Lome and Jose are investigating how a ball moves through the air. They get some equipment from the gear shed.

Lome looks at the rugby ball. He draws a flight path on a piece of paper.

The boys think about other sports and try to sketch how the ball moves through the air. Using the appropriate balls, they then take turns at kicking (or hitting, bowling, bouncing, or throwing) and observing.

1. Sketch the flight of the ball in each of these situations.
   If you don’t know the sport, talk to someone who plays it.
   a. a goal-scoring kick in soccer
   b. a netball shot from close to the goal
   c. a basketball shot that comes off the backboard
   d. a tennis serve and its return
   e. a cricket ball, fast-bowled, nicked, and caught behind
   f. a golf drive off the tee
   g. a corner kick in soccer, headed towards the goal but tipped over the bar by the goalie
   h. a rugby lineout, tapped back to the halfback, who passes to the first five, who kicks
   i. a serve in table tennis, with the return going off the end of the table
   j. a basketball dribbled up the court and put in the basket from a lay-up.

2. Compare your diagrams with a classmate’s. Discuss the differences.

3. For your favourite sport, sketch the flight of the ball in several different plays.