6

Name: ..... **Form:** .....

Based on **pages 14 and 15** of *Forces in action*

The centre of gravity of bottles

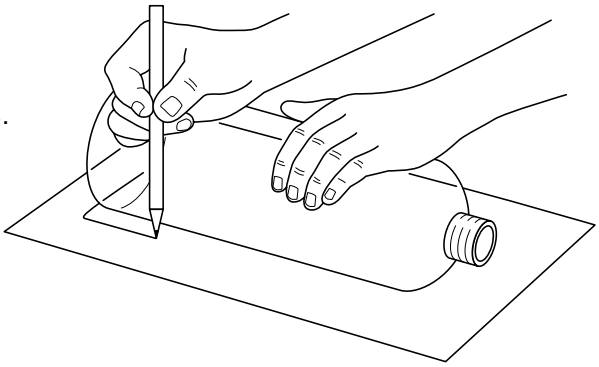
Try this…

1. Take a bottle-shaped piece of cardboard and find its centre of gravity. You may use the information on pages 14 and 15 of your book to help you.

2. Show the position of the centre of gravity of the shape to your teacher.

3. Make a collection of bottles.

4. Draw the shape of each bottle on a piece of card as the diagram shows.



5. Cut out the bottle shapes and find the centre of gravity of each shape.

6. Measure the height of each bottle.

7. Measure the height of the centre of gravity from the base of each bottle.

8. On a separate sheet of paper, make a table of your results.

9. How do the heights of the centres of gravity compare?

✎ .....

10. Fill the bottles with water and put their caps on.

11. On another sheet of paper, plan an investigation to find out how far the bottles must be tilted before they fall over.

12. Show your teacher your plan. If your teacher approves, try your investigation.

Looking at the results.

13. What do your results show?

✎ .....