Stage 5 Cambridge Primary Mathematics Practice Worksheet

Monday 17 August 2026

Syllabus Focus: Objective 5Ni.06 — Prime and Composite Numbers

Topic: Distinguishing, classifying, and testing prime vs. composite numbers up to 100

Time Allowed: 30 Minutes | **Total Marks:** 20 Marks

Section A: Definitions & Misconceptions

Question 1 [1 Mark]

Select the correct statement regarding the number 1:

- **A:** 1 is a prime number because it is odd.
- **B:** 1 is a composite number because it divides into every number.
- **C:** 1 is neither prime nor composite because it has only 1 factor.
- **D:** 1 is a prime number because it can only be divided by 1.

Answer: Letter _____

Question 2 *(TWM.04 Convincing / Misconception Check)* [2 Marks]

Tariro says: *"All even numbers are composite, so 2 cannot be a prime number."*

(a) Is Tariro correct or incorrect?

Answer: _____ [1]

(b) Explain how you know, listing all the factors of the number 2. [1]

Question 3 *(TWM.05 Characterising)* [2 Marks]

Chipo claims: *"Every odd number is a prime number."*

Show that Chipo is wrong by giving **two different odd numbers** between 20 and 60 that are **composite**, and list all the factors for one of your chosen numbers.

- Odd Composite Number 1: _____
- Odd Composite Number 2: _____ [1]
- Factors of _____: _____ [1]

Section B: Identifying and Classifying Numbers

Question 4 [2 Marks]

Classify each of the numbers below as **Prime** or **Composite**:

- $23 \rightarrow$ _____ [0.5]
- $26 \rightarrow$ _____ [0.5]
- $37 \rightarrow$ _____ [0.5]
- $45 \rightarrow$ _____ [0.5]

Question 5 *(TWM.04 Convincing)* [2 Marks]

Consider the number 51.

(a) Is 51 prime or composite?

Answer: _____ [1]

(b) List all the factors of 51 to justify your answer. [1]

Factors of 51: _____

Section C: Systematic Factor Finding & Divisibility

Question 6 [2 Marks]

Look at the list of numbers below taken from a classroom display:

$$\mathbf{17,\quad 27,\quad 53,\quad 65,\quad 91}$$

(a) Write down the **two prime numbers** from the list: _____ and _____ [1]

(b) Write down the **three composite numbers** from the list: _____ , _____ , _____ [1]

Question 7 [2 Marks]

A teacher writes two numbers on the board: 87 and 89.

(a) Find a factor of 87 other than 1 and 87 to prove it is composite. [1]

Answer: _____ is a factor of 87 because 87 ÷ ____ = _____

(b) State whether 89 is **prime** or **composite**. [1]

Answer: _____

Section D: Application and Problem Solving

Question 8 [2 Marks]

Two prime numbers add up to 20.

Find **two different pairs** of prime numbers that give a sum of 20:

- Pair 1: _____ + _____ = 20 [1]
- Pair 2: _____ + _____ = 20 [1]

Question 9 *(TWM.05 Characterising)* [2 Marks]

I am a 2-digit number less than 40.

- I am an **odd number**.
- The sum of my digits is 9.
- I am a **composite number**.

What number am I?

Answer: _____

Question 10 [3 Marks]

Here are five digit cards:

2	3	5	7	9

(a) Use two of the cards to form a **2-digit prime number** greater than 50. [1]

Answer: _____

(b) Use two of the cards to form a **2-digit composite number** ending in 3. [1]

Answer: _____

(c) Explain why **no 2-digit prime number** (greater than 5) can ever end with the digit 5. [1]