## Small ball, Big bounce (Post Primary)

Read it -- Try it safely -- Explore it further
A tennis ball sits on top of a basketball until they fall to the floor.
Then the bounce happens.
 How high does the tennis ball go?

This is a science experiment you will want to repeat over and over again.

Place one hand under the basketball and support the tennis ball with your other hand. Remove both hands at the same instant. Allow the balls to fall about one meter and land on a slab.

Test your speed of reaction by trying to catch the tennis ball before it hits the ground?

| A | B |
| :--- | :--- |
|  |  |
|  |  |
| C |  |

## Extension activity:

Mark out a grid as shown and count how often the tennis ball lands in each zone from 20 trials.

What do you predict will be the outcome from 100 trials? Test your prediction.

What happens if the balls are dropped the other way up?
Explore concepts of momentum and energy in the context of collisions.

