

Marine Invertebrates Pre-Post Trip Activities

Activity 1. Play-doh Invertebrates

Research the invertebrate phyla to find facts and examples. Then, have students create an example organism of each phyla out of play-doh or clay. After they have made examples of real invertebrates, have them create their own invertebrate with characteristics of the phylum of their choosing. Present models to the class and explain what characteristics it has in their assigned phylum.

Activity 2. Classify It!

Group students into teams and give them a bag with images of animals and vertebrate/invertebrate headings with definitions. To start, have students sort the animals into either vertebrate or invertebrate. After they have successfully sorted the two groups, challenge them to sort the animals into as many ways as they can base on their common characteristics. Debrief why they placed animals in certain groups, if there are other ways that the animals can be grouped, and why taxonomy is such a complicated science!



Activity 3. Mysteries from Deep Below

Put students into groups of four and tell them that they have been invited to share their stories on a new television series called *Mysteries From Below*. The show highlights the rarely seen and unknown creatures inhabiting our oceans. In this activity, the students will be adding on to the invertebrate files (segment on the show), a file documenting the appearances of the unknown mythological creature. Each group is responsible for creating a creature- the creature must include adaptations from each of the invertebrate phyla from class or from a list of your choice. Once they have created their creature, they must choose a way to present it on the tv show. It can be presented in a drawing, they can act out a witness identification, or make up stories or myths they heard about their creature. Each presentation must describe the adaptation of their creature and what phylum each adaptation came from.

Activity 4. Different Ecosystems, Same Phyla

Split the class into groups and assign each one a different ecosystem (such as tundra rainforest, deciduous forest, etc.). Students should name 5-10 animals found in that ecosystem found in at least 3 different phyla. Students can then share their group's work.

Activity 5. Finding Similarities

Create cutouts or photos of various invertebrates from around the world. Have students group the animals in as many ways as possible. As an extra bonus, have students try to identify what invertebrates were given to them. Grouping examples- all invertebrates that live in freshwater, invertebrates that are blue, etc.

Activity 6. Taxonomy Charades

Take time to research invertebrate taxonomy and learn about the different phyla. Once people are familiar with the characteristics of each phyla, make several slips of paper with one of the phyla written on it. Put all the paper slips in a hat and one by one have everyone pick a phylum that they will have to act out and have their classmates guess which phylum it is. You may want to divide into two teams and make it a competition.

