



# Moon Landing Investigation

## Real or Fake?

### Classroom Activity

#### Overview

**Age Range:**

9-12

**Prep. Time:**

10 minutes

**Lesson Time:**

1 hour

**Cost per activity:**

Low (print costs)

**Includes the use of:**

Printouts, post-it note

#### Outline

Students are shown a short video of the Apollo 11 lunar landings and listen to a short history. They are introduced to the question 'Did Man land on the Moon, or was it faked?'

Students are asked to examine 21 different pieces of evidence that are put up around the room. Approximately half of the evidence suggests that the Moon landings were faked, the other half indicate they were real. The students are given a worksheet to fill in as they tour the evidence, forming their own opinions.

### Pupils will Learn:

- Evaluating different evidence to form their own opinions
- Compare and contrast opposing evidence

### Lesson Plan:

Overview of the time required to complete lesson.

Description	Time	Notes
Introduction to the subject	15 min	Use: <a href="https://www.youtube.com/watch?v=cwZb2mqld0A">https://www.youtube.com/watch?v=cwZb2mqld0A</a>

Online Observatory: [onlineobservatory.eu](http://onlineobservatory.eu)

The online observatory collaboration consists of the following partners:

Baldone Observatory, Brorfelde Observatory, Cardiff University, Harestua Solar Observatory, Helsinki Observatory



Activity 1	30 min	Use: MoonLandingInvestigation_Evidence & MoonLandingInvestigation_CollectionSheet (or have students make their own tables)
Assessment	15 min	

## Introduction to the subject:

In 1969 America sent astronauts to the moon and on the 16<sup>th</sup> of July the first ever human (Neil Armstrong) set foot there, famously saying 'one small step for man, one giant leap for mankind'. Between 1969 and 1972 America sent six manned missions to land on the moon. Watch a video of the historical event and discuss what the students see (<https://www.youtube.com/watch?v=cwZb2mqld0A>). Along with the astronauts NASA sent a lunar module, to land on the planet, and a lunar buggy that they could drive around.

Despite this video evidence and popular belief, there are some people who do not believe the moon landings were real. Ask students to vote on whether they believe the moon landings were real or fake, make a note of the result. In this activity you will investigate the evidence for yourselves and come to your own conclusion.

## Activity 1:

- Distribute the 21 pieces of evidence around the room and organise students into groups of 3-4, each starting at one of the pieces of evidence.

Introduce the activity, tell students to go around the room and look at the different evidence slides, tell them it is ok for them to have a different opinion from others in their group.

1. Students decide whether the evidence is for or against the moon landings being real.
2. They then rate the strength of the evidence, deciding how reliable it is.
3. They should make a note of this on their collection sheets.
4. On the collection sheets students should make any notes they have about the evidence and also write a few questions that might be relevant to ask.
5. Students should move around the room and repeat the process until they have finished the collection sheet, with all pieces of evidence reviewed.
6. When all students have finished, ask them to write their names on two different coloured post-it notes. One colour for the 'strongest' evidence and one for the 'weakest'. Students should place their post-it notes on the piece of evidence they think is the strongest (most valid/important) and the weakest.

## Assessment:

- Students should write in their books what their opinion on the moon landing is, giving evidence to justify their answers.



- Ask students to once again vote on whether they believe the moon landings were real or faked and compare the result with the original vote.

## Further Activities:

Students could write a diary entry/log from Neil Armstrong's point of view, about what it felt like to be the very first person to step out onto the moon. They should do some research before writing, looking at what the moon environment is like and interviews of astronauts describing their experiences.

Host a debate between students, with one side arguing the moon landings are real and the other side that they are fake. Have the students not debating think up questions (based around the pieces of evidence) that they can put forward to the debaters.