



## Making Waves

Aim To move the members of the team such that they simulate the addition of waves of different frequencies.

**Materials** 4 batons 1 length of fishing line

Method • Three members of the team move back and forth along parallel paths between points marked on the ground. The peak-to-peak amplitudes and periods of motion for each team member are given by:

> • Team member 1: amplitude = 5 m period = 15 s;

> > 2: amplitude = 2 m period = 5 s;

3: amplitude = 0.4 m period = 3 s.

• The fourth team member moves along a parallel path in such a way that the tension in the line is maintained.

- *Conditions* Each of the team members must start from the positions indicated.
  - The team will be allowed to practise their motion for 15 minutes before they are judged.

Time limit 25 minutes

The ranking order will be determined by the accuracy of the motion Ranking of the fourth member of the team.

Team	Result	

Do not write below line

Rank	
Kunk	