

## Propagation and refraction of periodic waves *Dynamics first Equipment*

### List

- handouts
- paper towels
- water
- white board or large sheet of paper with markers
- beaker or glass of water

### Special Instructions

*Equipment to be placed around tutorial room (2-3 sets)*

- 1 baking pan (to serve as “ripple tank”) for water ~0.5 cm deep
- 1 wooden dowel, ~8" long and 1/2" diameter
- 1 eye dropper
- 1 beaker/glass of water

*6 envelopes, each containing the following:*

- photograph showing water waves incident on boundary between different depths
- diagram (in plastic sheet protector) of waves incident on boundary
- 4 different transparencies (each showing a different set of parallel wavefronts)

*Each group should also have an “adjustable angle of incidence” device. (See figure below.) Each requires:*

- 2 pieces of cardboard, 8 1/2" × 11", or manila folder cut in half
- paper fastener
- 1 paper copy of Transparency 3 (see above) taped to cardboard (or manila folder) representing a train of parallel wavefronts.

