Scavenger Hunt
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Perhaps my most unique and creative lesson is something that I call "*Club Cell*." I use the activity to teach about permeability, and it has evolved/taken many different forms over the years. . I even did a virtual version this year (not half as exciting). Since I've never written a formal lesson plan, I will describe "how it goes" and share the variations that have taken place.

Essentially- all of the students leave the classroom. I borrow a rope from the cafeteria and I set it up outside of the room like a "waiting line." I give each kid an index card which is their "ID." On each ID, I write the name of a molecule. The molecules vary in size (ex. Water, glucose, starch, polymer, monomer, $CO_2$, etc.). Someone acts as a bouncer who stands at the door of the classroom. The bouncer gets a clipboard and checks each ID card to see if the name is on the "guest list" of permeable molecules. Molecules that are NOT permeable are told "*Sorry, no room, not tonight*," and they must stay in the hallway. Music is "bumping" in the classroom and this whole party lasts about 5 minutes (Then I need to turn down the music before other teachers get annoyed ☺). Over the years, the *Club Cell* has varied in many ways:

- Some years, a student acts as the bouncer, some years I have. It is MUCH more entertaining/fun if the student is the bouncer- but if the bouncer messed up the guest list, it makes the purpose of the lesson confusing (i.e. To see that large molecules were unable to enter while small molecules were able to pass through).
- Some years, I incorporate "*Club Digest*," and some years I have not. *Club Digest* is the "lame" club where you can go hang out if you can't get into *Club Cell.*
- One year, I had students try to make a definitive list of which molecules got in and which molecules didn't. This was really cute to watch them laugh and make fun of each other if they "didn't get in" (in a nice and funny way- not mean!). They were essentially "acting" and continuing to play the role of "club-goers."

I really love this lesson, but like I said, it's taken so many forms (some more successful than others). To enhance this lesson, I want to establish the role of the bouncer as a student role. Every year, the students really get into the activity, so essentially, they are improvising and putting on their own performance. Previously, we've ended *Club Cell* by having a class discussion about what happened, and usually then move straight into content about the cell membrane. But, I want to make the learning experience more meaningful. To incorporate Arts Standards into this lesson, I want to add a creative writing component where the students interpret what happened and write a first-person perspective about their "night out." This way, each student is accountable for their own interpretation of the impromptu performance. Each student will make their own connection to the scientific concepts that were creativity modeled. Since this lesson is inquiry-based, the students would need some content to relate their "night" to. I could perhaps incorporate some time of scientific reading which students relate to their "performance," and then connect altogether by writing creatively about "their night." I browsed through the Performing Arts standards related to Theatre and found some that I think apply to my idea. I'm not sure if this is a stretch, or if I should actually choose a lesson that currently incorporates *no* arts… but when I thought about theatre in the biology classroom this activity instantly came to mind.

**Theatre Standards:**

- TH:Cr1.1.I. a. Apply basic research to construct ideas about the visual composition of a drama/theatre work.
- TH:Pr4.1.I. a. Examine how character relationships assist in telling the story of a drama/theatre work.
- TH:Pr6.1.II a. Present a drama/theatre work using creative processes that shape the production for a specific audience.
- TH: Re7.1.I. a. Respond to what is seen, felt, and heard in a drama/theatre work to develop criteria for artistic choices.
- TH:Re8.1.8. a. Recognize and share artistic choices when participating in or observing a drama/theatre work.