


Bellringer: D4

- ▶ Be ready to share your **Public Lands Experience**.
- ▶ What is the difference between **Weather and Climate**?
- ▶ *Note: We will be having a quiz today...have your guided notes ready for the review!*

Utah Studies

D4 /Day 4: Ch. 1: Climate in Utah.

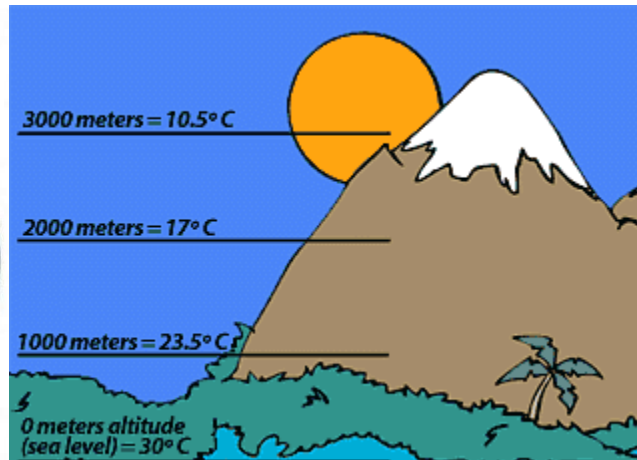
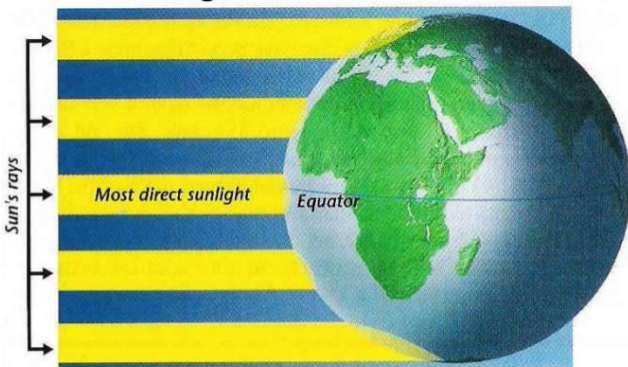
Main Ideas:

- ▶ Climate vs. Weather
 - Desert
 - Steppe
 - Mountain
 - ▶ Arid
 - ▶ Elevation
 - ▶ Irrigation
 - ▶ The Rain Shadow Effect
 - ▶ Indigenous
 - ▶ Domestic
- 

Utah's Climate

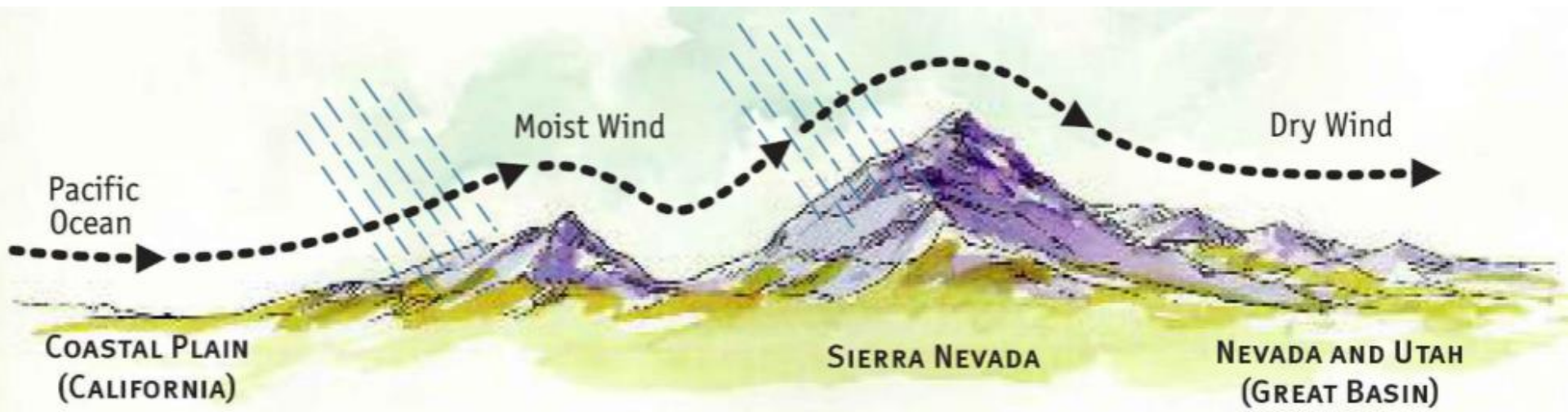
- ▶ Utah has some varying **climates**. **Climate** refers to a pattern of **weather** over many years, so you know what to expect (although climates sometimes do change).
- ▶ Utah's climate is affected by three key things:
 - **Latitude** – Because Utah is north of the equator, we get less direct sunlight than places closer to the equator. Thus it is cooler here than it is there.
 - **Elevation** – The higher you are in the mountains, etc., temperature generally goes down. Why St. George is warmer than Logan, since it is lower in elevation (and also it is closer to the equator)
 - **Distance from the ocean** – Large bodies of water maintain their temperature better than land; that is why coastal areas keep a more uniform temperature. Utah doesn't have that benefit.

How sunlight hits the Earth's surface



Climate Control & Utah

- ▶ Being by an ocean has other benefits; the moisture from the ocean is picked up by passing winds, which then drop that water as rain, snow, etc. as they pass over mountains, because colder air holds less moisture.
- ▶ This is called the **Rain Shadow Effect**. It explains why one side of a mountain can be moist and have lush forests, while the other side is dry and barren.
- ▶ Thus, areas closest to the ocean get a lot more rain and moisture, while Utah is left **arid** (dry with little rain), and subject to wide temperature swings. [VID](#)



Utah's Climates

- ▶ Utah has three major climates:
 - **Desert Climates (33% of Utah):** this is common in the Great Basin Region and the Colorado Plateau Region. Dry, little rainfall.
 - **Steppe Climates (43%):** Most common type; land is covered in grasses, shrubs, etc. Most people live in this climate of Utah.
 - **Mountain Climates (24%):** These areas are cooler, and more moist (except for the rain shadow side), thus supporting forests.

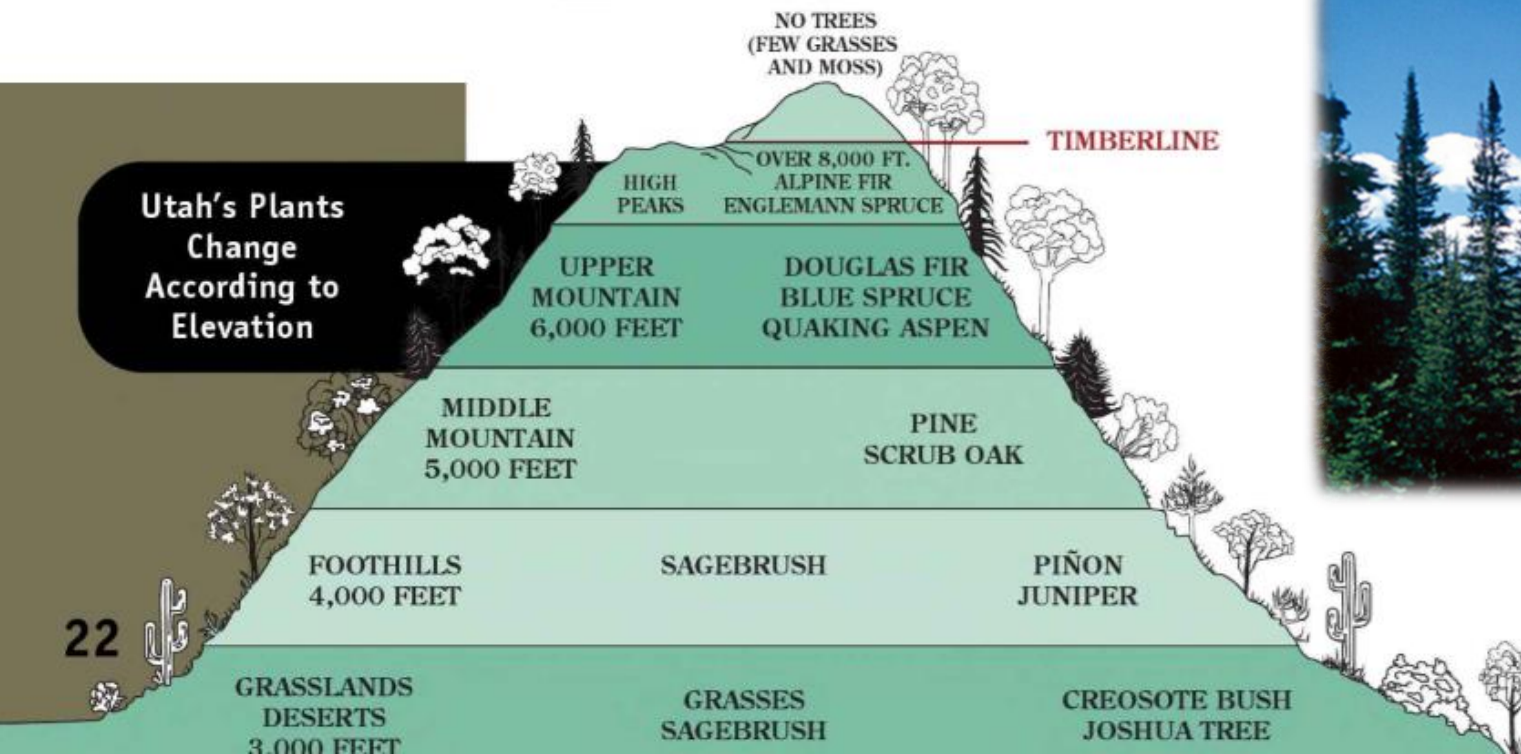


Water in Utah

- ▶ Water usage is always a hot topic in Utah, since we need it to survive, and as we are a very dry state (2nd driest in the nation), we have to be careful in how we use our limited water.
- ▶ That is why **irrigation**, or piped or channeled water from the mountains or other water-rich areas, is so important here!
- ▶ Throughout the world, over 85% of people live nearby mountains, because of this fact!
- ▶ Utah has recently become something of a hotbed for technology; Lehi has been nicknamed “**Silicon Slopes**” because of the many new companies coming to Utah. This provides jobs, but the many computers and servers these companies require also require a lot of water to keep their computers cool.
- ▶ A new proposed **Facebook Data Center** would require **over 5 million of gallons of water every day** to keep those computers cool. What do you think; is it worth the new jobs? [Facebook Data Center](#)

Utah Plants & Animals

- ▶ Just like our land, Utah's **indigenous** (or native to here) plants and animals are very diverse.
- ▶ Our plants depend on the climate as well, and many have evolved to survive in the different climates here (see below):



Utah Animal Life

- ▶ Utah is chock-full of animal life! We have elk, deer, antelope, mountain sheep, moose, cougars, coyotes, bobcats, etc.
- ▶ Utah also supports a lot of **domestic** animals, or animals raised by people, such as sheep, cattle, and turkeys to name a few.
- ▶ We also have many smaller animals and birds, like rabbits, chipmunks, squirrels, and many different types of birds. Fishing is very popular, and we have many species of fish here.



Protecting Our Wildlife

- ▶ Wildlife populations can change for many reasons:
 - Natural disasters (like a hard winter)
 - Overhunting by us, etc.
- ▶ Early settlers in the U.S. hunted beavers and bison / buffalo almost to extinction. Today, we do our best to wisely manage the animals that we have been blessed with.
- ▶ If you want to use wildlife, you have to get a license to hunt or fish for them, and they are strictly managed. This helps preserve the animals for future generations. Some animals are not allowed to be hunted ever.

Homework:

- ▶ Review and Test!
 - You can use your notes for the quiz, and if everyone gets at least 80%, you can keep that grade instead of taking the quiz.
 - *Note that if you want to, you can take it anyway to get a higher grade.*