

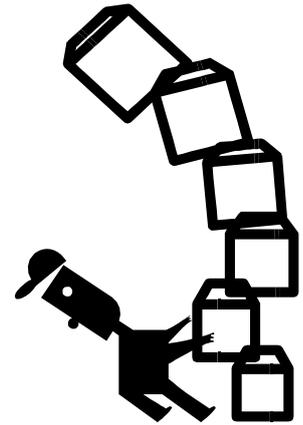
Name: \_\_\_\_\_ Date: \_\_\_\_\_

# Boxes

First, choose a box.

1. Roughly, how big is your box? Have a guess at the length, width and depth.

2. Use a tape measure or ruler to **measure** the dimensions of your box: length, width and depth. (Length is usually the longest side.)



3. **Round** the dimensions to the nearest cm, and nearest 10cm (or inches).

4. What is the **difference** between the length and the width? Show your working out.

5. What is the **difference** between the width and the depth? Show your working out.

6. Look at the measurements of your neighbour's box - discuss the **differences** between your boxes.

7. If you had to store boxes of this size on a shelf 4m wide, **how many** boxes would go on one shelf (single row)?

8. **How much** wrapping paper would you need to cover the top of the box? How could you work that out using measurements? Please show your workings. Work out the **amount** you would need to cover the sides and the whole box, if you can.

9. What is the **volume** of the box? (ask if you need to know how to work out the volume). Find the volume of your neighbour's box.

# Boxes

## Teaching Notes

I use this as an initial/diagnostic assessment activity in the first class of term, with a very mixed group of learners E2 to L2, including a variety of learning difficulties. Close observation reveals a lot of information about their numeracy (and literacy) skills.

## Resources required

- a selection of boxes (enough for one each)
- tape measures and rulers
- paper, squared paper

## L1 & L2 extension activities

- averages (mean, median, mode, range)
- percentage differences
- convert cm to inches ( $2.5 \text{ cm} = 1 \text{ inch}$ )
- express the length, width and depth as a ratio
- draw the box to scale on squared paper, etc.