One final piece of evidence to investigate were the fingerprints left on Sangita Mistry’s iPhone case. No two people have the same fingerprints, not even identical twins. This means that the police are able to make accurate matches between suspects and prints left at the crime scene. The four main prints that police look for are: whorls, loops, arches and composite prints.

Our evidence:

1) Photo of three fingerprints on the case.
2) **Fingerprint samples** from Brodie Smith, Marco Albenni, Sangita Mistry, Debbie Downes. Observe the fingerprints on the phone case. Look for the fingerprint styles to make a match.

<table>
<thead>
<tr>
<th></th>
<th>Right ring style</th>
<th>Right middle style</th>
<th>Right forefinger style</th>
<th>Match Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brodie Smith</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marco Albenni</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sangita Mistry</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Debbie Downes</td>
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</tbody>
</table>

Whose fingerprints match those found on the iPhone case? Based on all of the evidence you've investigated, can you identify the phone thief?

- **Loops** are found in 65% of the population (Most Common)

- **Whorls** are found in 35% of the population

- **Arch**es are found in 5% of the population (Least Common)

**LOOP**: Lines enter and exit in the same direction

**WHORL**: Lines form a spiral – a bit like a whirlpool

**ARCH**: Lines enter and exit at opposite sides of the finger

**COMPOSITE**: A mixture of two or more separate patterns
CALGARY POLICE SERVICE

Name  SMITH, Brodie  KEY NO.  45586D

1. Right Thumb    2. Right Forefinger    3. Right Middle    4. Right Ring    5. Right Little

PREPARED BY: CALGARY POLICE SERVICE
IDENTIFICATION SECTION

Date August 3, 2013

Taken By

Left    Right

Signature
CALGARY POLICE SERVICE

Name ALBENNI, Marco

1. Right Thumb 2. Right Forefinger 3. Right Middle 4. Right Ring 5. Right Little


PREPARED BY: CALGARY POLICE SERVICE
IDENTIFICATION SECTION

Date August 3, 2013

Signed By

Taken By

Left Right
LESSON 9: RESOURCE 2

Name: ____________________________

Work with a partner to carefully take each other’s fingerprints. Make sure you cover the fingertip in ink/ pencil lead and roll each finger from nail to nail.

Take each individual finger print and at the bottom, do the full hand print.

What patterns do you notice? Are there any accidental characteristics in the prints? Discuss!

FINGERPRINTS

<table>
<thead>
<tr>
<th>Name</th>
</tr>
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<tbody>
<tr>
<td>1. Right Thumb</td>
</tr>
</tbody>
</table>

PREPARED BY: CALGARY POLICE SERVICE
IDENTIFICATION SECTION

Date ____________________________

Taken By

Left | Right