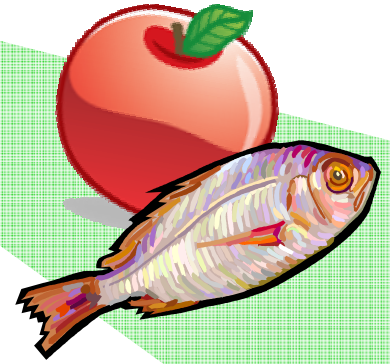


Cell in a Bag



QUESTION: What are the organelles of the cell?

MATERIALS:

candies
fruit cocktail (canned)

gelatin - any flavor
recloseable plastic bag - sandwich size

PROCEDURE:

1. Make an edible cell. Mix one box of gelatin (any flavor) with hot water by following the directions on the box.
2. After the gelatin has cooled to a warm temperature, pour it into small plastic bags.
3. Add fruit and candies to the gelatin to represent the organelles you would find inside of a cell. For example, mandarin orange slices could be mitochondria; a cherry half could be the nucleus; red and black string licorice could be microtubules.
4. The recloseable plastic bag can represent the cell membrane. Don't forget the ribosomes, golgi apparatus and endoplasmic reticulum.
5. After all the "organelles" have been added, close the top of the bag and place the "cell" in the refrigerator. When the gelatin is firm take it out.
6. When you have completed your model, make a "legend" of your cell so you remember which food represents which organelle. Write your legend on some card stock or index card.
7. Compare your model to other cells made by your classmates.

DATA: Your model is the data.

QUESTIONS:

1. In your model, the recloseable bag acts as the cell membrane. Things could be put into the cell or taken out of the cell when the bag was open. How is the similar to the actual function of the cell membrane? How is it different?
2. What organelle/s are involved in the production of proteins that are needed by the cell?
3. In your model what does the gelatin represent?
4. What is the function of each of the following organelles?

Golgi apparatus

Microtubules

Endoplasmic reticulum