- For assessment print out some smaller tens frames in their book, draw in their counters after each roll and write their part-part-whole statement next to each one.