

Pre-AP Biology Cell Analogy Models

2008

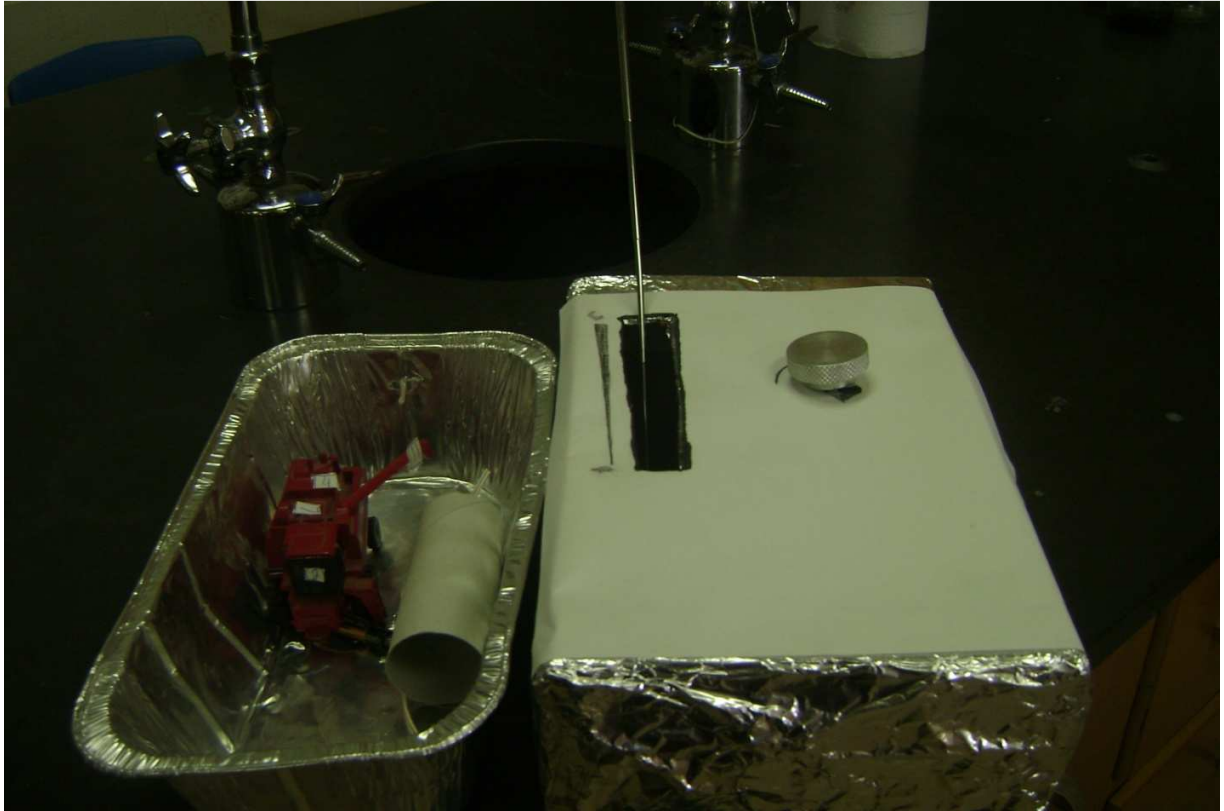
Pre-AP students did not make a model of a cell for their project. Instead, they made analogies of cells and modeled the analogy. It took a whole lot of creativity and brain power to make these work effectively. They are great!

Jacob F.



This analogy of a battle encampment was not only very well done, but had just the right amount of gross to be totally cool! For instance, the blue bag at the bottom of the picture is a body bag (aka - the vacuole: a storage organelle). The soldier carrying the dead body in the bag is like the lysosome, which is a digestive organelle that gets rid of wastes and nonfunctioning cell parts, just like the soldier has to get rid of the deceased enemy taken by surprise in the heat of battle. The Golgi apparatus, which transports chemicals, is represented by the helicopters which also transport items in and out of the camp.

Cody L.



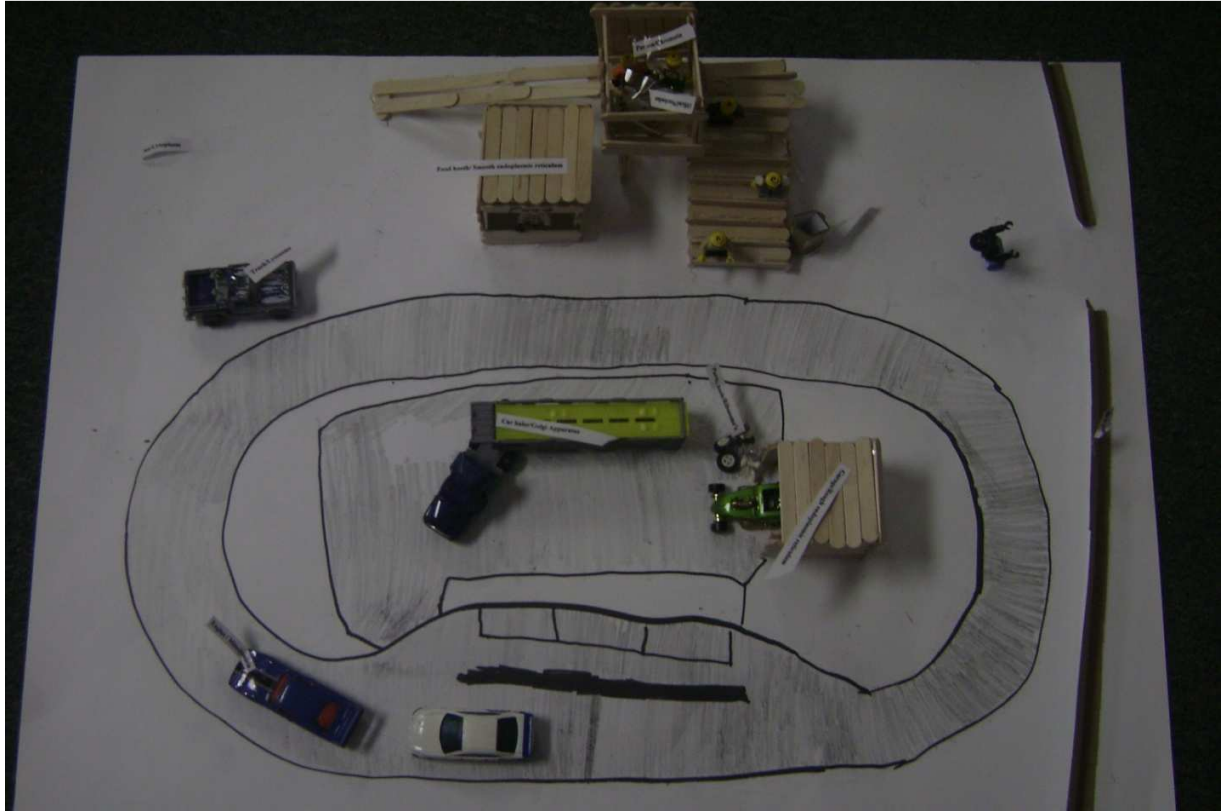
This cell analogy of a combine is personal to Cody as well as ingenious! He even blew up some of the combine parts for our viewing pleasure (as seen in the picture above). Some of the most creative parts of this model are: New welding, which plays the part of the cytoskeleton. “A new welding job is required lots of times in the wheat harvest because of all the accidents. The structure of the combine is always changing because of the new welding just like the cytoskeleton changes due to certain conditions.” Also the piston cylinder Cody said was like the chloroplast (changes sun energy into chemical energy) because the cylinder captures the potential chemical energy of the fuel and converts it to kinetic energy that the combine can use.

Dakota L.



Here we have another very personal and equally ingenious cell analogy! This is a model of Young County's best anhydrous ammonia company! Some of my personal favorite structures include the nucleus which is "my dad or the owner of the fertilizer yard. It is the leader of the eukaryotic cell because it contains the directions to make proteins", the nucleolus which is Dad's "brain that produces thoughts" just like the nucleolus produces ribosomes, and the nuclear pores as Dad's "mouth, it shoots the thoughts of the nucleolus out of the nucleus just like the pores in the nuclear membrane allow substances to pass out into the cell." Don't worry, Mom is also represented as the mitochondria (produces usable energy for the cell) because she is always making and bringing the workers food for energy! Thanks, Mom! Don't forget to ask Dakota how he depicted himself! It is not so glamorous.

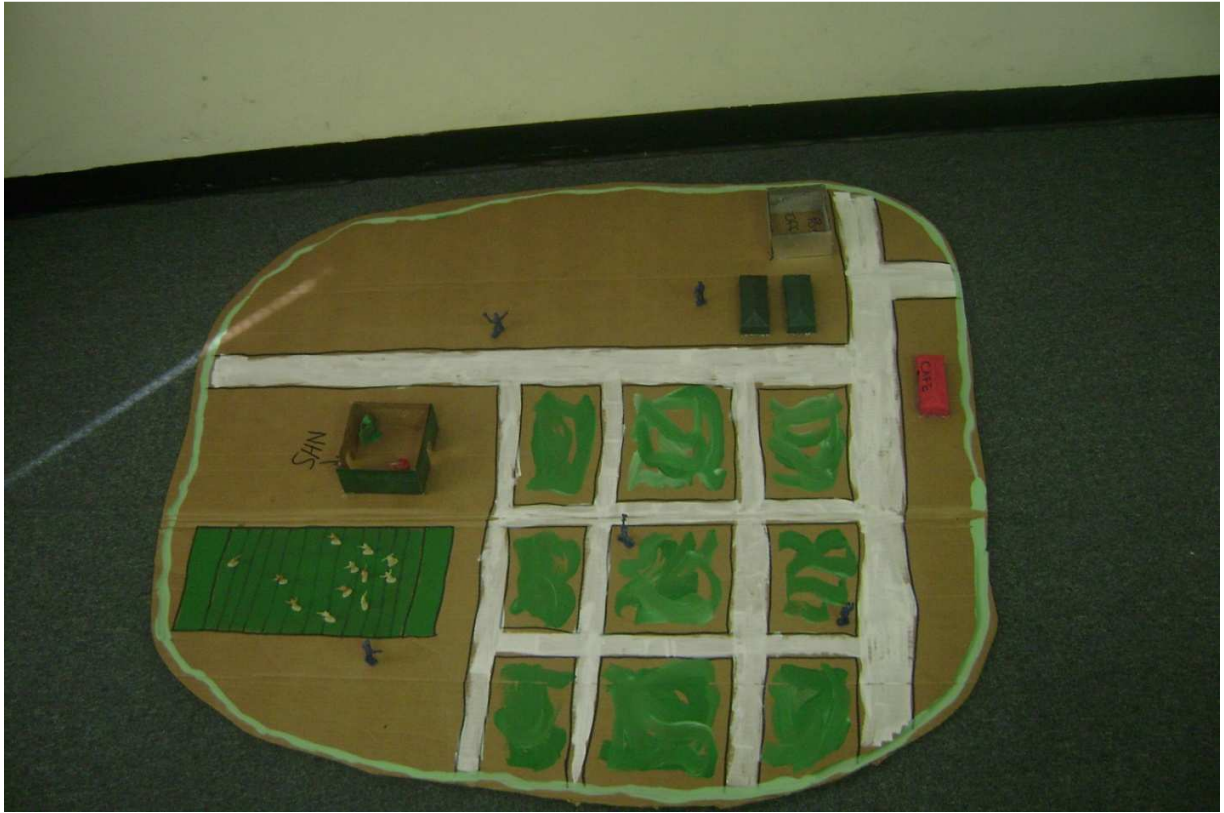
Shane P.



Shane did a great job of stealing cars from his brother and making connections between Nascar racing and animal cells! The ribosomes, which build proteins for the cell, are depicted by the tools and parts in the garage because the tools and parts build the cars. The garage is the rough endoplasmic reticulum, which is full of ribosomes (parts and tools) and helps make proteins as well as modifies them, just like the garage is where the cars are built and modified for each race.

The Golgi apparatus is the car hauler because it collects all the cars and takes them where they need to go. The Golgi does the same for chemicals in the cell; it packages them and ships them off. When I asked who Shane's favorite driver was he didn't know so I thought we could both take a bow and cheer on #18!

Brandon B.



Welcome to Newcastle, TX!

This fabulous cell model of the great town of Newcastle is the largest I have ever had measuring over four feet tall and almost four feet wide. I am a little partial to the school analogies which include: the nucleus – “represented by the school because it controls the future of the town like the nucleus controls the future of the cell.” And the nucleolus – “represented by the little green Indian chief, or the teacher I like to call him, because he shapes and makes the students like a nucleolus does ribosomes.” However, I’d be willing to bet Brandon is a little partial to the football analogies which include: the football players on the field – “represent the ribosomes because they create first downs like the ribosomes create proteins.” And the rough endoplasmic reticulum – “represented by the inner part of the field where all the player litter the field and create hits like ribosomes do on the rough ER where they synthesize proteins.”