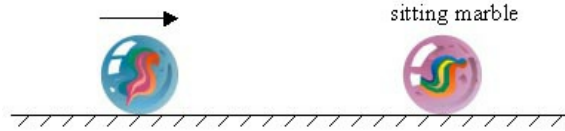


Colliding marbles

This task is about the transfer of energy.

a) Use the two large marbles to do the following.

Roll one of the large marbles into the other large marble which is sitting still (see diagram).



Draw a diagram similar to the one above to show what happens.

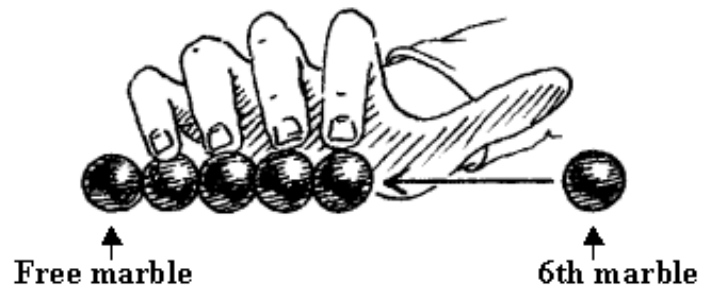
b) i) Now roll a **smaller** marble into a **larger** marble which is sitting still.
Either draw a diagram or describe what happens.

ii) Now roll a **larger** marble into a **smaller** marble which is sitting still.
Either draw a diagram or describe what happens.

iii) Write a general summary sentence to show what you have found out.

c) Investigate

On a flat surface (or in the fold of the newspaper) put 5 marbles close to each other. Hold 4 marbles together in a line with your fingers, leave one marble free on the end. Roll the sixth marble to hit the first marble held by your fingers. Try this a few times.



i) Describe what happens to the free marble on the end of the line.

ii) Explain what happens to the energy of the sixth marble as it hit the others.
