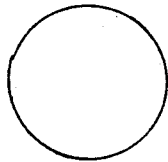


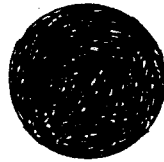
Tidal Pattern Discovery

Leslie Sautter, COASTeam Program

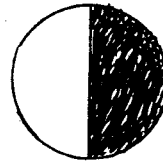
1. Go to the web site shown below and find the tide charts for Charleston, S.C.
http://co-ops.nos.noaa.gov/tp4day_old.html
2. Plot your assigned days (from class) on the graph paper provided. Use a black ink pen to make a smooth curve to connect the points (like a wave).
3. Use the symbols below to indicate the date and phase of the moon. Plot on your graph.



full moon



new moon



half moon

4. Return to the web site and find "Savannah River Entrance, Georgia."
5. Using a red ink pen, plot the Savannah tides for the same days. Connect the points with a smooth curve.
6. Make a key.
7. Return to the web site again and find "Cape Hatters, North Carolina."
8. Using a blue ink pen, plot the Harriers tides for the same days. Connect the points with a smooth curve.
9. Complete your key.

10. Write 2-3 questions you would ask your students to answer if they had performed the operation listed above. The question should use the information graphed. Things to consider: tidal range, frequency, timing of the tides, etc.

(1) _____

(2) _____

(3) _____

11. During next week's class you will compare your graph with the graphs others have made. We will discuss many of the questions generated by this preliminary activity.

Source: Leslie Sautter, COASTeam Program

Tidal Pattern Discovery

South Carolina Science Curriculum Standards (Grade 8)

Area I: Inquiry

National Science Education Standards* Grade 8	S.C. Components*
Identify process skills that can be used in scientific investigations	
Observe	1,2
Predict	1
Design and conduct a scientific investigation	B,C,D,E,F
Develop descriptions, explanations, predictions, and models using evidence.	B
Communicate scientific procedures and explanations	A,B,C

Grade	Area	Unit of Study	National Science Education Standards *		S.C. *Components
8	Earth Science	Earth and Space Systems	A. Earth in the Solar System	5. Gravity alone holds us to the Earth's surface and explains the phenomena of the tides.	

*Refer to South Carolina Science Curriculum Standards, adopted by the S.C. Board of Education January 12, 2000, for complete national standards and S.C. components.