

## The Cell Theory

- Examine Figure 1 below and follow the instructions that follow.

\*see notes for diagram

- Record two observations in the uncovered jar and two observations in the covered jar in the table below

Uncovered Jar	Covered Jar
Flies can enter beaker	Flies cannot enter beaker
Flies are touching meat	Flies are not touching the meat
Maggots are present on meat	There are no maggots on the meat

- Hypothesize as to why maggots only “appeared” in the uncovered jars  
The maggots only appeared in the uncovered jars because the flies came in contact with the meat and laid their eggs, which result in the maggots on the meat.

- Spontaneous generation is the idea that living things can arise from nonliving things ie. Mold appearing on old bread, mice appearing on cheese left out.
  - Based on the observations made above, state whether or not spontaneous generation occurs and provide an explanation for your statement.

Spontaneous generation does not occur; life only comes from other life as seen in the fly experiment.

### The Parts of the Cell Theory

- Where do living things come from?

Other living things

- What are all living things composed of?

Living things are all composed of cells

- Why are cells necessary for the survival of an organism?

Cells are the basic unit of life; they carry out all of the life functions.

### Exceptions to the Cell Theory

- 1-Viruses (have genetic material, but do not carry out all life functions)
- 2-the first cells (came from combining of organic compounds)
- 3-mitochondria and chloroplasts (have their own genetic material separate from the nucleus)