**Under the Microscope**Game ideas to go along with teaching microscopic organismsby Lanz Singbeil

**Cell Division Dancing:**



**Purpose:** Learn the basic idea behind cell division. Also demonstrates exponential growth.
**Materials:** None, (Music Optional)

Everyone starts by holding hands. The class next has to split in half as precisely as possible into 2 groups that form 2 smaller circles. Then those smaller circles split in half again and again until you get down to everyone on their own.

For an extra challenge get students to do it without speaking or time them to see how fast they can go. If music is playing you could get them to spin 1 revolution at each stage before splitting off again.

**Amoeba Tag:**

**Purpose:** Just a simple warm-up game to do in the gym or can be done as an energizer outside.
**Materials:** None

The Rules are exactly the same as blob tag but just use “Amoeba” or other Eukaryote name instead of “Blob”. 2 people start as “It” and they hold hands. If they tag someone that person has to join them. Once they form a group of 4 or greater they can split up into 2 groups. They may also stay as 1 large group. Play until everyone has been caught.

**Diversity or Die:**

**Purpose:** demonstrates how more unique organisms are more resistant to disease but may also be harder to replace. (Based on the idea of a-sexual reproduction being a hard copy of the parent whereas sexual reproduction takes genetic material from both parents).
**Materials:** 3 or 4 colours of pinnies.

This game plays similar to freeze tag but where you can only be tagged by the person that matches your color. Assign 3-4 people to be “it” based on how many colors you want to use. They leave the room or face away from the class until the next part of the set-up is done.

Split the rest of the class in half. 1 half is amoebas and they must decide together on 1 color for their entire group. The other half play as various Eukaryotes and can pick a color individually. Once players have all decide on a color they take a pinni and hide it in their hands or pocket.

The players who are “it” are then each given a pinni color so that there is one “it” for each color. They can only tag players who match that color. Place all the extra pinnies in the corner of the gym and observe from there.

Once the game begins, if a player is tagged they show their pinni color. If they have the same color as the “it” person when tagged then they must freeze and wait for someone else of their color to free them by tapping them on the shoulder.

The players who are “It” can trade-in their pinni for a different color by going to the corner. They can only ever have 1 color at a time.