ANSWER KEY

Answer Key: Day 2

Every page for this day is keyed, and nothing is left as "answers will vary." This file covers the bell ringer, the guided notes and the exit ticket. In this folder, the key for the Receipt Printer sheet is in Activity_and_Lab_Keys.pdf.

Bell Ringer: The Missing Mark

```
1  System.out.println("Hi!");
2  System.out.println("Band day")
3  System.out.println("At 3");
```

Model response

Java names line 2, because its statement has no semicolon to end it. The fix is `System.out.println("Band day");`.

Look for this idea in the student's own words.

Guided Notes: Day 2

Blanks are shown filled in, in order.

Compile, then run

To **compile** means to check the whole file and turn it into code the computer can run.

The **compiler** does this job. It reads every line before the program starts.

Java can **run** a program only after it compiles. Then the steps go from top to bottom.

When you compile Java, the compiler makes **`.class`** files full of bytecodes.

The Java Virtual Machine (JVM) runs the bytecodes. The JVM works on many operating systems, so the same **`.class`** files can run on many kinds of computers.

Compile errors

```
1  System.out.println("Thank you!");
2  System.out.println("Come again.);
```

Error

Line 2: Java says: `error: unclosed string literal`

A **compile error** is a mistake that stops the compiler, like a missing `;` or a missing quote mark.

With just one of these mistakes, nothing runs, so nothing prints. Even the lines before the mistake don't print.

The **error message** for a compile error names the file and a line. Start there, then check the line just above it.

Java cares about capital letters. `system.out` and `printLn` are compile errors.

Exit Ticket

The exit ticket is worth 3 points: 1 for each item.

1. Correct: (C) `System.out.println("Hi!")`

One line has no semicolon at its end, so its statement doesn't end.

2. Correct: (A) Nothing, because it doesn't compile

```
1  System.out.println("Open");
2  System.out.println("Closed);
```

Line 2 has no closing quote mark. Java compiles the whole file first, so one compile error stops every line.

Item 3: written answer

Look for

- Java compiles the whole file before it runs any line, so a compile error stops the program before it starts.

Model response

Java compiles the whole file before it runs any line. A compile error stops the compiler, so the program never runs and nothing prints.