

Climate Test Study Guide

Use this as a reference guide on what to study for our test over the weather and climate unit. If you know all of these answers, you should be good to go for your test!

Topic 1

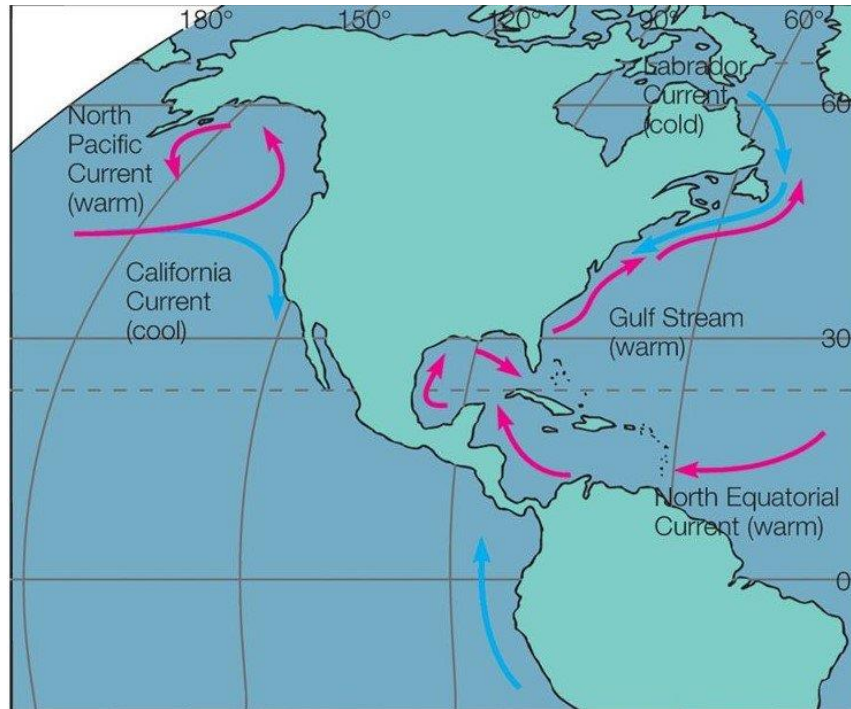
1. List the layers of the atmosphere in order from the surface of Earth to space and describe something unique about each layer of the atmosphere.
2. Describe the composition of the air you breathe.
3. What causes winds?
4. What is the difference between global winds and local winds?
5. What is the name of the type of scientist who studies the atmosphere?
6. Describe at least ten steps of the water cycle.
7. What is the energy budget of the atmosphere?
8. What is the EM spectrum and how did it affect your life?
9. What is the difference between conduction, convection, and radiation?
10. Know how to read a weather map like the one below.



Topic 2

1. The amount of energy coming into the atmosphere and the amount of energy being reflected back into space SHOULD be equal. Why isn't it equal?
2. What is the greenhouse effect?
3. Describe how heat transfers through conduction, convection, and radiation.

4. What is wind caused by?
5. How are local winds different from global winds?
6. What is the Coriolis Effect?
7. True or False: There are spots on Earth where almost no wind blows.
8. What is the jet stream and why is it useful?
9. What causes surface currents? What causes deep ocean currents?
10. Be able to read the ocean currents map below on how the ocean currents would affect the coastlines in terms of temperature differences.



Topic 3

1. Explain how each of the six factors of climate affect the climate of a region.
2. How is climate and weather similar and different?
3. Explain the greenhouse effect.
4. How is the greenhouse effect both a good thing and a bad thing?
5. Describe three causes of climate change that humans have caused.
6. Describe three effects of climate change.
7. How are people affected by each of those three effects of climate change?
8. What are three solutions people have been working on to combat climate change?

9. When dealing with climate change, do you think it is more important for us to figure out ways to deal with its effects, figure out ways to reduce climate change, or both? Explain.
10. Analyze the graph below. Describe what is happening.

