

Flat Shapes

TREND

Approach: One to one

Level: Year 8

Focus: Nets of 3D objects.

Resources: Laptop computer with video recording of instructions and example; bottle with label, *Jaffa* packet, ruler, measuring tape.

Questions/instructions:

This activity is done on the computer. Click the button that says *Flat Shapes Part 1*. Click the *Play* button and watch the video that plays. Then:

1. Draw the shape of the label before it was put on the bottle (to the nearest centimetre). Label the length of each line.

%

responses
2001 ('97)
year 8

label shape is rectangular 87 (89)

label size recorded accurately
with or without units (8.5–8.9cm x 3.5–4.5cm) 21 (27)

recorded but incomplete or inaccurate 28 (23)

2. Write the name of the shape.

Answer:

rectangle or oblong

68 (75)

Click the button that says *Flat Shapes Part 2*. Click the *Play* button and watch the video that plays. The video tells you what to do with the *Jaffa* packet.

3. Remember: you need to draw what the *Jaffa* packet looked like before it was made (to the nearest centimetre).

- Draw dotted lines to show where you would fold it.
- Label the parts of your drawing.
- Label the length of each line.

Drawing of Jaffa box:

4 sides, 2 ends, 3 glueing flaps,
4 small flaps appropriately proportioned 10 (8)

as above, except not including 4 small flaps 7 (11)

4 sides and 2 ends,
appropriately proportioned 30 (34)

basic idea correct but significant distortions 27 (18)

Measurements given and accurate:

(12–13cm, 3.1–3.9cm, 1.6–2.4cm) all major 4 (20)

most major 27 (17)

Commentary

Finer details and dimensions were often omitted. With the exception of recording dimensions (done better in 1997), the 2001 and 1997 results were similar.