DYNAMIC PLANET B

Representative Activites

These are sample questions/tasks/activities that will help prepare students for the 2026 season. This list is not all-inclusive and is representative of what students may be asked on tournament exams.

a. Given the water temperatures at various depths in a column of seawater, teams will construct graphs to identify and label the thermocline.

b. Use a downloaded dataset of oxygen to identify water masses and pathways of circulation.

c. Identify topographic features of ocean regions using seafloor maps.

d. Write a hypothesis to explain changes in water salinity in high latitude ocean regions.

e. Analyze and interpret water pH data from selected regions where barrier reef formation is changing.

f. Given a set of vertical profiles of salinity in an estuary, identify the type of estuary *(e.g., fjord, salt wedge, well-mixed, partially-mixed)* and discuss implications for bottom water hypoxia.

g. Relate trends in coastal flooding at specific locations to global sea level rise and local subsidence.