Name: _____ ( ) Class: _____ Date: _____

You are doing a project on crime and science. You have found an article about forensic science. Read the article.

Text 1   Article

Solving crime the scientific way

❶ A terrible murder is committed. A team of good-looking professionals rushes to the scene. Within minutes, crucial evidence is discovered and a suspect is identified. By the end of the day, the murderer is behind bars.

5 ❷ Fans of TV shows like *CSI* and *Bones* will find this plot familiar. Yet how accurate is it? Forensic scientist William Mak prefers to only derive entertainment from such plotlines. 'Actually, I'd rather not watch them at all,' he laughs. 'They greatly exaggerate my line of work. I'm not that handsome,
10 for starters!'

Forensic science: how crime scene investigations work

1   First responders secure the crime scene.

2   Investigators and scientists identify any dead bodies and determine when the crime happened.

15 3   The area is examined for evidence. All evidence is photographed or sketched, then collected or preserved.

4   Scientists perform tests on the evidence in laboratories. Results are recorded in reports.

20 5   Forensic reports are used as evidence in court.

6   All reports are stored away after the case is closed.

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❸ What are the biggest inaccuracies? 'Two things stand out. The first is time. Investigators in these shows always crack a case within days. In reality, it can take weeks to complete a
25 single test. The other is certainty. Fictional scientists always seem to make final decisions based on these tests. Real forensic scientists will tell you that our tests yield conclusive results only 30 per cent of the time. Often, we can't even determine when or how someone died.'

❹ Nonetheless, in his 35 years on the job, Mak has witnessed many advances in forensic
30 science, a subject defined as 'the collection and analysis of scientific evidence during a criminal investigation'. When Mak first started, fingerprint and footprint analyses were common. Developments in toxicology and ballistics made it possible to analyse poisons and weaponry more reliably. Then, in the 1990s, the most powerful weapon in a forensic scientist's arsenal was born.

35 ❺ DNA analysis is a remarkable tool. We leave DNA everywhere we go in the form of hair, skin, blood or saliva. It is also unique to every individual. If DNA samples taken from a crime scene match a sample from a suspect, investigators can usually link the suspect to the crime.

❻ In what is probably the most famous court case of all
40 time, this technology was used to place American athlete and actor OJ Simpson at the scene of a 1994 multiple murder. Forensic scientists found Simpson's blood at the scene. They also found blood and hair from the victims on Simpson's belongings. Despite this, the jury found him
45 innocent. This was because some jurors questioned the reliability of the groundbreaking DNA technology, while others felt the samples may have been damaged.

❼ Indeed, DNA analysis can be misleading. In 2008, American Donald Smith was arrested for shooting a woman and stealing her car. Forensic
50 scientists found Smith's DNA in the car. Witnesses also recalled seeing Smith flee the scene. Smith claimed his identical twin was the true culprit. Despite some scepticism, detectives asked scientists to examine the car again. This time, a fingerprint was found. It belonged to Smith's twin! Identical twins have the same DNA, but different fingerprints. Smith really had been innocent all along. The correct use of forensic science was key to his
55 release.

❽ Due to rapidly developing technology, William Mak is reluctant to predict what techniques forensic scientists will use in the future. 'I'd rather not speculate,' he smiles, 'though I think facial recognition could be significant. We wouldn't need forensic science if there were live security footage at all times. Now that sounds like something from *CSI*!'

Further simplified reading and comprehension

Name: _____ ( ) Class: _____ Date: _____

Comprehension 1 *Your friend wants to know more about forensic science. Answer her questions using information from the article. For multiple-choice questions, choose the best answer and blacken ONE circle only.*

1 What is the meaning of the phrase 'behind bars' (line 4)?

    ○ A arrested   ○ C having a drink

    ○ B dead   ○ D taking a break

2 William Mak feels that crime dramas like *CSI* and *Bones* are inaccurate because _____.

    ○ A they use the wrong forensic techniques

    ○ B they aren't based on real cases

    ○ C the actors aren't good-looking

    ○ D they exaggerate the work of forensic scientists

3 Number the following events in a crime scene investigation in chronological order. Write 1–4 on the lines provided.

    Findings are documented.   _____

    Evidence is collected.   _____

    Police officers arrive.   _____

    Studies are carried out.   _____

4 Which definition of 'crack' is closest to its meaning in line 24?

    ○ A to break without separating into parts

    ○ B to hit something with a short hard blow

    ○ C to no longer be able to function normally because of pressure

    ○ D to find the solution to a problem

5 Complete the table about forensic science using information from paragraph 3.

Myth 1: Cases are cracked in days.   **Fact:**   (i) _____   _____
Myth 2: Tests always yield conclusive results.   **Fact:**   (ii) _____   _____

6 According to paragraph 4, are the following statements **True (T)**, **False (F)** or **Not Given (NG)**? Write the letter(s) in the boxes.

Statements

i) Forensic work focuses on evidence and not suspects or motives. ☐

ii) Toxicology is the study of weapons. ☐

iii) It is difficult to analyse DNA. ☐

7 a) What does 'the most powerful weapon in a forensic scientist's arsenal' (lines 33 & 34) refer to?

    _____

b) Name TWO reasons why it is such a 'powerful weapon'.

    i) _____

    _____

    ii) _____

    _____

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8 Complete the juror's notes about the OJ Simpson case using information from paragraph 6.

The accused: OJ Simpson
Charged with: (i) _____
Arguments against the accused
(ii) _____ was found at the scene
(iii) _____ from the victims were found on Simpson's belongings
Arguments for the accused
DNA analysis may be (iv) _____
DNA samples may have been (v) _____
Verdict: (vi) _____

9 Using information from paragraph 7, match each person with one of the quotes below. Choose from A–F and write the letter in the box next to each person. Two of the quotes will NOT be used.

Quotes	
A	'You've got the wrong guy!'
B	'I'm hurt and I lost my car.'
C	'I've found new evidence on the car.'

D	'I saw a man running down the street.'
E	'An unlikely story. I don't believe you.'
F	'They'll never know it was me.'

Donald Smith		Forensic scientist	
The victim		Police detective	

10 What is the writer's purpose of bringing up the Donald Smith case?

_____

_____

_____

11 Why is William Mak 'reluctant to predict' (line 56) the future of forensic science?

_____

_____

_____

12 Which word best describes William Mak's personality?

○ A overconfident ○ C humourless

○ B easy-going ○ D naive

13 Find words from Text 1 with these meanings.

i) to obtain (v., paragraph 2)	
ii) to produce or provide something (v., paragraph 3)	
iii) an attitude of questioning whether something is true or will happen (n., paragraph 7)	
iv) hesitating or unwilling to do something (adj., paragraph 8)	