

## Investigating rolling and bouncing

This supporting learning resource provides ideas for setting up equipment to allow students to investigate the effects of properties on how an object moves. Use the **Sheet — Rolling and bouncing observation recording sheet** to make notes of individual student's statements and explanations.

To set up for investigations of rolling and bouncing, ensure you provide a range of objects to explore. Remember to include objects that don't move well (for example: rubber glove, eraser, shoe with grip sole) to provide clear comparison of object properties.



©

**Rolling:** For rolling, provide different materials to create low ramps.



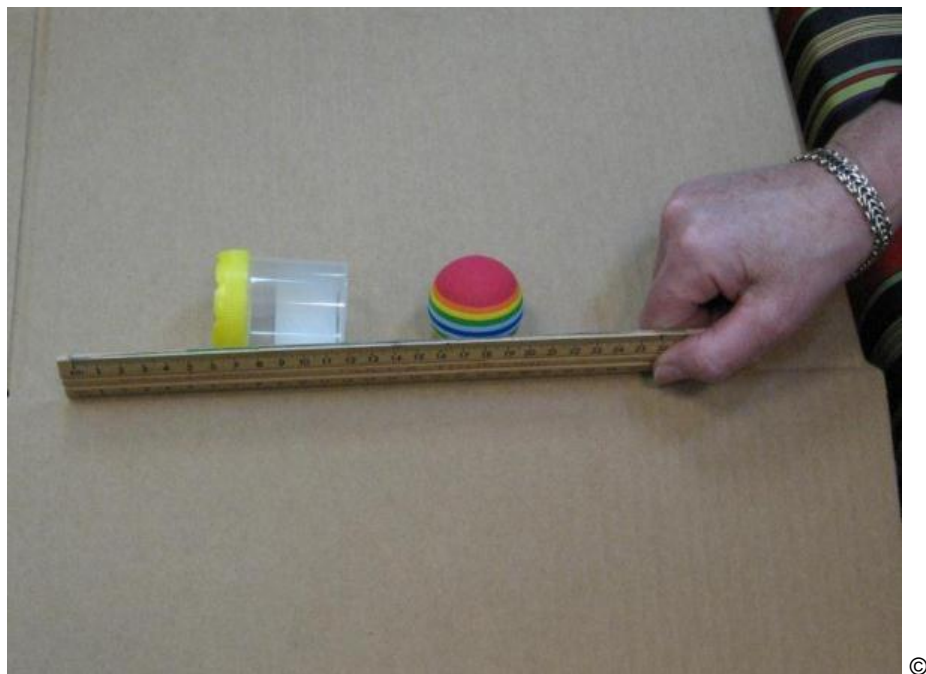
©

Ramps can be made from a variety of objects (for example: cardboard boxes, portable noticeboard or shelving), which are placed on the edge of furniture or other support.

**Important:** Place a towel or item of clothing across the bottom to stop objects rolling away and interfering with other investigations.

All students should have a ruler that they lift to start objects moving down the ramp.

**Note:** Remind students about safety with rulers.



**Bouncing:** For investigating bouncing, release the objects from a consistent height, for example: chest or shoulder height without applying downward pressure. Students might need to release the object a few times to gather enough evidence to make detailed observations.