



The Ten Apples game

Why play this game?

This game provides a meaningful context in which to apply one-to-one correspondence and a mental object of numbers to ten. Mathematical reasoning and problem-solving are at the heart of this game as students look for and make use of structure, test out strategies, make observations, and communicate with other.

Materials needed:

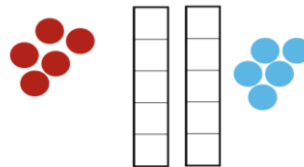
- A copy of the book *Ten apples up on top!* by Dr Seuss
- For each pair of students
 - 2 five-frames
 - 8 counters of one colour for Player 1
 - 8 counters of a different colour for Player 2

1. Student set-up

Setting up before the lesson begins will support a smooth transition from the demonstration to the activity.

Setting up: Organise students into pairs. If there is an odd number, have one group of 3.

Invite each pair to set up their workstation as the image here shows.



2. Lesson

- Start with a story.** Read the book *Ten apples up on top!* to the class.
- Model the Ten Apples game.** Gather students around at one of the tables which is already set up with materials and explain how to play.
 - *Here we have two five frames, one next to the other. They are the apple boxes. Together there are ten boxes to fill.*
 - *On each side we have some counters – the apples!*
 - *In this game, players take turns placing 1, 2 or 3 apples into the boxes. The person to place the tenth apple in a box is the winner for that game.*

An example game:

Player 1 places 3 counters. This leaves 7 spaces free.

Player 2 places 3 counters. This leaves 4 spaces free.



Player 1 places 2 counters. This leaves 2 spaces free.

Player 2 plays 2 counters. This fills the tenth space so Player 2 wins the game.

3. Explore

Give time for students to play and see if they notice patterns or ways of winning. They may like to remove one of the five frames to play with one five frame and see if it's easier to find a winning strategy.

4. Gather and share

Once students have had some time playing the game in pairs, gather them together for a discussion.

Some questions to pose:

- What are you noticing when you play this game?
- What are you wondering when you play this game?
- Do you think you have found a strategy that helps to win? Why do you think that strategy is helping? Does it always work? How can you find out?

Five frames

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