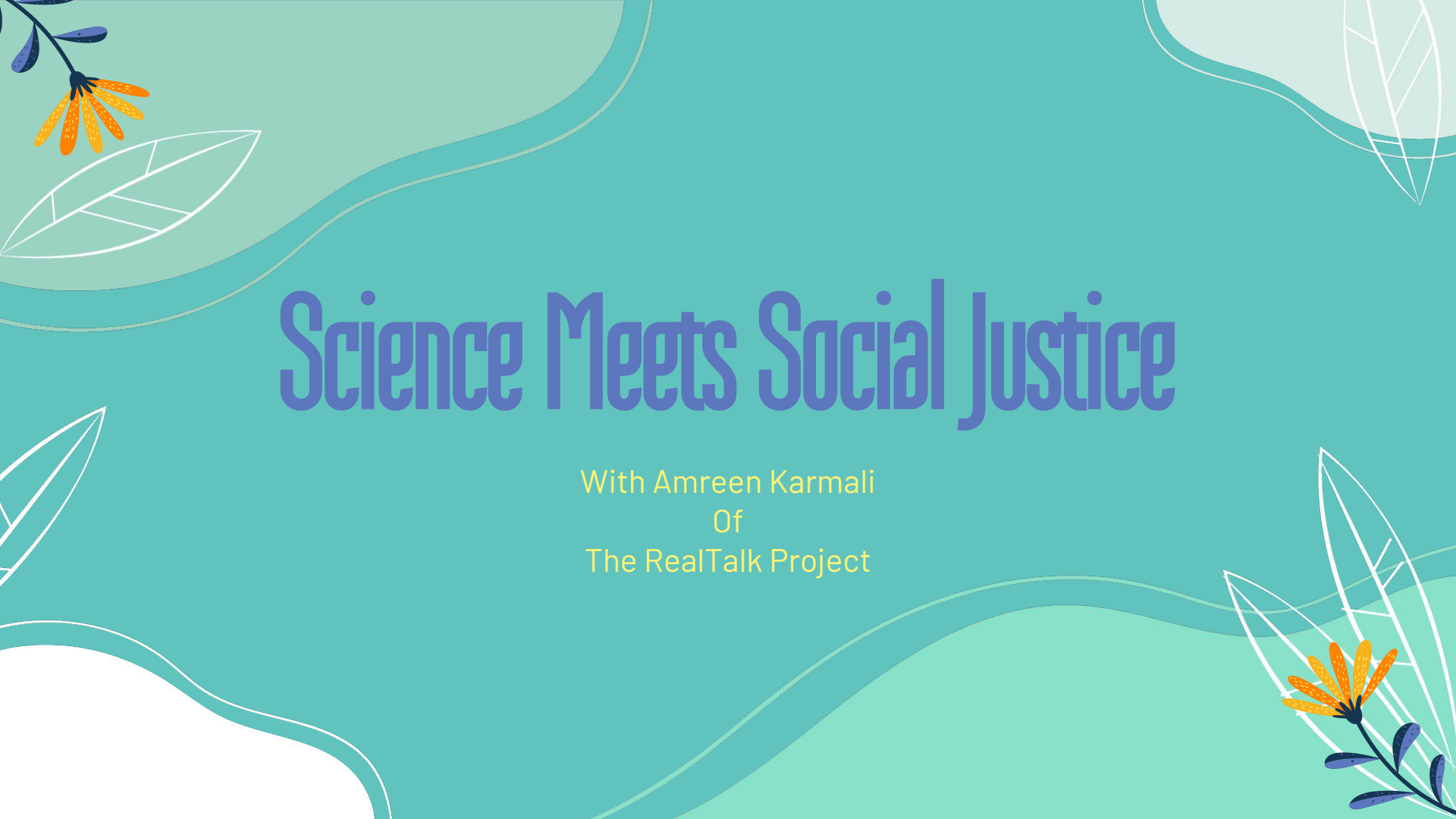


The background is a solid teal color with wavy, organic shapes in lighter shades of teal and white. In the top-left corner, there is a small illustration of a flower with orange petals and a dark blue stem. In the bottom-right corner, there is a larger illustration of a flower with orange petals and a dark blue stem, surrounded by white line-art leaves. The main title is centered in a large, bold, blue font.

Science Meets Social Justice

With Amreen Karmali
Of
The RealTalk Project



What has been bringing you Joy
Lately?

Who is this Person on your Screen

Amreen Karmali



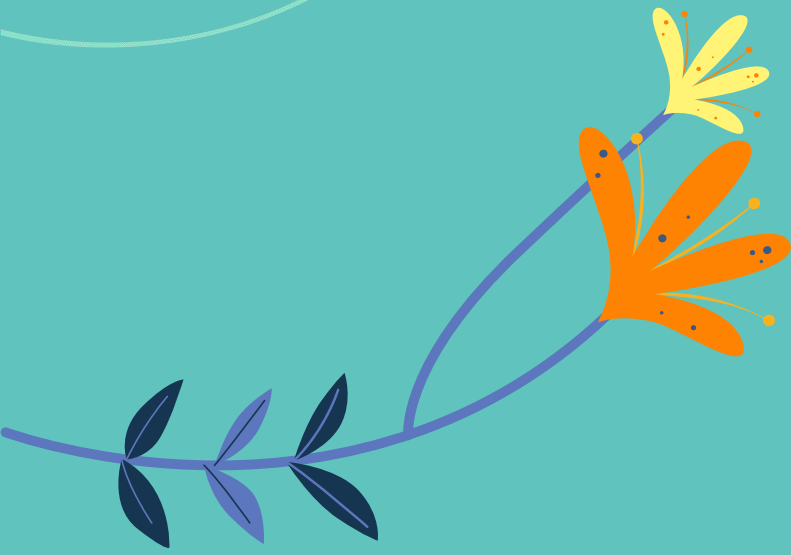
The Real Talk Project was founded by Amreen Karmali. An educator, activist and consultant for the past 15 years, Amreen has a Masters Degree in Education from Cal State Los Angeles and has presented her work at conferences around the nation and is a co-founder of the Peoples Education Movement! Passionate about creating communities in which everyone can be free to be themselves, Amreen envisions a world where people no longer suffer from the wounds of oppression.

Amreen's work has ranged from creating weekly healing spaces for young girls to helping adults identify ways racism and misogyny pop up in their lives, to facilitating professional developments for educators on how to create an environment where all voices feel heard.

Dedicated to helping educate and empower children, youth, and adults around the most difficult of topics, Amreen's educational approaches focus on inclusive, experiential learning, with a full embrace of the culture and priorities of her partners. She proactively integrates with existing communities to serve students, parents, and educators of all ages and genders.

A chaser and spreader of joy, from training capoeira, to cooking healthy yummy food and enjoying a sunshine filled day, she believes that self-care is revolutionary and much needed as we move from surviving to thriving!

Amreen is available to present at conferences, schools, community organizations, and private events. She welcomes media interviews and professional collaborations.



Grab a piece of scratch paper and
draw a **scientist**, be detailed ... use
colors if you have them



scientist clip art



Child Scientist Clip Art I...
pinterest.com



Free Science Cliparts, Downloa...
clipart-library.com



Cartoon clip art ...
pinterest.com



kids science clipart - Cli...
clipart-library.com



Free Clip Art on Clipart ...
clipart-library.com



Scientist Kids Cute Clipart Scienc...
etsy.com · In stock



Free Clip Art on Clipart Lib...
clipart-library.com



Scientist Kids Vector Clip Art ...
123rf.com



Scientist cartoon, Girl s...
pinterest.com



A Student in Science La...
vecteezy.com



Free Clip Art on Clipart Li...
clipart-library.com



Scientist Cartoon Clip ...
epicentrefestival.com



Science Scientist Chemist...
piclipart.com



Free Clip Art on Clipart Li...
clipart-library.com

What brings you Here?



Who is the Social Justice Science Educator?



Self Reflective

How do you balance self-reflection with the over analytical brain?

Always Learning

Anti-Racist, Feminist, Indigenous Frameworks



Constantly Practicing

Making Mistakes is key!

The Frameworks



Womyn of Color Theory

Bell Hooks - Teaching to transgress

- Education is an act of love
- Radical Openness
- Reading and Critical Thinking

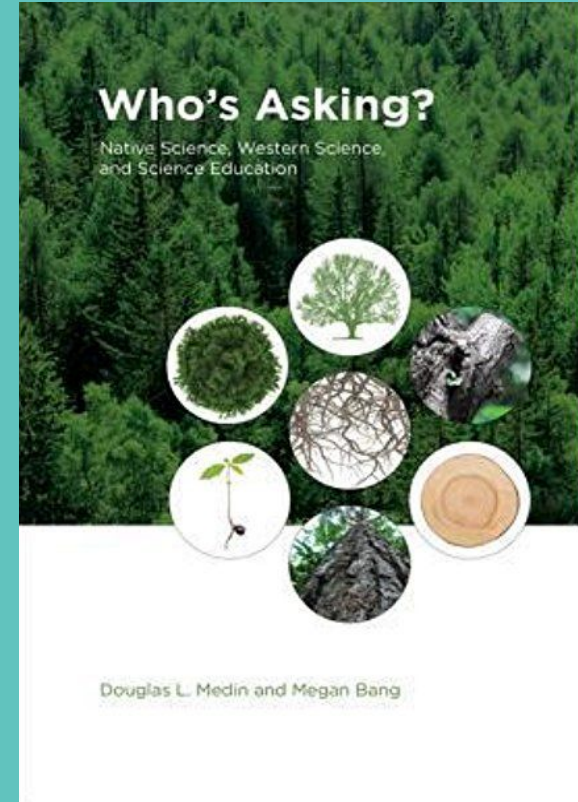
Gloria Anzaldua

- “I change myself I change the world”
- Write to keep our stories from being erased



Native Science

1. **Historical development of the methods of science-** Eurocentric history narrates that ONLY Europeans were able to escape the “irrationality” of superstition and the associated projection of cultural values onto nature in order to see the world objectively
2. **Rationality and the relationship between science and other ways of knowing-** ex/ spirituality and participatory science
3. **Purity and objectivity of science-** Is the history of science the history of the triumph of human intelligence over ignorance?



Indigenous Education Model

What new person will you become?		<u>Xipe</u> “Breakin g Skin” (Re-birth)	<u>Totec</u> “Our Lord” (Re- naissance)	What new people will we become?
What is your struggle?		<u>Huitzli</u> “Hummingbird” (Beautiful)	<u>opochtli</u> “on the left” (Struggle)	What is our struggle?
Where are you?		<u>Queztal</u> “Feather” (Precious)	<u>coatli</u> “Serpent” (Knowledge)	Where are we?
Who are you?		<u>Tezkatli</u> “Shinning Mirror” (Self)	<u>Poca</u> “Smoke” (Reflection)	Who are we?
Individual			Collective	

ANTI-RACISM IS THE
COMMITMENT
TO FIGHT RACISM

WHEREVER YOU FIND IT INCLUDING
IN YOURSELF. —IJEOMA OLUO

Reduces racial disparities
in criminal justice system



Improves interventions for
youth who are at risk



Improves educational
experience



Increases access to
community resources



Reduce obstacles
to employment

6 Impacts of Anti-Racism



Encourages social and
political participation

The Practice

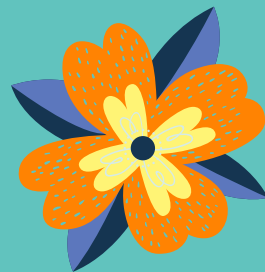
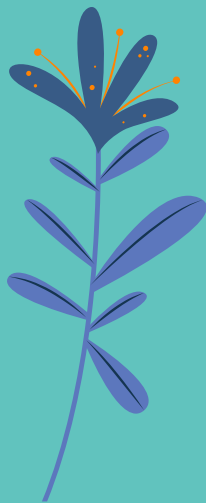
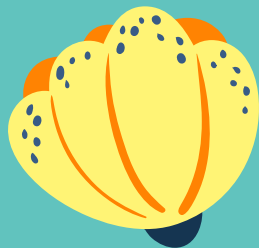
- BIPOC Student Centered, Empowering Content
 - Humanizing Assessment Practices
 - Communities of Care

Three Pillars of Anti-racist Science Education

Pillar # 1:
Creating a Community of Care



Think Back to your Favorite Teacher ... tell us about them in the chat box or share live!

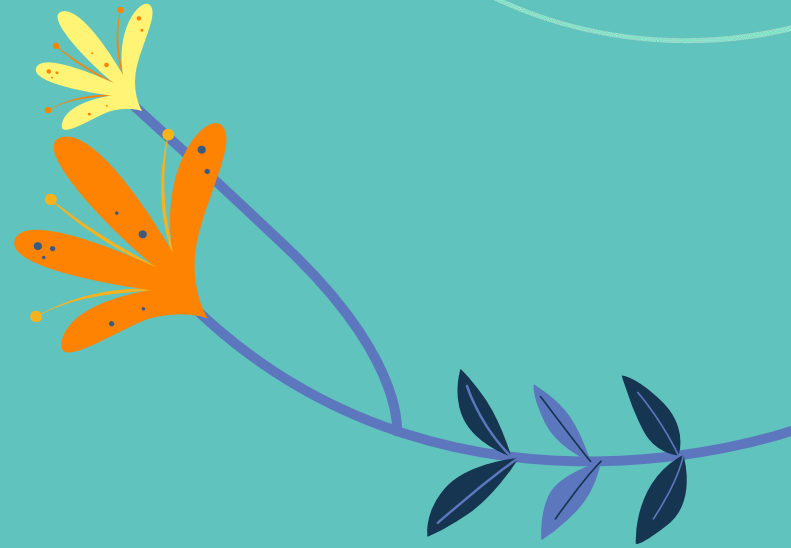


Indigenous Education Model

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Who are you?	<u>Tezkatli</u> “Shinning Mirror” (Self)	<u>Poca</u> “Smoke” (Reflection) Who are we?	
Individual		Collective	

Creating a Community of Care

- Circle
- Restorative and Transformative Justice
 - #differentisthenewnormal
 - Warm Fuzzies
 - Real LIFE LIFE
- Community Accountability



Community Accountability

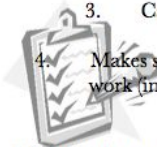
Ambassador of Peace

1. In charge of maintaining a peaceful vibe in the continent and the larger community.
2. Community shusher – if a person has been called on or Ms. Amreen is speaking the ambassador of peace is responsible for making sure everyone at their continent is quiet.
3. If conflict arises the ambassador of peace try's to mediate the problem or as Ms. Amreen know.

*I can do things you cannot; you can do things I cannot.
Together we can do great things! – Mother Teresa*

Secretary of Information

1. Maintains detailed notes of what we did in class daily.
2. Updates any person absent on what to make-up.
3. Can be the spokesperson of the group.
4. Makes sure everyone in group is doing the written work (in their notebook) that they need to do to be successful.



Education is our passport to the future, for tomorrow belongs to the people who prepare for it today." – Malcom X

Resource Manager

1. Responsible for maintain the community resources box.
2. Counts materials at the beginning and end of each block.
3. Lets Ms. Amreen know if something is missing, broken or has run out.
4. In charge of making sure continent members donate materials when needed.



Learning is Caring:Part 1

Minister of State

1. Makes sure everyone participates in group work and discussions.
2. Is responsible for ensuring that everyone is doing their job in order to be a successful continent.
3. Replaces any absent person in their job for the day.



It's your world – change it!



Three Pillars of Anti-racist Science Education

Pillar # 2:
BIPOC Student Centered, Empowering Content

Matter and its Interactions

EXPLOSIVE REACTION



Name _____

Date _____

Atomic Dating Game

Spread the love

Atoms are lonely hearts that are constantly in search of partners to bring stability to their lives. Your job is to play matchmaker and make each atom stable by determining how many valence electrons each element needs and finding a partner that will complete the valence energy level.

1. Fill in the boxes to the right with your atoms symbol, atomic number and mass.

2. Then in the box next to it draw a diagram of its atom with the appropriate number of protons, neutrons and electrons.

3. Is your element happy? Why or why not.

--	--

Directions

1. When the dating game starts you have 30 minutes to move around the room and check out the other atoms.
2. When the music stops, set your eye on the atom of your hearts desire.
3. When the music starts again you have 30 seconds to find the atom of your hearts desire.
4. In the box below draw a picture of your newly formed compound ... relationship ... <3. If you did not find a match draw a wanted sign with the atom of your dreams or a picture of you both together.

- What are you going to name your new relationship ... molecule/compound ... think chemical formula

- Does your molecule/compound



Earth and Human Activity

Earth Systems

Ecosystems Interactions, Energy and Dynamics

Energy

Matter and It's Interactions

Name _____

Block _____

Earth in (Energy) Crisis

Goals of the project

Learn about the energy crisis

Educate your family about energy crisis

Inventory your household's Energy Usage and Carbon Footprint.

Find ways to reduce your carbon footprint.

Reflect.

Task	Due Date	Parent Signature	Teacher Signature
Earth in Energy Crisis - Read about the energy crisis and educate your family. Use the following websites. Discuss with parent or parents how you think your household can reduce its carbon footprint. You learned. To be turned in. http://www.conserve-energy-future.com/causes-and-solutions-to-the-global-energy-crisis.php http://www.eia.gov/kids/energy.cfm?page=environment_home-basics http://www.eia.gov/kids/energy.cfm?page=about_energy_efficiency-basics http://www.livestrong.com/article/159514-carbon-footprint-definition-for-kids/ http://storyofstuff.org/movies/story-of-stuff/ https://www.youtube.com/watch?v=Q_xl_8alids	THU Friday 10/9		
Find out your home energy usage and carbon footprint. Use the websites below or ask Ms. Amreen for a paper copy and work with a parent or adult at home. Energy Calculator (Turn in Worksheet) http://energyusecalculator.com/calculate_electrical_usage.htm Carbon Footprint Calculator (Screenshot and Print) http://www.nature.org/greenliving/carboncalculator/	Monday 10/12		
Discuss your findings with your parents and figure out a way to bring down your families carbon footprint. Make an action plan. (To be turned in)	Wednesday 10/15		
Spend the week monitoring your family's carbon footprint.	Monday – Friday 10/25 - 10/30		
Re-do the carbon footprint test and see if there were any differences. (Print and turn in Results)	Monday 11/2		
Write a reflection. Final Project due	Monday 11/2		



Three Pillars of Anti-racist Science Education

Pillar #3

Humanizing Assessment Practices:



Chemistry for Change

The Goal:

1. Do power and privilege play a role in various environmental issues?
2. Understand in depth the topic given.
3. To be able to determine whether a source is valid or not
4. Identify key players/organizations involved in the debate.
5. Thoroughly argue for or against a topic.
6. Recommendations for ways to move forward.

The Issues:

Greenhouse Gasses - Does the US have a responsibility to reduce theirs?
Environmental Racism - Is it intentional or not?
Fracking - Should we use it as a major source of oil or not?
Keystone Pipeline - Should Obama have vetoed it or not?
Pesticide Use - affecting workers' health or not.

The Questions:

1. Thoroughly describe the issue including who is being affected and what pollutants or chemicals are involved.
2. Who or what is creating the problem?
3. Who is affected by the problem?
4. What are some solutions?
5. Who is working to fix the problem and create change and how are they doing it?

The Science:

1. What are the compounds involved in the issue and where do they come from or what are they used for?
2. What affect do these compounds have on the land, people or animals they are exposed to?

Partners in Change :



Earth and
Human Activity

Matter and its
Interactions



F HD

	5	4	3	2
The Question (Double Points)	All 5 items in the science portion are correctly explained.	Missing one of the items.	Missing two of the items.	Missing three of the items.
The Science (Double Points)	All 6 items in the science portion are correctly explained.	Missing one of the items.	Missing two of the items.	Missing three of the items.
Neatness and Completeness	The PowerPoint, Poster or IMovie is extreme well organized. There are numerous pictures. Spelling is correct and there is a complete bibliography and websites for further information given.	The PowerPoint, Poster or IMovie is well organized. There are some pictures. Spelling is most correct and there is a partial bibliography and websites for further information given.	The PowerPoint, Poster or IMovie is not organized. There are a few pictures. Spelling is somewhat correct and there is a partial bibliography and websites for further information given.	The PowerPoint, Poster or IMovie is not organized. There are no pictures. Spelling is not correct and there is a no bibliography and websites for further information given.
Creativity and Compassion	The PowerPoint, Poster or IMovie are incredibly creative. There is a passion and a push for change shown. A public service announcement (PSA) Either in video or poster form is created for the topic.	The PowerPoint, Poster or IMovie are creative . There is a passion and a push for change shown. A public service announcement (PSA) Either in video or poster form is created for the topic.	The PowerPoint, Poster or IMovie is somewhat creative. There is some passion and a push for change shown. A jingle is created to help remember the issue.	The PowerPoint, Poster or IMovie is not creative. There is no passion or push for change shown.
Presentation	Each person presents and presentation is very well rehearsed. Presenters are well educated about subject and can handle questions well.	Each person presents and it is somewhat rehearsed. Presenters are somewhat well educated about subject and can handle questions.	Presenters have unequal amount of time and presentation is somewhat rehearsed. Presenters are somewhat well educated about subject and can handle questions.	Each person presents but presentation is not rehearsed. Presenters are minimally educated about subject and can't handle questions.

Reflection



- What are you currently doing that uses these frameworks and principles?
- What resources are available to support you in this work?
- What are some challenges you may face? How can you navigate them?



What are some Tricks or Tools that you learned
today?



Thank you for joining in on
the journey!

Lets KIT
amreen@therealtalkproject.com
therealtalkproject.com

