**Week 6**: Race

**Activity**: Grouping Ourselves

**Discussion**: Race

1. Review of evolution and adaptations
2. Evolution of Skin color
   1. Darker skin
      1. Evolved to protect the body from UV radiation
3. Lighter skin
   1. Evolved so that the skin could still absorb some UV radiation to make vitamin D
4. Clines
   1. gradual change in a specific trait with no strict dividing lines
   2. Skin color is clinal
5. Adaptations
   1. Skin color is an adaptation to UV radiation
   2. Now we have cultural adaptations so that everyone can live most everywhere
6. Race
   1. In biology, a race is the same as a subspecies, and one subspecies has many genetic differences from another
   2. Biologically speaking, there are no human subspecies
7. There is no biological basis for human subspecies
   1. Skin color is clinal(no strict dividing lines)
   2. Skin color map doesn’t match other human traits, even supposedly “racial” ones
8. Race is a cultural construct
   1. Race is defined by the culture that uses it to group people, and the word is used as a synonym for a social or ethnic group
   2. There are 5 main races in the US, but racial categories change over time and space
      1. Different racial categories over the years in the US (census)
      2. Different ways of categorizing race in Brazil and Spain
9. Race is important, but it is not the only important thing about us
10. Race is a social reality
    1. People still judge other people on the basis of race, so we need to make sure we treat everyone equally,
11. Review Questions

**Activity**: Grouping ourselves

* Kids will go to one side of the room or another based on whether they have a certain genetic trait or preference
* The teacher will randomly pick one group to do an exercise each time
* The last time, the teacher will give one group a small prize (we used small erasers), then meet back as a group and discuss the activity
* Questions we want the kids to answer in group:
  + How did you feel when you had to do the exercise?
  + What about for those of you that didn’t get an eraser?
  + Do you think this activity was fair?
  + Were there any that were especially frustrating?
* After the activity is over, we make sure everyone in the class gets the small prize

**Activity Supplies:**

* Shaped erasers or other equivalent small prize

**Review**:

* What is anthropology?
* What do Archaeologists study?
* How does evolution work?
* What are gender roles?
* What is race?

**Script**:

Hi everyone. Our lesson for today is on race.

First we’re going to review evolution. Does anyone remember what evolution is? It is change over time in response to the environment.

And do you remember what an adaptation is? It is a trait that helps an organism survive. Remember that a trait is any characteristic of an organism. A good example of an adaptation is the chameleon’s skin because it can change colors to blend in with its environment, which allows it to avoid predators and live long enough to pass on its traits to the next generation.

As we talked about in the lesson two weeks ago, humans evolved in Africa. Africa is located along the equator, which receives the most direct sunlight. People needed protection from part of the sunlight, which is known as known as ultraviolet, or UV radiation, which can break down important chemicals in the body, especially folate, which is important to babies’ development. They didn’t have sunblock to protect them, so the people, or human ancestors that had darker skin to protect them from the sun could live longer and pass their traits onto their children.

When humans expanded out of Africa towards the north, further from the equator, there was less direct sunlight. And although UV radiation can be dangerous, we need some UVB radiation so that our bodies can make vitamin D. So there was a selection for lighter skin further from the equator so that people could produce vitamin D.

Now, we can talk about clines. A cline is a gradual change in a specific trait over geographical space. In other words, there are no strict dividing lines between the different types of that trait present in a species, but it varies gradually over space. Because skin color evolved in response to the amount of sunlight in an area on the globe, skin color is clinal. As you can see on this image, there aren’t any clear lines dividing skin colors by area. Instead, it varies gradually over the globe.

Do you think skin color is a trait or adaptation?

That’s right, skin color is an adaptation. But we need to remember that skin color is just one adaptation to one environmental factor, UV radiation.

Humans have other adaptations and traits that have developed in other parts of the world, but none of them are physically connected to skin color. There are no genes that are linked to the skin color.

Nowadays we have many cultural adaptations like sunblock and vitamins so that everyone can live most everywhere on the globe.

People like to group things. This makes them make more sense to us. By categorizing all of the organisms of the world, we were able to understand them better. And one thing we really like to put into groups is people. We have been grouping ourselves and each other since we’ve been humans, but grouping people by skin color is a relatively recent development; it’s only about 500 years old.

So what actually is race? Biologically speaking, a race is a synonym for a subspecies, which is a group of organisms of one species that has many genetic differences from other groups of the same species, but they are not different enough to be a separate species. One good example of this is dogs. There are many different dog breeds, which are separate subspecies, but they are all the same species because they can all interbreed.

So what about for humans? Biologically, there are not separate races of humans, and skin color is not equivalent to race. This is because humans haven’t been around long enough for there to be separate races. Also, humans are very mobile. This means that we have spread to nearly every part of the globe, but it also means we have stayed closely related through gene flow. All in all we are more alike than we are different.

In fact, there is actually more genetic variation within races than between races

Over the past few centuries, some people have tried to find a biological basis for race. But because skin color is just one adaptation to one environmental condition, there just isn’t one. Like we talked about, there are no strict dividing lines between skin color. And other traits that vary over the human population don’t align with the skin color.

Take blood type. Are these the same distributions? No. And even for traits that people say go with skin color, they don’t line up evenly with the skin color distribution.

Like with hair type, be it straight, wavy, or tightly curled. People often say hair type is a “racial” trait. But do these traits have the same distributions? no

So from all of this, we know that race is a cultural construct. This means that the idea of race, like gender, is constructed by the culture that uses it, but it it not a real biological distinction between people.

So when we use race in conversation today, we aren’t talking about the biological definition of race. Most of the time people actually mean a cultural or ethnic group, usually still connected to skin color.

In the US, there are 5 main recognized races: Black, Asian, Latinx, Native American, and White.

Even in the US, race has not always been classified in the same way. A census is a survey that the government sends out every 10 years to every adult that lives in the US to learn more about them. Data on race has been collected by the census ever since it began in 1790, but before 1970, a person’s race was determined by the census taker. After 1970, people could decide on their own race classification, and a question about ethnicity, asking if the person is hispanic/latino, was added. After 2000, people were also able to check more than one race.

In other cultures, race is grouped in other ways. In Brazil, there are 28 different races based on skin color and social standing. In Brazil, even with the same skin color, if you have more money, or even talk and dress differently, you can be categorized as a different race. This shows that the idea of race is determined by the culture and the time you are in, as well as the language you use to describe race. And in our sister country, Spain, race is often seen more as the region you are from.

-Activity-

So is race important?

Yes! Because it is a part of us, but it’s not the only important thing

Even though race has no biological basis, people still judge other people and treat them differently because of their race.

So we need to be aware of this and consciously make sure we try to treat everyone equally