|  |  |
| --- | --- |
| **Advantages of Being Multicellular**  | **Disadvantages of Being Multicellular**  |
| Can live in a wide variety of environments because they can be moist on the inside and dry on the outside  | Needs to eat more than a unicellular organism because it needs more energy  |
| Can grow very large | For reproduction, they need to grow for a longer time before they can be “born” or be independent |
| Live longer than unicellular organisms  |  |
| Can work more **efficiently** because they have cells organized into tissues to do certain jobs (functions)  | Cells are organized into tissues. Ex: skin tissueTissues are organized into organs. Ex: stomach liningIf one organ fails, the whole organism can fail.  |

|  |  |
| --- | --- |
| **Advantages of Being Unicellular**  | **Disadvantages of Being Unicellular**  |
| Easier to adapt to changes in the environment (hot, cold) because they are small  | Cannot grow very large  |
| Reproduce quickly because they are simple  | Do not live as long as multicellular because there is only 1 cell to do all life functions (jobs)  |
|  | Usually need to live in water or moisture because they can dry out quickly; must also have a food-rich environment  |
|  | Must take everything they need in through their cell membrane  |

**Unicellular/Multicellular Cartoon**

**Rough draft due:**

**Good draft due:**

Design a cartoon which includes 2 characters – a unicellular character and a multicellular character

Choices for unicellular organism – amoeba, paramecium, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(1)

Choices for multicellular organism – a cell from one of the following tissues that are designed for one of the SEVEN Life functions (1)

* Movement (muscle cell)
* Reproduction (an egg cell (female), a sperm cell (male))
* Growth (a skin cell)
* Response (a nerve cell)
* Excretion (an kidney cell)
* Exchange of gases (a heart or lung cell)
* Nutrition (a stomach cell)

You must include

\*evidence that your organism is a plant or animal (2)

\*at least 2 advantages to being unicellular \*at least 2 advantages of being multicellular (8)

\*at least 2 disadvantages to being unicellular \*at least 2 disadvantages of being unicellular (8)

Design an organism which is either unicellular or multicellular

Name it ensuring that the name represents something about the organism (1)

Draw the organism using labels which demonstrate clearly how the

Choices for multicellular organism – a cell from one of the following tissues that are designed for one of the SEVEN Life functions (1)

* Movement (muscle cell)
* Reproduction (an egg cell (female), a sperm cell (male))
* Growth (a skin cell)
* Response (a nerve cell)
* Excretion (an intestine cell)
* Exchange of gases (a heart cell)
* Nutrition (a stomach cell)

You must include

\*at least 2 advantages to being unicellular \*at least 2 advantages of being multicellular (8)

\*at least 2 disadvantages to being unicellular \*at least 2 disadvantages of being unicellular (8)