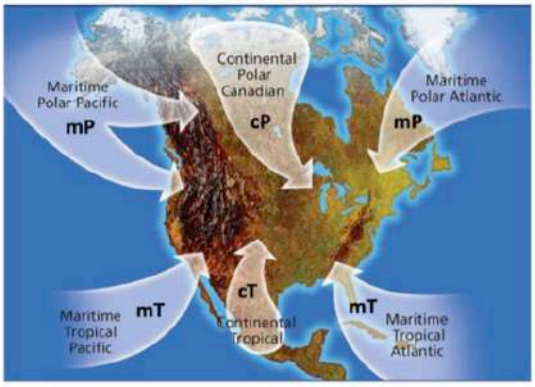
Lab: Physical Geography, Severe Weather & Rain Shadows

1) On your map of the United States, do the following:
   _____Label the types of air masses that influence the weather in North America.
   _____Color a key that shows the type of weather that would result from each air mass.
   _____Color each air mass.
   _____Label 40° N Latitude, 20°N Latitude, and 5°N Latitude
   **Note: 5° and 20° N Latitude will not go through the United States!
   _____Draw & label the Sierra Nevada Mountains, the Colorado Rockies & the Appalacians.
   _____Label Santa Maria.
   _____Draw & label the areas that have hurricanes & tornadoes. (Add this to your key to show these areas!)
   _____Draw & label the locations of the rains shadows.

2) On the bottom of your map, draw a picture of a rain shadow.
   _____Label where the lush forests would be found.
   _____Label where the deserts would be found.

3) Answer the following in complete sentences on a separate piece of paper.
   a) How do hurricanes form (you may want to use the requirements to help you)?
   b) Where is tornado alley and why is it located there?
   c) Using your notes to help you, explain why Santa Maria area does not have to worry about hurricanes & tornadoes.
   d) What is a rain shadow? Where would the lush forests be found? Where would the deserts be found? Use your notes to explain why the forests and the deserts are found where they are. Give an example of 2 rain shadows in the United States.



Air Masses of North America

Air Mass	*Source location*	*Movement*	*Weather*
cP	polar regions in Canada	south-southeast	cold & dry
mP	polar Pacific; polar Atlantic	southeast; southwest-south	cold & moist
cT	U.S. southwest	north-northeast	warm & dry
mT	tropical Pacific; tropical Atlantic	northeast; north-northwest	warm & moist