

# SECTION 1 Interview Q's on video

The first purpose of the interview is to find out how a student who is learning views mathematics. You can use this interview and add additional questions as needed to get a complete picture of the student. The questions listed below need to be adapted for appropriate phrasing for the student you interview. Keep accurate notes on your questions and student responses as you will be providing a transcript of your interview.

Introduce yourself and your purpose: "I am learning to teach <sup>SCIENCE</sup> ~~math~~. You can help me by telling me what you know and think about ~~math~~. May I ask you some questions?"  
~~SCIENCE~~

	Interview Prompts	Additional/Adapted Questions
SCIENCE	Mathematics as a Subject	
	If I had no idea what <del>math</del> <sup>Sci</sup> meant, what would you tell me? What is <del>math</del> <sup>SCIENCE?</sup>	
	What are the important <del>math</del> <sup>Sci</sup> topics?	
	Why do you think you are learning <del>math</del> <sup>Sci</sup> ? How will you use it? Can you give some examples?	
	Is there usually one way to solve a problem or more than one way?	
	Your teacher says, "It's time for <del>math</del> <sup>SCIENCE</sup> ." What is going to happen (what will you be doing, what will the teacher be doing)?	
	Attitudes/Beliefs About Mathematics <sup>Sci</sup>	
Sci	When you visualize someone who is good at <del>math</del> <sup>Sci</sup> , what kinds of things can this person do?	
	Do you think everybody can do well in <del>math</del> <sup>Sci</sup> if they try?	
	Who is good at <del>math</del> <sup>Sci</sup> ?	
	Is <del>math</del> <sup>Sci</sup> something that is useful to know? Why or why not?	
	Are you good at <del>math</del> <sup>Sci</sup> ? Why do you think so?	
	How is <del>math</del> <sup>Sci</sup> best learned?	
	How do you best learn <del>math</del> <sup>Sci</sup> ?	
	Is <del>math</del> <sup>Sci</sup> your favorite subject?	

# Section 2 Task Questions + Worksheet

Science

Math Concept:

## Questions for each task

Task 1:

Key Questions

(low Blooms)

1. Describe cells
2. What were similarities/differences
3. \* Based on sim/diff do you think they function sim/diff + why?

Task 2:

Key Questions

(med. ; Blooms)

1. Integrate organelles into Euk. Cell.
2. What did you have to know before you could answer this question?
3. What helped you answer this question?

Task 3:

Key Questions

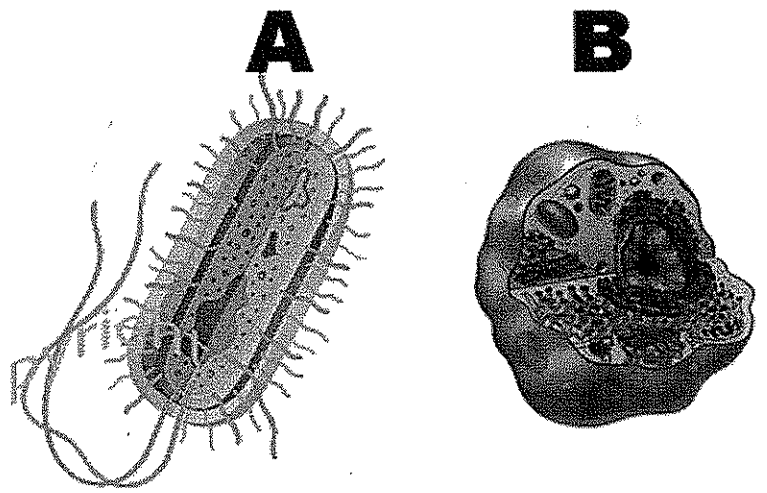
(upper Blooms)

1. Relate City to Cell
2. What did you have to know before you could answer this question?
3. Is this question easier or more difficult than the last question? Why?

4. If you had to have the same previous knowledge, why more difficult?

Student Tasks – Science

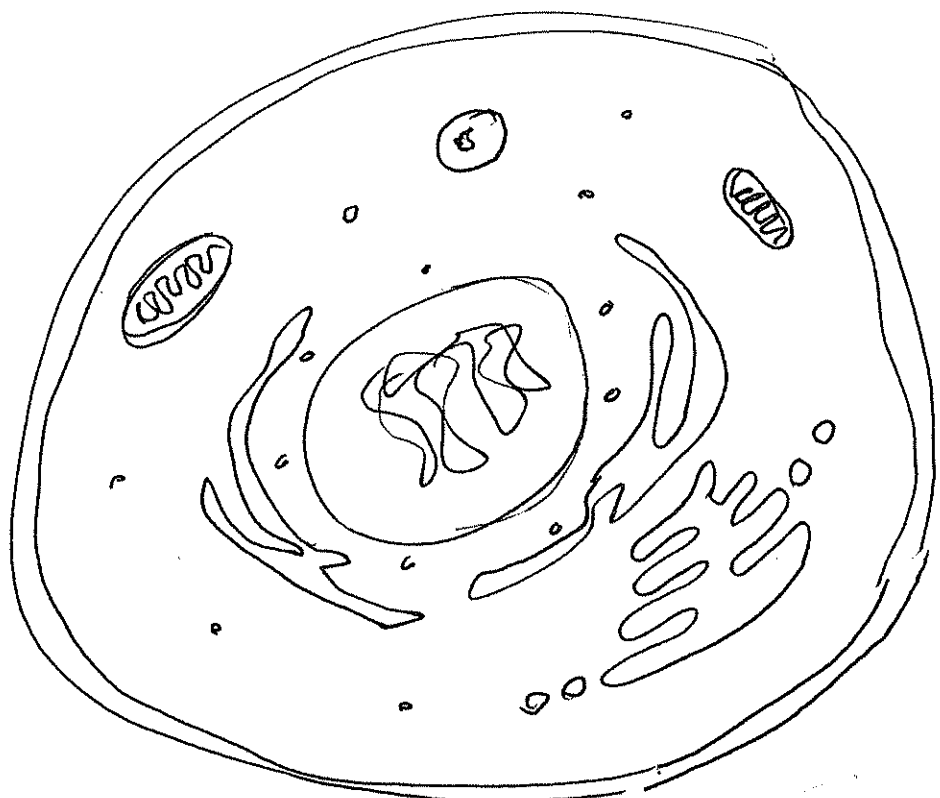
1. Describe and identify the similarities and difference between the Prokaryotic Cell in Photo A and the Eukaryotic Cell in photo B. (Blooms – Level 1 “Remembering”)



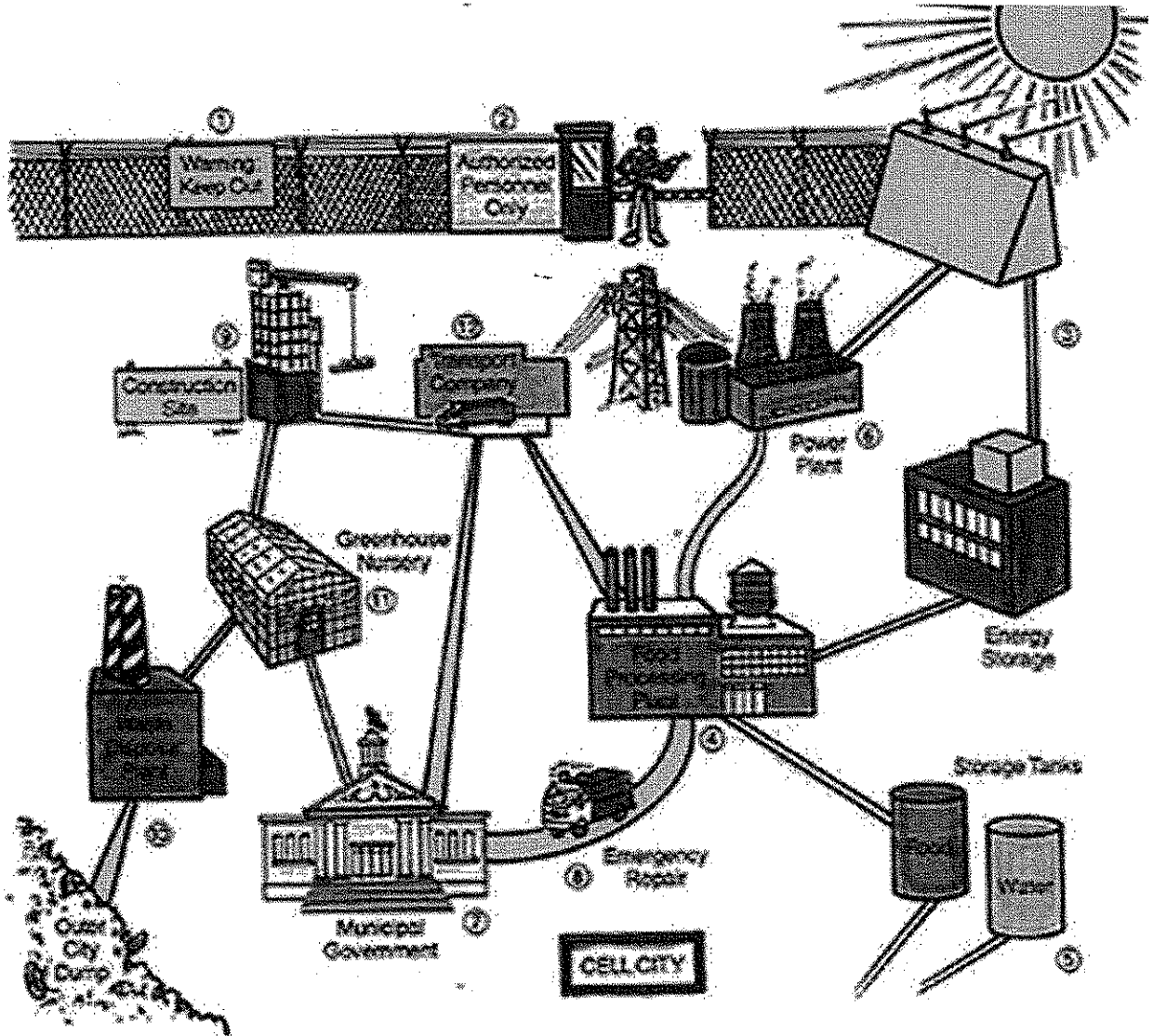
Student Answer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Integrate the organelle names into the picture of the animal cell in the proper location. Find each organelle and label it appropriately. (Blooms – Level 4 “Analyzing”)

- Nucleus
- Ribosomes
- ER
- Golgi
- Vacuole
- Mitochondria
- Cell Membrane



3. You have a city plan in front of you. Relate this city to a cell and the workings and organization of a eukaryotic cell. Relate the jobs of the individual organelles to that of individual businesses in a city and create a working city/cell. (Blooms – Level 6 “Creating”)



Nucleus is the \_\_\_\_\_ because \_\_\_\_\_

Golgi is the \_\_\_\_\_ because \_\_\_\_\_

Vacuole is the \_\_\_\_\_ because \_\_\_\_\_

Mitochondria is the \_\_\_\_\_ because \_\_\_\_\_

Cell Membrane is the \_\_\_\_\_ because \_\_\_\_\_