

Date: \_\_\_\_\_

Name: \_\_\_\_\_

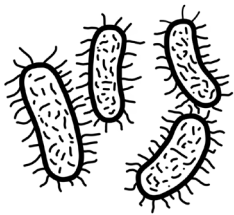
## To Be or Not to Be (Living or Not)

This activity was created by Amaris.

Many people with different worldviews or interpretations of life have different definitions of what may be living or not. Using your understanding of life and living things, write down some requirements that you think organisms must meet to be characterized as living. Make sure they are broad enough so that they can apply to more than one type of organism.

**Living things must:**

Now, using your criteria for living things, characterize the things below as either living or not. Describe which of your criteria it meets or fails. Even if you think it is not living, try to identify living things around it which may depend on it for their own life or which it might interact with. For example, you may say that water itself is not alive, but natural bodies of water are ecosystems full of many microorganisms which are living, plus many plants and animals need water to live.



**Lactobacillus bacteria** that dwell on human skin and protect against infection

Living or not?

Criteria met or failed:

Interactions with living things:

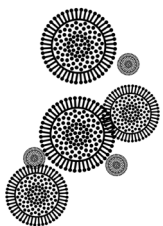


**Fire**

Living or not?

Criteria met or failed:

Interactions with living things:



**Viruses** which can only reproduce inside of another organism's cells

Living or not?

Criteria met or failed:

Interactions with living things:

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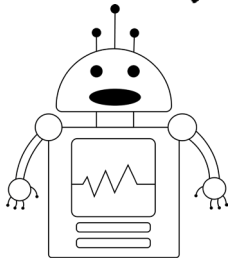


**A parasite** that found its home on a zebra

Living or not?

Criteria met or failed:

Interactions with living things:



**A robot** who uses machine learning

Living or not?

Criteria met or failed:

Interactions with living things:



**A tapeworm** that gets all its food from inside an animal's stomach

Living or not?

Criteria met or failed:

Interactions with living things:



**Fungi**

Living or not?

Criteria met or failed:

Interactions with living things:



**A rock** that supports life for a lichen growing on it.

Living or not?

Criteria met or failed:

Interactions with living things:

**A lichen** which is composed of algae and fungi (and is defined by both species together)

Living or not?

Criteria met or failed:

Interactions with living things:

## → SCIENTIST DEFINITIONS

Most scientists characterize living things by 6 requirements.

Living things must:

- |   |                   |
|---|-------------------|
| 1 Be made of one or more cells          | 4 Produce waste   |
| 2 Reproduce, grow and repair themselves | 5 Require energy  |
| 3 Respond to their environment          | 6 Have a lifespan |