

Now try to make a matching strand to the DNA sequence below!

ACCTGGCTTAACT

7. **Find and play the Lick a rat! game.** Our genes can be affected by the way in which we live our lives. In the Lick a rat! game, what happened to the rats that got more licks from the mother?

What happened to the rats that got fewer licks?



Discovery Guide

Under the Microscope

Grades 3-5

Directions

Answer the guide as you travel through *Under the Microscope*. This guide is meant to be completed while in the gallery with a chaperone.

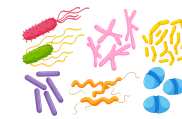
1. **Find Life's Story.** All life on Earth is based on an atom called *carbon*. Circle the things below that are alive.



Apple



Cat



Bacteria



Rock

2. **Find the Common Processes panel.** What lives longer, plants or animals?

Do animals stop growing after birth?

When do plants stop growing?

3. Find and enter the giant cell model. Real cells are tiny, the smallest unit of life, and are found in all organisms, including plants and animals. The cell is full of things called *organelles*, which have special functions that help cells to survive. Draw what you see inside of the cell!

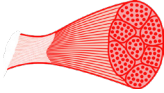
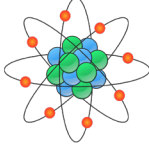
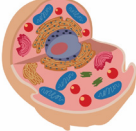


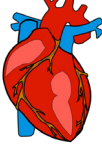

What organelle is the DNA located in?

4. Find Life Cycles. All living things on Earth experience the same five steps of life. These five steps are growing, aging, reproducing, dying, and developing. Put these five steps into the correct order in which they occur in living things.

Growing Aging Reproducing Dying Developing

1. _____
2. _____
3. _____
4. _____
5. _____

5. Find The Building Blocks of Life. Humans are an example of an organism. Organisms are made up of many smaller parts, each of which help us to survive. These building blocks are nestled into each other, from smallest component to largest. Label the images below 1-7 from smallest to largest.

Tissue	Atom	Cell	Organ System
			
#: _____	#: _____	#: _____	#: _____
	Molecule	Organ	Organism
			
	#: _____	#: _____	#: _____

6. Find Continue the Code with the DNA Model. DNA is shaped like a ladder. It has two backbones with paired bases to form the “rungs,” or steps of the ladder. What are the four bases of DNA? Which DNA bases pair together?
