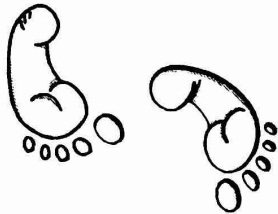


Name \_\_\_\_\_

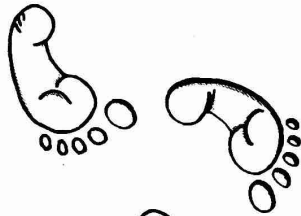
During Viewing  
Activity 3

# Walking With Ryan

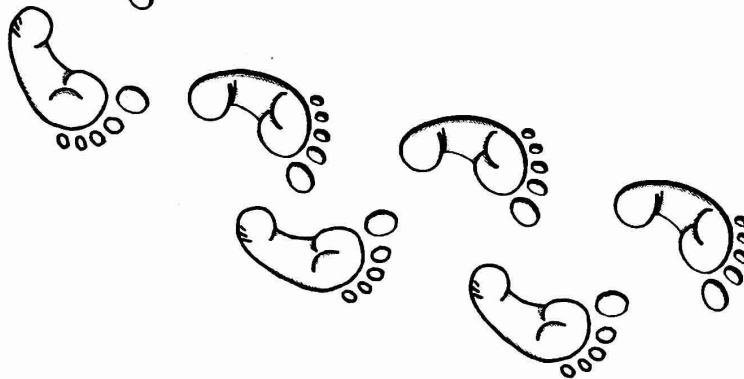
During the video/DVD, Ryan takes several steps to find his way out of the cell. As you watch and listen to the characters he meets, record their jobs below.



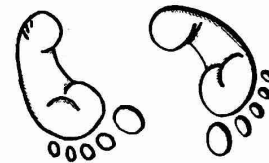
Cell membrane-



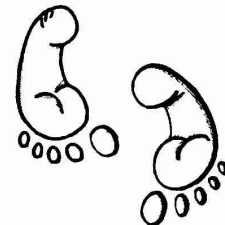
Cytoskeleton-



Endoplasmic reticulum-



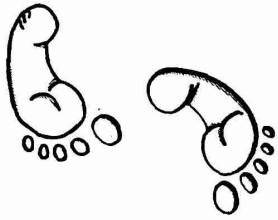
Golgi apparatus-



Vesicle

# Walking With Ryan (cont.)

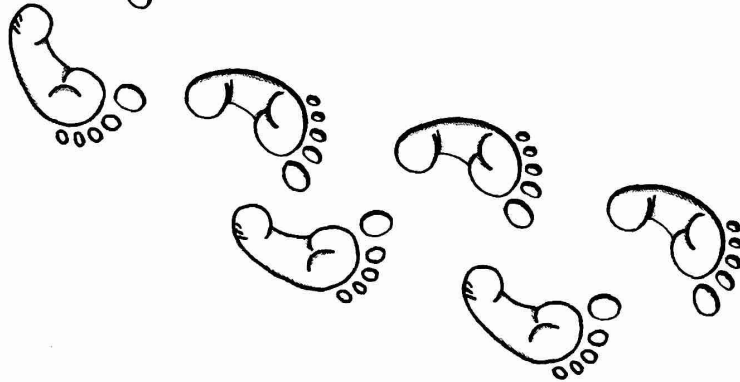
During the video/DVD, Ryan takes several steps to find his way out of the cell. As you watch and listen to the characters he meets, record their jobs below.



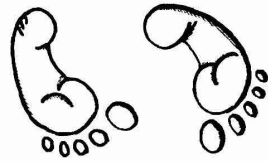
lysosome -



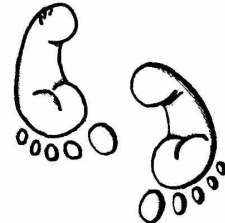
mitochondria -



Centriole



nucleus



# What Am I?

Use the clues to determine which cell organelle is being described.  
Write the name of the organelle after the question.

1. I feel like jelly, but my job is important. I am the place where molecules are broken down to produce energy and where other molecules are built up.  
What am I? \_\_\_\_\_
2. I am a thin layer that surrounds the cell. I hold all of the organelles in place. I let some things into the cell and keep others out. What am I? \_\_\_\_\_
3. I am strong like a bone. I provide support, strength and shape to the cell.  
My long thin structures are made of protein. What am I? \_\_\_\_\_
4. I can be rough or smooth, but my job is to make macromolecules like proteins, lipids, and complex carbohydrates. I also separate molecules that go to the cytoplasm from those that go to other sites. What am I? \_\_\_\_\_
5. I am made in the nucleolus and found on rough endoplasmic reticulum.  
I synthesize protein and send it to different parts of the cell. What am I?  
\_\_\_\_\_
6. I hang out with vesicles and I collect, modify, and package substances manufactured by the cell. What am I? \_\_\_\_\_
7. I eat and eat debris, old organelles and large ingested particles within the cell.  
If I get too full and burst, my digestive enzymes will destroy the whole cell.  
What am I? \_\_\_\_\_
8. I am called the powerhouse of the cell. I have two membranes where I break down sugars and fatty acids to trap energy. I am self-replicating and have my own DNA. What am I?  
\_\_\_\_\_
9. I hang out near the nucleus. My job is to organize microtubules and migrate to the ends of the cell to assist in mitosis. What am I? \_\_\_\_\_
10. I am the brains of the operation. I direct all of the organelles and keep track of the DNA in my membrane. What am I? \_\_\_\_\_

# Cell Knowledge Quiz

Choose the best answer for each question.

- The nucleus is sometimes called the \_\_\_\_\_ of the cell.
  - powerhouse
  - gatekeeper
  - control center
  - transporter
- Mitochondria are self-replicating which means they \_\_\_\_\_.
  - divide and make copies of themselves
  - provide support, strength, and shape to cells
  - hold organelles in place
  - transport digestive enzymes
- Ribosomes can be found \_\_\_\_\_.
  - in the cytoplasm
  - on the endoplasmic reticulum
  - in the centrioles
  - A and B
- Which of the following are organelles?
  - Mitochondria
  - Vesicle
  - Golgi apparatus
  - All of the above
- Which of the following contains its own DNA?
  - Golgi apparatus
  - Mitochondria
  - Endoplasmic reticulum
  - Cytoplasm
- Cell division is known as
  - Mitosis
  - Prophase
  - Telophase
  - Reproduction

# Cell Knowledge Quiz (cont.)

Choose the best answer for each question.

- Every living thing is composed of \_\_\_\_\_.
  - cells
  - organelles
  - cytoskeleton
  - DNA
- The \_\_\_\_\_ has the job of exporting and importing nutrients as well as passing waste and unwanted particles outside the cell.
  - mitochondria
  - cell membrane
  - cytoplasm
  - All of the above
- If a lysosome breaks, the \_\_\_\_\_ would leak into the cell and digest it.
  - cytoskeleton
  - digestive enzymes
  - nuclear membrane
  - cytoplasm
- DNA carries \_\_\_\_\_ information.
  - speed of cell division
  - the stages of mitosis
  - genetic
  - centriole movement