GRADE 7

1a

Cell Biology

All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept:

Students know cells function similarly in all living organisms.

GRADE 7

1b

Cell Biology

All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept:

Students know the characteristics that distinguish plant cells from animal cells, including chloroplasts and cell walls.

GRADE 7

1c

Cell Biology

All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept:

Students know the nucleus is the repository for genetic information in plant and animal cells.

GRADE 7

1d

Cell Biology

All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept:

Students know that mitochondria liberate energy for the work that cells do and chloroplasts capture sunlight energy for photosynthesis.

GRADE 7

1e

Cell Biology

All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept:

Students know cells divide to increase their numbers through a process of mitosis, which results in two daughter cells with identical sets of chromosomes.

GRADE 7

1f

Cell Biology

All living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope. As a basis for understanding this concept:

Students know that as multicellular organisms develop, their cells differentiate.