Activity One

Daniel and Rameka are trying out their new skateboards on a sloping path.

1. Rameka practises shifting his weight from one side to the other without moving his feet.
   a. How does he do this? Try it yourself. What do you experience?
   b. i. What happens as your weight shifts from one side to the other?
      ii. How are direction and speed affected?

2. a. Set up some cones in a straight line. Do some trialling to find out how close the cones can be while still allowing you to move around them smoothly.
   b. Discuss with a classmate what affects how close the cones can be and why.
**Activity Two**

1. a. With your classmate, use chalk and string to make some circles with different radii (for example, 2, 3, and 4 metres). Start with a string length of 2 metres.

b. Use your hands to push a skateboard around each circle. Try to maintain contact with the curve. Observe what happens to the deck and truck as you push the skateboard around the different-sized circles.

2. a. What is the smallest circle you can move the skateboard around and why?

b. Discuss how this relates to the line of cones in **Activity One**.

Examine what happens to the truck and wheels as you shift your weight from side to side on the skateboard:

a. Why do the wheels move forwards and backwards?

b. How is a skateboard truck like a see-saw? How is it different?