

Icebreaker Think/Pair/Share Instructions

This think/pair/share icebreaker activity was designed by **Dina Kovarik, Chair of the Biotechnology Program at Shoreline Community College.**

We use this as our first activity in all of our high school Biotech summer camps. It gets the students talking to each other. It also shows us and the students what they know about different topics we'll be covering in camp. And it lets us know which topics or concepts the students know less about. It can be adapted for any type of subject matter.

Set up:

First we describe how to make a network diagram. We use the topic of 'pizza' and create a network diagram on the white board with input from the students. Terms, concepts, phenomena that are related are connected with a line. (see example of a Cancer Biology network diagram on slide 2).

Each student is given a card that is red, purple, green or blue. Each color represents a subject area. The card has a number on it, based on how many students will be participating in the activity. So, for example, our summer camp enrollment is 24 campers per camp. So, each color group would have 6 students. There would be six red cards numbered 1, 2, 3, 4, 5 or 6. The same would be true for each of the other colors.

Once the students have their cards, we pass out the activity sheets. We print the ice breaker activity worksheet double sided, so all students have the information for all 4 of the color subject areas.

We give students 5 min or so to look at the topics in the subject color they have been assigned and jot down what they know about those topics in the topic boxes provided. Then we have students group by color. This will result in 4 groups of 6 students given our 24 student camp size. We give them 10 min or so to share what they know about each of the topics in their color subject area. They can jot down new information, make note of questions etc.

Next we have students group by number, creating 6 groups of 4 students. Red #1, Purple #1, Green #1 and Blue #1 will all be in the #1 group etc. Now students get 10-15 minutes to discuss all the subject areas and topics. The Red #1 student will be the expert in the Red subject area. The Blue #1 student will be the expert in the Blue subject area etc. Again, students write down information in the topic boxes.

Lastly we give each group colored pens and a poster-sized Post-It. We ask them to create a network diagram of all the subject area topics they have discussed. We stress that these diagrams are not supposed to be neat. Any terms that they do not understand can be written in a 'parking lot' in the corner of the poster. Finished posters are put up on the walls and each group takes a turn describing the thinking behind how they set up their network. Networks can be arranged around a central term or concept. They can also be created without a single central term or concept.

The next slide shows an example of a concept map created during our Cancer Biology summer camp.

Example of a Network Diagram

PROJECT BIOTECH Cancer Biology Summer Camp

