

Meteorite Identification Questions:

1. Does the specimen feel unusually heavy for its size?

(Yes = possible meteorite).

Many meteorites, particularly iron meteorites, are quite dense and feel heavier than most rocks found on Earth.

2. Does the specimen attract a magnet?

(Yes = possible meteorite).

Almost all meteorites contain some iron-nickel metal and attract a magnet easily.

3. Can you see gray metal specks shining on any broken surface of the specimen?

(Yes = possible meteorite).

Most meteorites contain at least some iron-nickel metal. These fragments may be seen shining on a chipped surface.

4. Does the specimen have a thin black crust on its outer surface?

(Yes = possible meteorite).

When a meteor falls through the Earth's atmosphere, a very thin layer on the outer surface of the rock melts. This thin layer is called a fusion crust. It is usually black and has the texture of an eggshell.

5. Does the specimen appear to have 'thumbprints or dents' on its surface?

(Yes = possible meteorite).

Often, when a meteor falls through the Earth's atmosphere, these thumbprint-like features called regmaglypts form on the surface.

6. Does the specimen have any holes or bubbles in it?

(No = possible meteorite).

Meteorites do not have holes or bubbles. Slag from industrial processes usually has holes or bubbles.

If the answers to questions 1 and 2 are No, then the rock is almost certainly Not a meteorite. If the rock is actually a meteorite, then the answers to most of questions 1 through 5 should be Yes, and question 6 should be No.