## Characteristics of Living Things

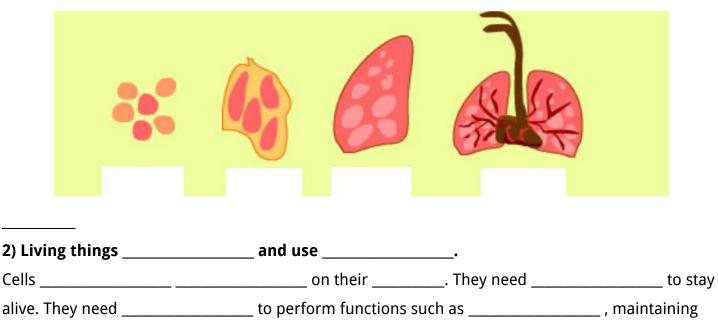
| http://eschoolt              | oday.com/science/characteristics-of-livi | ng-organisms/characteristic | <u>cs-of-living-things.html</u> |
|------------------------------|--|-----------------------------|---------------------------------|
| There are five chara         | acteristics of life that the fish has    | s, which the rock does      | not have.                       |
| 1. It is m                   | nade up of                               |                             |                                 |
| 2. It                        | and                                      |                             |                                 |
| 3. It                        | ·  |                             |                                 |
| 4. It                        |  |                             |                                 |
| 5. It                        | to                                       | in its environ              | ment.                           |
| It is the                    | for all living things (                  | and                         | ). It also includes             |
| very tiny organisms          | s that our eyes cannot see. They         | are known as                |                                 |
| and include viruses          | s, and fungi                             |                             |                                 |
|                              |  |                             |                                 |
| It is possible to hav        | /e a object c                            | lisplay ao                  | f the                           |
|                              | of Exa                                   | ample:                      |                                 |
|                              |  |                             |                                 |
| This means for               |  |                             |                                 |
| organism, it must c          | lisplay of the characteri                | stics listed above.         |                                 |
|                              |  |                             |                                 |
| 1) Living organism           | ns are made up of                        | _ <b>.</b>                  |                                 |
| A cell is the                |  |                             | _ of all organisms.             |
| It is the                    | unit of                                  |                             | in a living thing.              |
| <u>Directions</u> : Using th | ne picture from the website, labe        | l the types of cells bei    | ng shown and their              |
| organelles in the pi         | cture below.                             |                             |                                 |
|                              |  |                             |                                 |
|                              |  |                             |                                 |
| -                            |  |                             |                                 |
|                              |  |                             |                                 |
|                              | 1 _                                      |                             |                                 |
|                              |  |                             |                                 |
|                              |  |                             |                                 |
|                              |  |                             |                                 |
| Some                         | are made up                              | of only cell, while         | es other                        |
|                              | an ant or a lion are made up of _        | -                           |                                 |

• \_\_\_\_\_ organism:

• An organism with only \_\_\_\_\_ cell is called a unicellular organism. They include:

- \_\_\_\_\_ organism:
  - These are organisms that are made up of \_\_\_\_\_\_ cell. In a multicellular organism, \_\_\_\_\_\_ of the \_\_\_\_\_\_ of the \_\_\_\_\_\_ are very important. Here is an illustration of cell organization:

<u>Directions</u>: Using the picture from the website, label the different levels of organization of cells in the picture below.



balance, \_\_\_\_\_\_ and defense.

| For example green plants pr | oduce their own food from a process | called    |  |
|-----------------------------|-------------------------------------|-----------|--|
| They use the                | in their cells to                   | energy in |  |

Other organisms \_\_\_\_\_\_ green plants (which has a store of the energy they produce) to

\_\_\_\_\_ energy.

| 3) Living things              | and                   | ·  |              |
|-------------------------------|-----------------------|--|--------------|
| Every living organism         |                       |  | ·            |
| Unicellular organisms may sta | y as one cell but the | y grow too. Multicellular organisms          |              |
|                               | to form more _        | and  | as they grow |
|                               |                       | <b>•</b> ••••••••••••••••••••••••••••••••••• |              |

\_\_\_\_\_\_ and \_\_\_\_\_\_ and things.

\_\_\_\_\_ is the \_\_\_\_\_\_ in \_\_\_\_\_ and \_\_\_\_\_\_ of that organism.

| Cell growth and               |                  | _ include its            | As cells {            | grow old, they |
|-------------------------------|------------------|--------------------------|-----------------------|----------------|
| wear off. Sometimes they s    | suffer injury an | d bruises, but they ar   | re able to repair the | mselves by     |
| growing new cells in a proc   | ess called       | ·                        |                       |                |
|                               |                  |                          |                       |                |
|                               |                  |                          |                       |                |
| 4) Living things              |                  |                          |                       |                |
|                               | is the pro       | cess by which            | _ organisms (offspr   | ings) are      |
| ·                             |                  |                          |                       |                |
|                               |                  |                          |                       |                |
| There are main types of       | of reproduction  | ו:                       |                       |                |
|                               |                  |                          |                       |                |
| • Repr                        | oduction:        |                          |                       |                |
| This involves                 |                  | of the same speci        | es,                   | a              |
| and He                        | ere the male ar  | nd female sex cells co   | me together for       |                |
| to take place. After this the | newly fertilize  | d cell goes on to beco   | ome a new organism    | n, the         |
|                               |                  |                          |                       |                |
| • repr                        | oduction:        |                          |                       |                |
| This form of reproduction     | occurs           | the involv               | ement of              | Asexual        |
| reproduction is very comm     | on in            |                          |                       | and            |
| in many plants. There are r   | nany forms of    | asexual reproduction     | ۱                     | , fission,     |
| , fragme                      | entation, sporu  | lation and vegetative    | reproduction are al   | l examples of  |
| asexual reproduction. In u    | nicellular orgar | nisms, the parent cell   | just                  | to produce     |
|                               | The te           | erm for kind of cell div | vision is             | •              |
|                               |                  |                          |                       |                |
| Directions: Using the pictur  | re from the we   | bsite, draw the proce    | ss of mitosis in the  | box below.     |
|                               |                  |                          |                       |                |

|                              | t will happen to a species if it had |                             | -                 |
|------------------------------|--------------------------------------|-----------------------------|-------------------|
| -                            | This means reproduction              | is                          | for the           |
|                              | of all species.                      |                             |                   |
| 5) Living things             | to their                             |                             |                   |
| Response to                  | is an important characteri           | stic of life. Anything that |                   |
| a living organism to         | is called a                          | (plural is stim             | uli). Stimuli can |
| be external or               |                                      |                             |                   |
| It helps the organism to s   | tay in Living                        | organisms have some _       |                   |
| (sight, smell, touch, taste, | etc) that help them to detect cha    | anges in their external ei  | nvironment, as    |
| well their internal balance  | e and to th                          | iem.                        |                   |
| Homeostasis                  |                                      |                             |                   |
| Just like all the changes th | nat occur outside of our bodies (e   | external environment), th   | nere are          |
| i                            | n our en                             | vironment too.              |                   |
| The term used to to desci    | ribe the ability of an organism to   |                             |                   |
| in its                       | environment is called "              |                             |                   |
| Adaptation is the            | that                                 | an organism                 | in its            |
| environment.                 |                                      |                             |                   |
| <u>ANALYSIS</u> :            |                                      |                             |                   |
| 1) What are the five chara   | acteristics of life?                 |                             |                   |
|                              |                                      |                             |                   |
|                              |                                      |                             |                   |
| 2) How many of these cha     | aracteristics should an item have    | to be considered "living"   | ?"                |
| 3) What does "respond to     | stimulus" mean?                      |                             |                   |
| 4) What is homeostasis? _    |                                      |                             |                   |
|                              |                                      |                             |                   |