

Blood Analysis

Name:

Date:

INQUIRY

Blood spatter patterns at a crime scene can tell investigators what happened — without any witnesses.

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Blood type	A, B, AB, or O — determined by antigens on red blood cells.
Spatter pattern	The shape/distribution of blood drops — reveals angle, force, direction.

Part A — Blood Types

1. Name the four main blood types. Which is the most common worldwide? Which is the rarest? [3 marks]

2. Blood type O is found at a crime scene. Can you convict someone with type O blood? Why or why not? [2 marks]

Part B — Spatter Analysis

3. Explain how the SHAPE of a blood drop can tell you the angle it hit the surface from. (Round = 90 degrees, elongated = low angle.) [3 marks]

Part C — Ethics

4. South Korea and China both maintain national DNA databases. Germany has strict limits on DNA storage. Discuss the benefits and concerns of a national DNA database. [4 marks]