1. Take off one shoe, hold it sole up, and (lightly) apply cooking spray to your shoe.

2. Set the shoe on the absorbent pad and put the shoe back on.

Step/hop on the shoe once or twice to remove excess oil.

3. Step (with your oiled shoe) onto the first sheet of paper, rolling heel-to-toe.

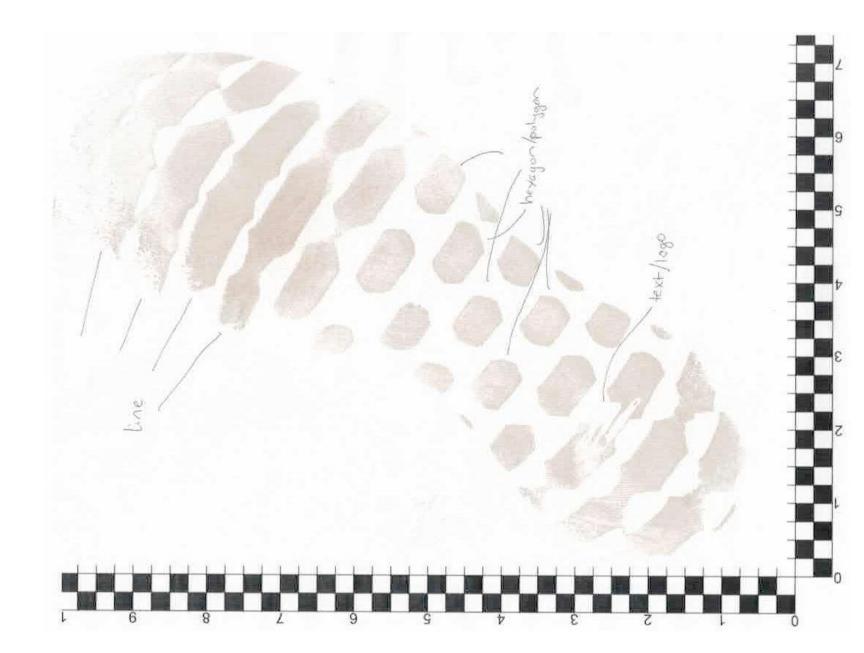4. Step (with your oiled shoe) onto the second sheet of paper, rolling heel-to-toe

5. Step into the pan of soapy water with the shoe that you oiled, then step onto the towel to dry your shoe off

6. Lightly sprinkle about ¼ tsp of cocoa powder onto each sheet of paper. Shake the paper to spread the powder around so that it adheres to the oil.

7. Identify shapes & patterns

Bowtie	Chevron	Circle	Polygon
Lines	Star	Quadrilateral	Triangle
Text	Other		

line

hexagon/polygon

text/logo

8. Compare with the other shoe prints – do any have similar features in similar locations?

Calculate the random match probability:

similar prints / total number of prints

9. Discuss:

- What factors might affect the random match probability?
- Does your shoeprint match the bottom of your shoe?
- Are there issues with the print quality that interfere with your ability to identify shapes?