

# Peace Literacy Curriculum

## An Introduction

The Allegory of Metis | **The Muscles of Metis** | The Anatomy of Metis  
The Descendants of Metis



**The Muscles of Metis**, which we also call the **Muscles of Our Humanity**, is the second in a four-part unit designed to teach how to make good decisions, take effective actions, and unlock the power of waging peace, building on a compelling allegory drawn from Greek mythology.

## Peace Literacy Curriculum: An Introduction

### Part 2: The Muscles of Metis / The Muscles of Our Humanity

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#### Foreword:

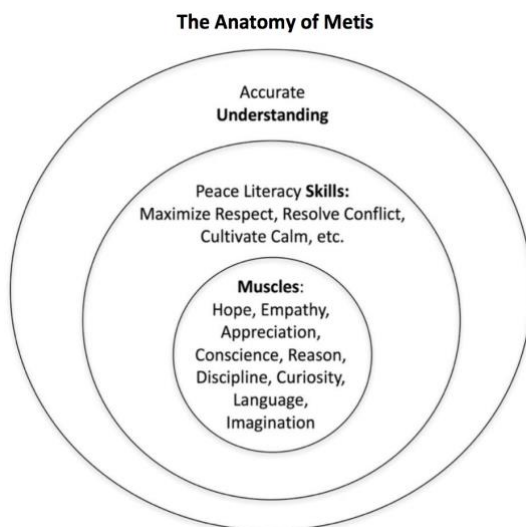
What is the greatest power that human beings can possess? How can we make good decisions and take effective actions? How can we improve our lives and increase peace, justice, and wellbeing in our world? The Allegory of Metis, written nearly three thousand years ago by the Greek poet Hesiod, gives us important guidance for answering these questions.

Metis is an ancient Greek word that refers to the power of thought. Metis can mean good decisions, effective actions, discernment, forethought, skill, awareness, and wisdom. These words convey aspects of metis, but they do not fully capture the complexity and power of the concept. There are words similar to metis in various ancient languages such as Sanskrit and classical Chinese. In our presentations to students, we use a pronunciation of metis closer to the ancient Greek and recommended by classics professor Elizabeth Vandiver, where metis is pronounced with “met” as in “metal” and “is” as in “this.”

This Introduction consists of a four-part unit. Part 1: *The Allegory of Metis* introduces the allegory from Greek mythology. In **Part 2: *The Muscles of Metis*** we show students the practical

applications of metis in their own lives by introducing the nine metis “muscles” that help us make good decisions and take effective actions. Part 3: *The Anatomy of Metis* discusses all of the parts of metis that must come together, such as Peace Literacy Skills and Accurate Understanding, if we are to solve the root causes of problems and promote peace, justice, and all forms of wellbeing. Part 4: *The Descendants of Metis* discusses the power of nonviolent strategic action, showing how metis reaches its full potential when it provides alternatives to violence.

Each part of the unit offers different frameworks for understanding metis. For elementary school students, Part 2 is the best place to start, followed by some components of Part 3. For students in middle school, high school, and higher education, Part 1 is the best place to start, followed by Parts 2, 3, and 4.



## **Peace Literacy Curriculum: An Introduction**

### **Part 2: The Muscles of Metis / The Muscles of Our Humanity**

#### **Essential Questions:**

- How can we use the metaphor of “balance” to understand the importance of metis?
- How does metis help us create balance in our personal lives, communities, nations, and world?
- What are the components of metis that we must develop?

#### **Peace Literacy Learning Outcomes:**

- Describe how the metaphor of a muscle helps us better understand the following human capacities: hope, reason, appreciation, discipline, curiosity, language, empathy, conscience, and imagination.
- Explain how these human capacities can improve our personal lives, communities, nations, and world.
- Successfully strengthen the muscles of metis. We have included exercises for strengthening the muscles of appreciation, discipline, curiosity, and conscience. We will be adding a wide variety of exercises for strengthening all of the metis muscles, available at <http://www.peaceliteracy.org/compendium>.

#### **Supplemental Reading for Students:**

- Paul K. Chappell, “The Nine Muscles of Metis” (available for free download at <http://peaceliteracy.org/curriculum> )

#### **Background Reading for Teachers:**

- Paul K. Chappell, “A New Peace Paradigm: Our Human Needs and the Tangles of Trauma” (available for free download at <http://peaceliteracy.org/>).
- Paul K. Chappell, *Peaceful Revolution* (each chapter focuses on a muscle).
- Andrew Shim, Theresa Engle. 2017. “Teaching Balance to Reduce Possible Injuries and Promote Skill Acquisition.” *J. of Physical Education, Recreation, & Dance*, 88(5): 56-58.

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### Part 2: The Muscles of Metis / The Muscles of Our Humanity

#### Exercises:

- If you are focusing on reading comprehension with your students, have them work through the instructions accompanying the Supplemental Reading for each muscle.
- In this document, we offer exercises for strengthening the muscles of appreciation, discipline, curiosity, and conscience.
- The lesson ends with a “World Café” exercise, which is a rotating student-facilitated discussion.

#### Instructions for Use:

This unit can be used across education contexts, in a variety of classes such as language arts, history, science, and social studies, as well as in higher education and adult education classes. This unit offers examples of classroom exercises that can teach both science and history while helping students strengthen their metis.

There are a number of ways to use this lesson plan to help reinforce Common Core, Next Generation Science, and regional standards for your classroom – contact our Peace Literacy Curriculum Coordinator [Sharyn.clough@oregonstate.edu](mailto:Sharyn.clough@oregonstate.edu) for more details.

We are pleased to share this curriculum **at no cost** and ask only that you cite us, as below, when you use direct quotes or paraphrased passages from this unit:

Paul K. Chappell and Susan A. Radford. 2018. “Part 2: The Muscles of Metis,” in *Peace Literacy Curriculum: An Introduction*. <http://peaceliteracy.org/curriculum/>

We welcome your feedback. Please send us copies of any materials you produce that are based on this unit so we can put them up on the Peace Literacy website as models for others. Peace Literacy is meant to be shared!

## Peace Literacy Curriculum: An Introduction

### Part 2: The Muscles of Metis / The Muscles of Our Humanity

#### Overview:

Language is a natural human capacity. Children naturally learn language, yet no one seriously says, “Since children naturally learn language, we shouldn’t teach it in school.” On the contrary, we teach language from pre-school through college, and after all of that training, people can still have trouble communicating their thoughts effectively, because language is difficult to master.

In addition to language, human beings have other natural capacities that are difficult to master. These natural capacities include hope, reason, appreciation, discipline, curiosity, empathy, conscience, and imagination, which we describe metaphorically as muscles that can grow stronger when we train and exercise them, and can become weaker through lack of use. For example, children have a natural capacity for empathy, which is why Disney and Pixar movies work. These films can get children to feel empathy for robots in *Wall-E*, fish in *Finding Nemo*, elephants in *Dumbo*, and toys in *Toy Story*.

However, our society fails to strengthen our natural capacity for empathy as it strengthens our natural capacity for language. Furthermore, so much of what people learn in our society actually *suppresses* their capacity to feel empathy. A lack of empathy can lead to abuse in a family, bullying in a school, cruelty and harassment in a workplace, and a wide variety of national and global problems. When a student has a strong muscle of empathy, that student’s teachers and peers in the classroom will benefit.

When the muscle of curiosity is concerned, four-year-old children are naturally curious, asking questions such as, “Why is the sky blue? Where do babies come from? Why does it rain?” Children ask so many questions that adults can get annoyed with them. Children in pre-school and kindergarten want to learn. They don’t want to feel left out as their peers learn reading and other new things. But for many children in our education system, their muscle of curiosity is not strengthened as they advance through school. Their curiosity becomes suppressed rather than strengthened, and by the time they are in high school, they have become disinterested in learning. This makes a teacher’s job more difficult.

To offer one more example of a natural human capacity that is often neglected, many students are not taught how to strengthen their muscle of discipline (by which we mean *the ability to focus and follow-through*) in ways that counterbalance the increasing distractions of twenty-first century technologies. These distractions can interfere with a student's ability to concentrate and learn. These technologies can also reduce our empathy if we aren't taught how to use them wisely. To serve students well in the twenty-first century and to empower them with the skills they need to navigate a technologically complex world, we need to help them develop their natural capacity for empathy, curiosity, discipline, conscience, hope, appreciation, imagination, and reason, just as we help them develop their natural capacity for language. Healthy families, schools, workplaces, communities, and nations depend on people being able to use these human capacities well.

In our society, people often associate thinking with reason alone, but this is a mistaken view of how human beings actually think. All nine of the psychological capacities discussed earlier (hope, reason, appreciation, discipline, curiosity, language, empathy, conscience, and imagination) can greatly affect our thinking, because they are cognitive processes. For example, empathy and imagination are cognitive processes that can affect our thinking as much as reason does. These nine psychological capacities can be called our *metis muscles*, because they allow us to make good decisions, take effective actions, and unlock the power of waging peace. These metaphorical muscles can also be called the *muscles of our humanity*, because they are essential to being human and allow us to fully express our humanity. We will use the terms "metis muscles" and "muscles of our humanity" as synonyms. These muscles can be strengthened throughout K-12, higher education, and adulthood.

Contrary to the misconception that thinking consists merely of reason, each one of these muscles of our humanity can *enhance* how people think in positive ways. For example, if a student has a large amount of empathy and appreciation for their parents, teachers, and fellow-students, the student will think about these people much differently than if the student were to completely lack empathy and appreciation for them. If a student has integrity (an aspect of conscience), this can dramatically affect how the student thinks when making choices. Hope

greatly affects how we think and how we reason. People who are hopeless or rely on naive hope think differently than people who have a strong foundation of realistic hope.

Students who have strong metis muscles are also stronger learners. For example, a teacher is going to have great difficulty teaching a student who lacks curiosity and is disinterested in learning, lacks conscience and prefers to cheat, lacks discipline in ways that prevent focusing and following through on assignments, feels hopeless and is filled with worries that undermine concentration, and lacks empathy in ways that create a hostile environment for the teacher and other students.

In Part 3: *The Anatomy of Metis*, we explain how skills and understanding can also greatly affect our thinking. For example, trauma can distort how we perceive a situation, giving us an *inaccurate* understanding of what is happening that causes us to think about the situation in ways that seem irrational. In Part 3 we also discuss how each metis muscle empowers us to think in ways that make us more courageous. People need courage to reduce bullying and to confront the root causes of our most challenging problems.

Most people in our society are not trained how to confront the root causes of problems, and are instead taught approaches that merely address symptoms. If we are going to make our communities and world more peaceful by effectively confronting the root causes of our personal, national, and global problems, we will need strong muscles of hope, reason, appreciation (which creates the foundation for stewardship), discipline, curiosity (which allows us to ask the kinds of questions that reveal root causes), language, empathy, conscience, and imagination. Referring back to the diagram on page two, we will also need *Peace Literacy* skills that empower us to implement practical solutions, along with an *accurate* understanding of the root causes of these problems and how we can realistically increase peace.

The nine muscles of our humanity, along with peace literacy skills and accurate understanding, are all areas of potential growth. Teaching students this framework encourages a *growth mindset*. You can give your students positive reinforcement when they demonstrate empathy, curiosity, appreciation, imagination, conscience, discipline, reason, effective use of language to resolve a conflict (instead of resorting to violence), an attitude based on realistic hope when discussing national and global crises, a particular skill, or perceptive insights that



increase the accuracy of their understanding. Instead of just telling a student, “You demonstrated strong discipline” (which can sound repetitive if said too often), you can instead provide positive reinforcement on an aspect of discipline the student demonstrated, such as praising the student’s focus, follow-through, determination, hard work, patience, concentration, persistence, calm, planning, preparation, attention, etc.

You can teach students the nine muscles of our humanity through this curriculum, and also through modeling these human capacities yourself. One of the most powerful ways to teach is through *leading by example*. Peace Literacy Lesson Plan 1 discusses leading by example as an essential Peace Literacy skill. By modeling and teaching the nine muscles of our humanity that are needed to navigate the challenges of the twenty-first century and a technologically complex world, we can *enhance* education in ways that build on the best traditions of the past and more fully prepare students for the future. When students strengthen these muscles, they not only learn how to improve quality of life for themselves and others, but they also learn how to feel more fully alive.



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### Part 2: The Muscles of Metis / The Muscles of Our Humanity

#### Background notes for using the balance metaphor

Even if you are not using Part 1: *The Allegory of Metis* with your students, we encourage you to read through it. In Part 1, we learned that the goddess Athena—daughter of Metis and Zeus—was born fully grown, fully armored, and fully ready for action, symbolizing that her capacity for metis was fully realized. Athena serves as a contrast to the human condition, because as humans we are not born with our metis fully realized. We have to develop it, and we benefit from good guidance.

One purpose of Peace Literacy is to make good guidance more accessible to more people during a time when metis has never been more important. **The following balance exercise** serves as a metaphor that helps students understand that we can develop our metis and that this process takes practice and persistence.

#### The Balance Exercise

Adapted from Shim and Engle, “Teaching Balance to Reduce Possible Injuries and Promote Skill Acquisition” (2017).

- (Alternative versions for students who are unable to stand are available. Please contact us at [peaceliteracy.org](http://peaceliteracy.org) for more information.)
- The balance exercise requires discipline because it has to be done at least three times a week for several weeks.
- There are three balance activities:
  - Balancing on one leg with eyes open (do with both left and right legs)
  - Balancing on one leg with eyes closed (do with both left and right legs)
  - Squatting with one leg (for greater challenge, students can try squatting to deeper depths with a spotter)
- The balance exercise is a metaphor for the psychological balance that metis gives us. In addition, metis helps us create balance in our personal lives, communities, nations, and world.
- The balance exercise is also a metaphor for how our metis can get stronger when we develop it, just as our balance can get stronger when we develop it.
- You can take students through this exercise for at least several weeks, while prompting them to examine how the metaphor of “balance” helps us understand the importance of metis.

**Note:** The balance exercise also serves another purpose, by helping to prevent those injuries and deaths that result from falling (Shim and Engle, 2017).

Falls are the leading cause of injuries in children between the ages of 0–19. A fall is usually an event that results in a person landing on the ground unintentionally and without any pre-planned action on their part. On average, about 8,000 children [in the United States] are brought to emergency rooms to be treated for fall-related injuries on a daily basis. This number exceeds 2.5 million within a typical calendar year (Centers for Disease Control and Prevention, 2016). Worldwide, childhood fatalities exceed over 46,000. The majority of these deaths occur between the ages of five and nine and 15 and 19 years old. Falls are also the leading cause of brain injuries in young children, which could result in permanent disability or long-term hospitalization. Even though motor behavior specialists and developmental growth experts will consider “falling” a normal behavior of children, many falls do result in severe injuries . . . With the increase of healthcare costs in the United States and the risk of potential fatality, the demand to have physical education or movement classes that focus on reducing falls and injuries should be a vital focus of curricula worldwide (Shim & Engle 2017).

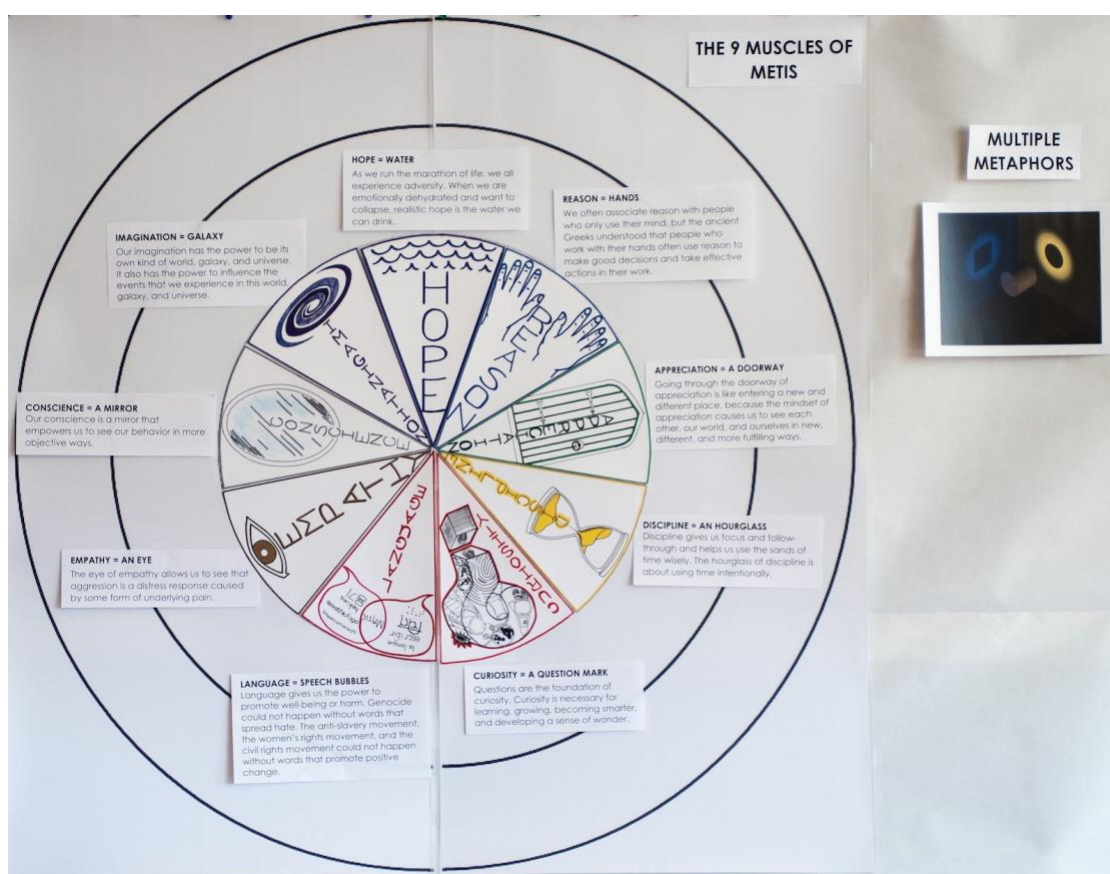
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#### Assembling the pictorial

Below is a photo of the pictorial that we will help you build with your students. To give you a sense of scale, the inner circle is two feet wide and the entire circle is four feet wide. The middle ring that represents Peace Literacy Skills and the outer ring that represents Accurate Understanding will be explored in Part 3: *The Anatomy of Metis*.

All of the images, including the rings, the pie piece for each muscle, and their accompanying text boxes, are available for download at <http://www.peaceliteracy.org/curriculum>.

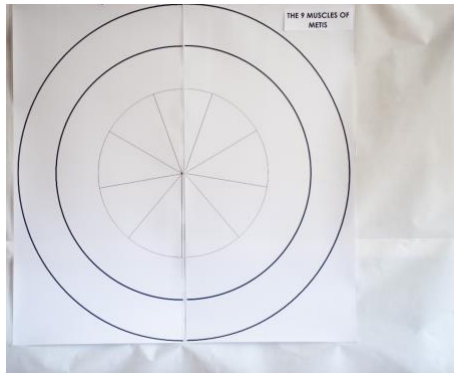


In this pictorial we symbolize each of the nine human capacities not only as **metaphors** but also as a **color, image, and aspect of sensory experience** (such as drinking water, the feeling of balance, etc.). This multifaceted approach makes complex ideas more accessible and engaging by connecting them to more parts of the student's mind.

## Step 1:

Put up the craft paper, the concentric circles, and the heading box "The 9 Muscles of Metis."

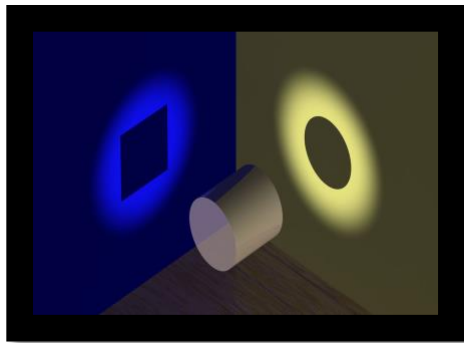
You can also add the heading box, "The 9 Muscles of Our Humanity."



## Background notes for using Multiple Metaphors

*Multiple metaphors* is a Peace Literacy teaching technique that allows students to see a complex idea from different angles. Each metaphor gives us a new way of looking at the idea, like looking at an object from a new angle. Just as viewing the cylinder from multiple angles provides greater insight into the nature of the object being viewed, viewing each component of metis through a primary metaphor—a muscle that can be strengthened—and through a secondary

metaphor—such as water for hope, hands for reason, etc.—provides greater insight into the nature of the metis component being discussed.



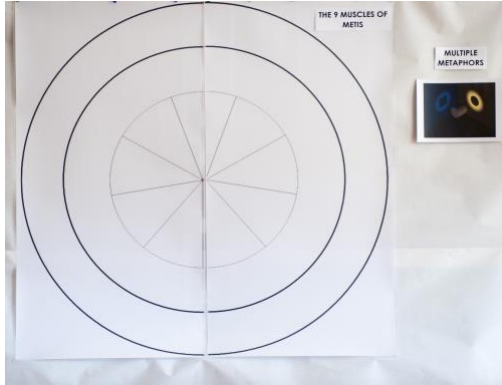
Multiple metaphors are not mixed metaphors. When multiple metaphors are concerned, each metaphor remains distinct and helps us see the idea from a new angle. This technique should also not be confused with the lesson imparted by the allegory “The Blind Men and the Elephant.” In that allegory, each blind man assumes

that the part of the elephant he encounters is *literally* something else, such as assuming that the elephant’s tail is literally a snake. Instead of thinking metaphorically, they make literal interpretations that lead to false conclusions about elephants.

*“Because reality is so complex, we can use a variety of metaphors to better understand any aspect of reality. When metaphors are used properly, they make our complex reality appear simple, accessible, and understandable without oversimplifying complexity.” – Soldiers of Peace (Chappell, 2017)*

## Step 2:

Put up the title box “Multiple Metaphors” and the image of the cylinder.



### Share with students:

We are using multiple metaphors to better understand complex ideas. Just as multiple angles give us greater insight into an object we are viewing, multiple metaphors allow us to perceive an idea from multiple angles, giving us greater insight into the idea we are discussing.

### Background notes for the Nine Muscles of Metis

Introduce the nine muscles of metis as the inner circle of three concentric circles. The middle circle (Peace Literacy Skills) and outer circle (Accurate Understanding) will be introduced in Part 3: *The Anatomy of Metis*.

The probing questions for each of the nine muscles of metis can be used as Think-Pair-Share questions for students to discuss during the presentation of the pictorial, and as probing questions if students get stuck during the World Café discussion activity. You don't have to ask all of the questions that we have shared. You can choose a number of questions from our list, depending on how much time you have to discuss each muscle, or come up with your own questions.

The questions are listed after the two-paragraph description of each of the nine muscles of metis. They are not listed a second time under the World Café table discussion questions, even though they can be used in both sections. The two-paragraph description of each muscle is also included in the supplemental reading.

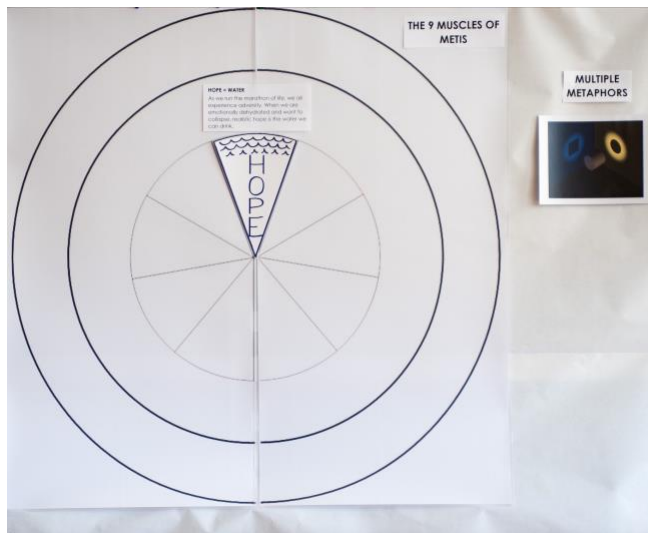
### Share with students:

- “Metis” is an ancient Greek word that refers to the power of thought. Metis can mean good decisions, effective actions, discernment, forethought, skill, awareness, and wisdom.
- These words convey aspects of metis, but they do not fully capture the complexity and power of the concept.
- We can strengthen our metis by strengthening nine natural human capacities, which we depict metaphorically as muscles.

- By strengthening the nine muscles of metis, we can increase our capacity for wisdom, discernment, forethought, and awareness.
- These muscles also empower us to make good decisions, take effective actions, and unlock the power of waging peace.
- The nine muscles of metis can also be called the nine muscles of our humanity, because they are essential to being human and allow us to fully express our humanity.

### Step 3:

**Introduce each muscle, starting with Hope, by putting up the pie piece and text box.**



If you are working on reading comprehension with your students, circulate the relevant page(s) from the Supplemental Reading for each muscle and have them complete the reading exercise before they move to the next muscle.

As you move to the next muscle, **add the pie-shaped piece and text box** that corresponds with that muscle.

### Share with students:

- People often associate thinking with reason alone. Reason is a metis muscle, but the other metis muscles can affect our thinking as much as reason does.
- **Hope**, which we discuss first, can affect our thinking immensely.
- Understanding how all of the metis muscles can affect our thinking, along with our communities and the world, gives us a deeper and more comprehensive understanding of the power of thought and how we can make good decisions, take effective actions, and unlock the power of waging peace.

## 1. **Hope** = Water (dark blue)



### **Share the text box with students:**

As we run the marathon of life, we all experience adversity. When we are emotionally dehydrated and want to collapse, realistic hope is the water we can drink.

### **Two Paragraph Description of Hope from the Supplemental Reading:**

West Point teaches that the most powerful people are hopeful, and that ideals help us build a strong foundation for hope. By learning to strengthen our hope and idealism, like learning to strengthen a muscle, we can develop realistic hope and realistic idealism instead of naive hope and naive idealism. Discussing the importance of having hope and idealism that are based on strength and realism, Nobel Peace Prize laureate Albert Schweitzer said that we must learn to transform “the soft iron of youthful idealism into the steel of adult idealism which will never be lost.”

As we run the marathon of life, we all experience adversity. When we are emotionally dehydrated and want to collapse, realistic hope is a cup of water we can drink from, and realistic idealism (the highest expression of realistic hope) is a lake we can swim in. Realistic idealism is hope that spills into our actions, the way we treat others, our commitment to something larger than ourselves, our determination to make a difference, every corner of our personalities, and every aspect of our lives.

**Note:** Hope is just one example that shows how every metis muscle affects our thinking, perception of the world, and behavior as much as the metis muscle of reason does. Hope can also drastically affect *how* we reason. Students learn better when they feel hopeful and empowered rather than hopeless and helpless.

### **Hope Probing Questions:**

- How important is the water of hope? Explain your thinking.
- Where is the water of hope?
- What happens if you can't find the water of hope?

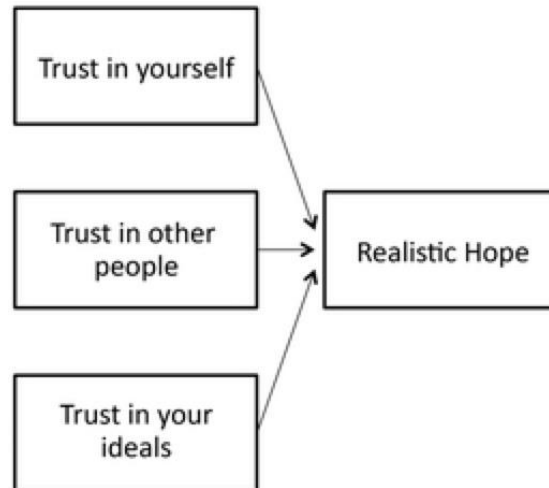
- Can the water of hope be hidden or ‘underground’?
  - How can you find this hidden or ‘underground’ source of hope?
  - Can other people become a source of the water of hope? Can *you* become a source of this water?
- Can people withhold the water of hope from others?
  - What happens to people attempting to withhold the water of hope?
- Can a person choose to have hope even in dire circumstances?
  - How important is it to have hope in dire circumstances?
  - How does this happen?
- Under what circumstances could the water of hope evaporate?
- Can you share the water of hope with others?
  - How would you do that?
  - What does that look like?

**Note:** While naive hope is simply wishful thinking, realistic hope is based on trust in yourself, trust in others, and trust in your ideals. It’s based on evidence and a plan for taking action. When we use the term “hope,” we are referring to realistic hope based on powerful ideals, not naive hope. *The Landscape of Our Human Needs* allegory and pictorial (available at [peaceliteracy.org](http://peaceliteracy.org)) discusses ideals in greater depth. Chapter 1 of *Peaceful Revolution* (Chappell, 2012) discusses the relationship between ideals and hope. The two diagrams on the following page are from *Peaceful Revolution* and they illustrate the anatomy of hope.

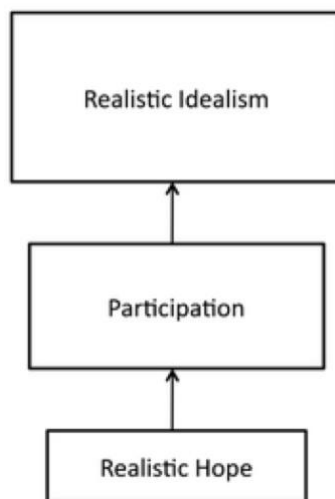
**Diagram 1** shows how realistic hope is comprised of Three Kinds of Trust: Trust in Yourself, Trust in Other People, and Trust in Your Ideals.

**Diagram 2** shows how participation is a higher expression of realistic hope, and realistic idealism is the highest expression of realistic hope.





**Diagram 1: The Three Kinds of Trust that Comprise Realistic Hope**



**Diagram 2: The Higher and Highest Expressions of Realistic Hope**

Here is a quote from General Douglas MacArthur's last speech at West Point where he discusses how ideals give us hope, courage, strength, and wisdom (which are all aspects of metis).

"[Ideals] are your rallying points: to build courage when courage seems to fail; to regain faith when there seems to be little cause for faith; to create hope when hope becomes forlorn . . . These are some of the things they do. They build your basic character . . . They make you strong enough to know when you are weak, and brave enough to face yourself when you are afraid . . . They teach you to be proud and unbending in honest failure, but humble and gentle in success; not to substitute words for action; not to seek the path of comfort, but to face the stress and spur of difficulty and challenge; to learn to stand up in the storm, but to have compassion on those who fall; to master yourself before you seek to master others; to have a heart that is clean, a goal that is high; to learn to laugh, yet never forget how to weep; to reach into the future, yet never neglect the past; to be serious, yet never take yourself too seriously; to be modest so that you will remember the simplicity of true greatness, the open mind of true wisdom." – General Douglas MacArthur

## 2. Reason = Hands (light blue)



**Share the text box with students:**

Our multipurpose hands are capable of many tasks.

Reason, like our hands, is also multipurpose. Reason, like our hands, allows us to build our world.

### **Two Paragraph Description of Reason from the Supplemental Reading:**

Our multipurpose hands are capable of many tasks. With our hands we can make tools, start a fire, hunt with a spear, carry objects over long distances, construct a shelter, grow crops, play music, paint a portrait, type on a keyboard, eat a burrito, put on clothes, brush our teeth, scratch an itch, drive a car, and manufacture machines. Reason, like our hands, is also multipurpose. With reason we can invent tools, understand cause and effect, solve problems, plan for the future, do math, cure diseases, perform organ transplants, detect a lie, and create rockets that travel to the moon. Reason, like our hands, allows us to build our world.

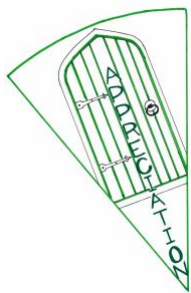
Today it is common to associate reason with people who work in academia, but the ancient Greeks understood that people who work with their hands often use reason to make good decisions and take effective actions in their craft. Classics scholars Marcel Detienne and Jean-Pierre Vernant tell us that in ancient Greece, people who worked with their hands were associated with Athena, the goddess of metis: "Wood-cutters, carpenters, and ship builders are all craftsmen who traditionally enjoy the protection and favor of Athena. Homer writes of the great affection she has for Tekton Harmonides, the Carpenter . . . 'whose hands knew how to make masterpieces of every kind.' . . . As Homer says, it is 'not strength but metis which makes the good wood-cutter.'"

**Note:** By symbolizing reason as hands rather than as a clichéd symbol like the human brain, we are expressing a timeless idea that can be traced back to the ancient world and adding dignity to the work that people do with their hands.

**Reason Probing Questions:**

- Just as we can use our hands to create or destroy, can we use reason to create or destroy? What are examples of this?
- What encourages people to use reason for creation rather than destruction?
- What are some factors that can cause people to use reason for destruction?
- Just as cold can make your hands temporarily numb and difficult to use, what can temporarily numb your reasoning?
- How do you develop the ability to reason?
- Just as people can use their hands in a clumsy way, can people also use reason in a clumsy way? What does clumsy reasoning look like? How does clumsy reasoning affect our decision-making?

**3. Appreciation = Doorway (green)**



**Share the text box with students:**

Going through the doorway of appreciation is like entering a new and different place, because the mindset of appreciation causes us to see each other, our world, and ourselves in new, different, and more fulfilling ways.

**Two Paragraph Description of Appreciation from the Supplemental Reading:**

Appreciation is the doorway to joy, because we cannot experience joy unless we first experience appreciation. When we take steps toward and through the doorway of appreciation, it is like entering a new and different place, because the mindset of appreciation causes us to see each other, our world, and ourselves in new, different, and more fulfilling ways.

Appreciation is also the doorway to stewardship. By encouraging us to take care of our friends, family, freedom, country, and planet, appreciation helps us behave responsibly. In this way, appreciation creates the psychological foundation for stewardship, and stewardship is the highest expression of appreciation. Citizenship is a form of stewardship, and as active citizens we can become stewards who protect our country and planet. When we take the responsibility of citizenship seriously, we become stewards of justice, liberty, and peace. Being a steward means being a protector.

**Note:** Students learn better when they appreciate their teacher, their fellow students, the opportunities they have to learn, and the content they are learning about. Chapter 3 of *Peaceful Revolution* (Chappell, 2012) discusses how appreciation creates the psychological foundation for stewardship, and how hard work can increase our sense of appreciation.

### **Appreciation Probing Questions:**

- How does appreciation serve as the doorway to joy? What joys are possible because of appreciation?
- What happens if the doorway of appreciation seems shut?
- What happens if you don't know how to open the doorway of appreciation?
- What happens if you can't even find the doorway of appreciation?
  - What can you do?
- What happens when you go through the doorway of appreciation and look behind you?
  - What do you see?
  - How did the world look when you were on the other side of the doorway?
- Can you help others walk through the doorway of appreciation?
  - How can you do that?
  - What does that look like?
- Can you go back and forth through the doorway of appreciation?
  - What could cause this to happen?
  - When the appreciation you usually feel seems to vanish (due to a bad day, trauma, etc.), is it possible to forget what it felt like when you were through the doorway of appreciation? Explain your thinking.
- Is there a difference between taking one step through the doorway of appreciation and ten steps? What about a hundred steps?
  - How can the world appear differently as you take more steps through the doorway of appreciation and explore?
  - Can we keep deepening our appreciation by taking more steps through the doorway of appreciation as we grow older? How can we do this?
  - What does this reveal about the nature of appreciation?

- What can you do to help yourself go through the doorway of appreciation more often?
- Can you be through the doorway of appreciation in one area of your life and not in another area of your life? Explain your thinking.
- Green represents sustainability. Is appreciation sustainable? Does appreciation and its highest expression of stewardship contribute to sustainability? In what ways?
- What are some things people do to block others from going through the doorway of appreciation?

### **Appreciation Classroom Exercises Introduction**

One of the metis muscles that we will discuss later is language. Just as every grade level strengthens the muscle of language in students, every grade level should also strengthen the other metis muscles in students, including the muscle of appreciation. Our education system has various exercises and practices for expanding the language capacity of students as they grow older. For our education system to serve students well in the twenty-first century, education must also expand their appreciation capacity and its highest expression of stewardship. When students learn how to become empowered as responsible stewards, this improves the health of our schools and society.

### **Appreciation Classroom Exercises**

**1) Terrible Ideas Game.** This can be tailored for different grade levels. For elementary and middle school students, you can begin the Terrible Ideas Game by asking them, “What are the ten worst things you can imagine using for toilet paper?”

- This is a fun exercise for students, and can also teach a history lesson and science lesson.
- Modern toilet paper was not invented until after the telegraph.
- In terms of history, what did people use before cheap, dissolvable, soft toilet paper was invented?
- In terms of science, what is the complex process that allows toilet paper to be made?
- How is toilet paper an unappreciated marvel of modern technology?

- This can also be a fun and informative exercise for adults. The muscle of appreciation is not just about appreciating our friends and family, but also the many gifts of life that we so often take for granted.

List the 10  
worst  
substitutes  
for toilet  
paper.



### Appreciation Classroom Exercises

**2) Battlefield of the Realm of Ideas.** This exercise can also be tailored for different grade levels. For elementary or middle school students, have them debate what they would rather have if they could choose only one: an indoor toilet or an indoor shower?

- Have them explain their reasoning.
- Have them debate what they would rather use instead of toilet paper: leaves or newspapers?
- Remind students that debating whether they would rather use leaves or newspapers is not a silly question. On the contrary, it is a question that countless people had to ponder before toilet paper was invented.
- For high school students or college engineering students, have them debate what has been more important for human civilization: the ability to shape glass or metal?
- If students had to choose between humanity being able to use either glass or metal as a tool, but not both, what would they choose?

- If students say they would just replace all glass with plastics, tell them that humans would not have developed plastics without first developing glass:
  - Most adults have no idea how important the ability to shape glass has been for the development of human civilization. The following quote from *Glass: A World History*, written by Alan Macfarlane and Gerry Martin, describes how important glass is to us, even though we often take it for granted.

Most of us hardly give glass a thought, but imagine waking in a world where glass has been stripped away or uninvented . . . All glass [items] have vanished, including those now made of similar substances such as plastics which would not have existed without glass. All objects, technologies and ideas that owe their existence to glass have gone.

We feel for the alarm clock or watch: no clock or watch, however, for miniaturized clocks and watches cannot exist without the protective facing of glass. We grope for the light switch. But there can be no light switch, for there is no glass for the light bulb. When we draw back the curtains a blast of air strikes us through the glassless windows. If we suffer from short sight, we can see clearly for about ten inches. If we have long sight, as we probably do if we are over fifty, we will not be able to read. There are no contact lenses or spectacles to help us . . .

There is no television in the living room, for with no screen it cannot exist . . . There would almost certainly be no electricity, since its first generation depended on gas or steam turbines, which required glass for their development. So there would be no radios, no computers, or email . . .

[Without the glass used in microscopes] there would be no understanding of the world of bacteria and viruses, no antibiotics and no revolution of molecular biology from the discovery of DNA. As there would be little control of epidemic and endemic diseases these would everywhere be as rife as they were at the end of the eighteenth century. [Without the glass used in telescopes] our understanding and control of space would be very limited. We might not even be able to prove that the earth goes around the sun. (Alan Macfarlane and Gerry Martin, *Glass: A World History*)

Students can come up with their own scenarios for the Terrible Ideas Game and the Battlefield of the Realm of Ideas, all of which can teach not only appreciation, but also history and science and the ability to experience wonder and awe.

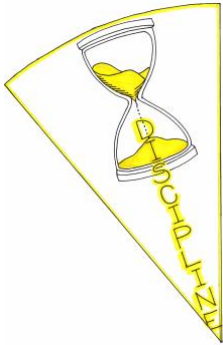


## **Appreciation Classroom Exercises**

### **3) There are many other ways to exercise the muscle of appreciation:**

- You can show a short movie scene or read a passage from literature where someone is demonstrating hope, appreciation, or another metis muscle and analyze and discuss the scene. What was unique about this character's response? How did this character or others benefit from this response? How do you think most people would have responded? What metis muscle does this demonstrate?
- You can ask students to take something most of us don't like or are indifferent toward, and find something we can appreciate about it. This exercise can start with objects and expand to situations and people.
- You can lead a discussion about the freedoms and rights we inherited today through no effort on our part, but from simply being born. Who were the people who struggled and sacrificed so that we could have these freedoms and rights? What are the benefits of appreciating these freedoms and rights? What do we gain, and what do others gain, when we have this form of appreciation? What are the dangers of not appreciating our freedoms and rights? What can we lose, and what can others around us lose? What happens when our appreciation for these freedoms and rights creates a sense of stewardship? What do we feel that we owe to our communities, nation, and world when we feel this sense of stewardship? How do appreciation and a sense of stewardship change how we think and act? How do appreciation and a sense of stewardship affect how our reason works? Will our world be better if people behave as stewards rather than take things for granted? In what ways?
- Teachers can model appreciation by writing a note of appreciation to each student. Explain that these notes will be spread out over time; not all the students will receive the notes at once. Students can put their names in a hat and someone can draw names to see who gets appreciation notes in the first round.

#### 4. **Discipline** = Hourglass (yellow)



##### **Share the text box with students:**

Discipline gives us focus and follow-through and helps us use the sands of time wisely. The hourglass of discipline is about using time intentionally.

##### **Two Paragraph Description of Discipline from the Supplemental Reading:**

One way the muscle of discipline helps us make good decisions and take effective actions is by empowering us to control our impulsiveness. When rage or other feelings urge us to impulsively make shortsighted decisions without thinking them through, this can cause us to take reckless actions that harm us and those around us. Or when we feel the impulse to text and drive or interrupt people while they are talking, discipline can help us not act on this impulse. Discipline also helps us overcome the impulse to procrastinate, which can interfere with our ability to make good decisions and take effective actions.

Discipline gives us *focus and follow-through*. This includes the focus and follow-through needed to take action or exercise strategic patience. Good decisions and effective actions can depend a lot on timing. If we eat fruit too early, it will not be ripe. If we wait too long, it will be rotten. With the help of discipline, metis empowers us to discern not just in what direction we should take action, but *when* to take action, not just where to go in life, but *when* to go. The timing of when you send a text message, such as sending a text after you arrive at your destination rather than while you are driving, might save your life, along with the lives of others. The timing of when you do your work, such as being proactive rather than procrastinating and being complacent, can improve your future, along with the future of others. Discipline helps us use the sands of time wisely.

##### **Discipline Probing Questions:**

- Can you think of a time when you acted impulsively?
  - What did you do that was impulsive?
  - How could discipline have helped you handle this situation differently?
- Have you ever had trouble focusing?
- Have you ever had trouble focusing when someone is talking to you or when you are trying to study or do your work?
  - Why do you think you were having difficulty focusing?
- Have you ever noticed other people having trouble focusing?

- Have you ever wanted someone to focus on what you are saying, but they were distracted by their phone or something else?
  - How did you feel when that happened?
- The hourglass of discipline is about using time intentionally (an hourglass helps us use time intentionally). What are things that distract you and interfere with your ability to focus or follow-through and use time intentionally and effectively?
- Do you know how to improve your focus?
- Have you ever made a plan in your head to do something and not been able to follow-through?
  - What prevented you from following through?
  - Was your plan not detailed enough?
  - Did you lack motivation?
  - Did you get distracted by other things?
    - If so, what things distracted you?
- Have you ever seen someone texting and driving?
  - How could strengthening the muscle of discipline help people not to text and drive?
- Have you ever felt overwhelmed and been unable to break down a goal into steps you can accomplish?
- Have you ever been afraid to start something you need to do or want to do?
- Has fear of succeeding ever interfered with your ability to follow-through with a plan?
- Have you ever sabotaged your follow-through?
- Do you do better with follow-through if you have support from friends or family?
- Have you ever had difficulty starting something you need to do or want to do?

### **Discipline Classroom Exercises**

- Think of something that you've had trouble starting and following through on, such as cleaning your room, doing your homework, reading text you are not interested in, taking a break when you are frustrated, exercising, or doing chores.
- What would happen if you did this task for three minutes uninterrupted?

- How much do you think you could accomplish if you were focused and had no distractions?
- What tools do you need to accomplish this task?
  - Get all of those tools out.
  - Set a timer for 3 minutes. Try to avoid any distractions until the timer goes off.
- How much have you accomplished?
- Teachers can have students *focus and follow-through* for three minutes on any type of task:
  - Read one paragraph and write one question.
  - Get started on your homework. How much were you able to accomplish?
  - Review your notes and add comments.
  - How many vocabulary words can you memorize in three minutes?
- Turn the “three minutes of focus and follow-through” exercise into a game.
  - If you are cleaning your room, how many things can you pick up in three minutes?
- Have students practice three minutes of focus and follow-through every day for a week.
  - Provide students with behavior specific praise for what they are able to accomplish.
    - “Wow! You were able to read the paragraph, underline the key concepts, and ask two questions about the information. That is demonstrating excellent focus!”
- The following week, increase the time of the focus and follow-through exercise by thirty seconds to a minute.
  - Each week, add thirty seconds to a minute of focus and follow-through time.
  - You can commend students when they go from being able to do “three minutes of focus and follow-through” to “four minutes of focus and follow-through” and beyond.
  - Can students eventually build up the time they are able to focus and follow-through on their task from the original three minutes to ten minutes? How about fifteen or twenty minutes?
  - You can use a small hourglass that runs for three minutes or longer. An hourglass is a fun addition to the classroom and makes this exercise more visual for students. You should notify students when the hourglass has run out of time, since you don’t want them to be constantly looking at the hourglass. You want them to be focused.

- Focus and follow-through can be practiced as a team activity. For example, if students have a list of vocabulary words they need to memorize, such as the parts of a microscope, or the parts of a flower, break them into groups of two to four students.
  - Give each group the first three words and have them work until everyone in the group knows all three words.
  - Once everyone in the group has memorized the first three words, add two more words.
  - Once everyone has memorized these five words (the first three words and the added two words), add two more words.
  - Continue the process until all the vocabulary words have been memorized.

## 5. **Curiosity** = Question Mark (orange)



### **Share the text box with students:**

Questions are the foundation of curiosity. When we are curious, we can become smarter and wiser. Curiosity also leads to a sense of wonder, adventure, and awe.

### **Two Paragraph Description of Curiosity from the Supplemental Reading**

Curiosity helps us create balance in our personal lives, communities, and world by empowering us to ask questions that reveal the underlying causes of problems and help us create innovative solutions. When our life seems out of balance, we can ask questions to help us regain balance. When anything we see or experience seems out of balance, the first step to regaining balance often involves asking a question. As we strengthen our muscle of curiosity, we can learn how to question in ways that are more likely to create understanding, innovative solutions, and balance.

Curiosity is necessary for learning well. When we are curious, we can become smarter and wiser. Curiosity also leads to a sense of wonder, adventure, and awe. When we perceive our world with a sense of curiosity and awe (the highest expression of curiosity), then being alive becomes more fascinating, meaningful, and fulfilling. Being curious makes our world more interesting, and it also makes us more interesting.

**Note:** Students learn better when they are curious. This is one among many examples that show how students learn better when their metis muscles are strengthened.

### **Curiosity Probing Questions:**

**Note:** Questions asked from a genuine place of curiosity avoid judgment.

- Why is curiosity important?
- What have human beings achieved because of curiosity?
- What would happen if there were no curiosity in the world?
- How would human beings be living today if nobody had ever asked a question?
  - If nobody had ever asked a question, would human beings even be alive today, or would humanity have gone extinct long ago? Explain your thinking.
- What are ten things that you find fascinating but don't know a lot about?
  - Pick one of those topics. What are some questions you could ask about that topic?
- What happens when people have curiosity but lack empathy and conscience?
  - What types of inhumane experiments have been done by people who have curiosity, but lack empathy and conscience?

**Note:** The muscles of empathy and conscience are not discussed until later in this unit. The curiosity probing questions that reference empathy and conscience can be asked after these two muscles are discussed.

- Are there questions that you don't like being asked?
- If someone is asking you personal questions that you feel are inappropriate, are they using empathy and conscience? Could this person have empathy and conscience but simply not understand that you don't like being asked those kinds of questions? Explain your answer.
- What are some personal questions that could hurt someone's feelings? How do empathy and conscience make us more mindful of the kinds of questions we ask?
- Are there uncomfortable questions that we need to ask when injustices are occurring in our society? What are examples of people in history who questioned injustice? What kinds of questions did they ask?
- If you want to learn about something new, what kinds of questions should you ask?

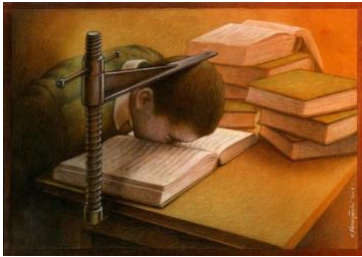
- If you have an inaccurate understanding of a culture, could you unintentionally ask an offensive question? Explain your thinking.
- What should you do if you unintentionally offend a person by asking them a question?
- Are there things you question about our society? What are they?
- How do questions feed our need for explanations?
- What questions were people in the past asking about the world?
- When people ask questions, what could cause them to come up with an inaccurate answer?
- Can people be afraid to know the answers to questions they have asked?
  - What can cause these fears?
  - Can this lead to people developing inaccurate understandings?
  - Can this cause people to come up with convenient, rather than accurate answers?
- What causes people to come up with over-simplistic, easy answers to questions?

### **Curiosity Classroom Exercises**

- Look at a photo, painting, or drawing and discuss the questions listed below.
- See the next page for sample images you can use.



**Art by Pawel Kuczynski**



A head in a vice



Praying at the altar of  
Facebook



Smartphones being used  
as blinders

**Other miscellaneous images**



Volkswagon precision  
parking ad



Glacier colored by algae



Russia's sea glass beach

- What do you see?
- What does the picture remind you of?
- What do you wonder about the picture?
- Does this picture cause you to have any questions?
- Do you have any questions about why this picture was created, who took or created it, or when it was made?

## 6. Language = Speech Bubbles (red)



### Share the text box with students:

Language gives us the power to promote well-being or harm. Genocide could not happen without words that spread hate. The anti-slavery movement, women's rights movement, and civil rights movement could not happen without words that promote positive change.

### Two Paragraph Description of Language from the Supplemental Reading

When misunderstanding or conflict put us out of balance with those around us, language can help us regain balance. When adversity pushes a friendship, relationship, family, or community to the point of potentially falling into ruin, language can help us maintain balance as we navigate adversity so that our human connections do not collapse. Language also allows us to turn all of our other metis muscles into sources of expression. We can learn to speak powerfully with hope, reason, appreciation, discipline, curiosity, and the other muscles of our humanity. As we learn how to unlock the full potential of language, we can become more effective at using language to create balance and express ourselves in meaningful and fulfilling ways.

Language gives us immense power to promote either wellbeing or harm. Before people can commit organized violence or oppression, they must first communicate with words. Genocide cannot happen without words that spread hate and irrational fear. Words are also necessary to coordinate the buying, selling, and transport of slaves. People use words when they want to incite the hostility needed for mob violence, and violent extremism requires words that teach extremist points of view. Words can express lies. Words also have the power to make an enormous positive difference. Before people could organize the anti-slavery movement, women's rights movement, or civil rights movement, they first had to communicate with words. Words can express truth.

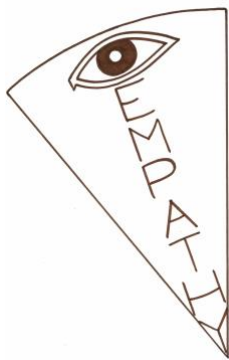
### Language Probing Questions:

- What does it mean that language helps us create balance with others?
- How do you use language to strategize with others in a cooperative video game?
- How do coaches use language to help their players?
- How do friends use language to decide what they want to do on a Saturday afternoon or where they want to go to dinner or what kind of take out to order?
  - What do you do when you disagree with someone's choice?

- Do you talk about it?
- Do you thumb wrestle?
- Do you flip a coin?
- Do you play rock paper scissors?
- Are there issues where you just can't thumb wrestle, flip a coin, or play rock paper scissors to solve the problem?
  - What types of issues are they?
- How do our emotions affect how we use language?
- How does language change when people are filled with aggression versus calm?
- How does language change when people are filled with hatred versus empathy?
- How does language change when people are filled with hope versus hopelessness?
- When people speak aggressively, is their aggression conveyed by the words they are saying, or is their aggression conveyed by the way they are saying them?
- Have you ever tried to talk to someone who wouldn't listen to reason?
  - What types of things do they say?
  - What can cause people to not listen to reason?
- How does appreciating people affect how we talk to them?
- How does curiosity affect the way we use language?
- Sometimes people use language to intentionally create imbalance by spreading rumors and gossiping. What are some other examples where language is used to intentionally create imbalance?
- Has anyone ever used words to hurt you?
  - What types of things did they say?
- Has anyone ever used words to help you feel better about yourself?
  - What types of things did they say?
- Have you ever been persuaded by words that you saw in a commercial or on social media to buy a product?
  - What product did you buy or want to buy?
  - What made the words in the ad or on social media persuasive?

- Were there pictures or videos that went along with the words?
- If the advertisement said, "This is a piece of junk," what would have happened?
  - Would you still have wanted to buy it?
- Which is more influential, the commercial or the reviews of the product?
- How does word choice affect a message?
- An alternative fact is a lie. What sounds worse, lying or providing alternative facts?
- Does hyperbole affect how we hear a message? Define the word "hyperbole."

## 7. Empathy = Eye (gold)



### Share the text box with students:

Empathy is our ability to identify with and relate to others. It allows us to have compassion for their problems and share their joy and pain. The root causes of human aggression are invisible to our eyes, but they can be seen with the eye of empathy.

### Two Paragraph Description of Empathy from the Supplemental Reading

Military history shows why empathy is one of the most powerful forces in the world. The greatest problem of every army in world history is: when a battle begins, how do you stop soldiers from running away? Where our fight-or-flight response is concerned, the vast majority of people prefer to run when a sword is wielded against them, a spear is thrust in their direction, a bullet flies over their head, or a bomb explodes in their vicinity. Today when there is a mass shooting, the natural reaction of most people is to panic and run away. Military history shows that the most effective motivator for convincing people to run toward danger rather than run away is empathy and its higher expression of love. When people feel that their loved ones are threatened, they will often risk their lives to protect them. Throughout military history, effective armies sought to turn soldiers into a "band of brothers"—into a family—not because these armies were sentimental, but out of necessity. Lao Tzu, a Chinese philosopher who lived during the sixth century BC, also acknowledged this fundamental truth about human nature when he said: "By being loving, we are capable of being brave." In other words, when our loved ones are threatened, our love can become a source of bravery. If your loved ones were threatened, how would you react?

Just as gold is the most malleable metal, meaning that it can resist breaking when stretched under pressure, empathy makes communities malleable under pressure. Mahatma

Gandhi, a veteran who served in the Boer and Zulu wars as a medic, saw the power of empathy in the military and wanted to strategically use this power on a broader scale to heal the root causes of problems. He realized that violence deals with symptoms rather than root causes. The root causes of human aggression are invisible to our eyes, but they can be seen with the metaphorical eye of empathy. We must learn to see with the eye of empathy so that we can perceive the underlying fires (painful emotions) that cause the heat of human aggression. This can create a positive feedback loop, because the more we see with the eye of empathy, the more understanding we gain, and the more understanding we gain, the better we can see with the eye of empathy. Only when we see deeply with the eye of empathy can we confront the root causes of our local, national, and global problems rather than merely addressing symptoms.

**Note:** These metaphors can serve multiple purposes. For example, you can use the gold metaphor to teach a science lesson about gold and the malleability of metals.

### **Empathy Probing Questions:**

- Have you ever empathized with a friend who had a problem?
  - What problem were they dealing with?
  - How do you think they felt?
  - Did you have to feel the same level of joy or pain to empathize with them?
- How does it feel to have someone empathize with you?
- What does the eye of empathy allow you to see?
- What would happen if all of the empathy were removed from the world?
- Why is it important to have empathy not just for others, but also for yourself?
- What is a person like that lacks empathy?
- What types of things can a person do when they lack empathy?
- What does a country look like when their leaders lack empathy?
- What types of things would a company be willing to do if the people in charge lack empathy?
- Why is the natural reaction of most people to panic and run away when their lives are threatened with lethal violence?
  - Why are they more likely to stay and fight if their loved ones are threatened?
- Is there a person or animal you would protect if they were threatened?
- What would happen if people in the military saw each other as strangers rather than comrades?

**Note:** Many of the criticisms that people have about empathy result from an inaccurate understanding of empathy. In Part 3: *The Anatomy of Metis* we discuss the importance of accurate understanding, along with the relationship between empathy, vulnerability, and courage.

### Examples of Empathy

Here are **three examples of empathy** that you can share and discuss with students. Stories like these are important for refuting the common misconception in our society that empathy is weak. We must teach students how strong empathy truly is. These three examples of empathy involve physical courage. When people think that empathy is weak, examples where empathy leads to incredible physical courage are an effective way to help students associate empathy with strength. However, a deeper exploration of empathy must involve a discussion of *moral* courage, along with the everyday acts of empathy that often go unnoticed. There are countless examples of empathy that a teacher can find and share with students.

#### 1. **Sergeant First Class Alwyn Cashe, who died during the Iraq War in 2005 (text written by journalist David Zucchino for the *LA Times*)**

[Sergeant First Class Alwyn] Cashe, his uniform soaked with fuel, had plunged into a burning vehicle in Iraq on Oct. 17, 2005, to rescue soldiers who were on fire . . . Cashe rescued six badly burned soldiers while under enemy small-arms fire. His own uniform caught fire, engulfing him in flames. Even with second- and third-degree burns over three-fourths of his body, Cashe continued to pull soldiers out of a vehicle set ablaze when a roadside bomb ruptured a fuel tank. . .

Nine years after the Iraq bomb attack, retired Sgt. Gary Mills [recalls what happened] . . . Mills was inside the stricken Bradley fighting vehicle that day. He was on fire, his hands so badly burned that he couldn't open the rear troop door to free himself and other soldiers trapped inside the flaming vehicle.

Someone opened the door from outside, Mills recalls. A powerful hand grabbed him and yanked him to safety. He later learned that the man who had rescued him was Cashe, who seconds later crawled into the vehicle to haul out the platoon's critically burned medic while on fire himself.

"Sgt. Cashe saved my life," Mills said. "With all the ammo inside that vehicle, and all those flames, we'd have all been dead in another minute or two."

Four of the six soldiers rescued later died of their wounds at a hospital. An Afghan interpreter riding in the Bradley died during the bomb attack. Cashe refused to be loaded onto a medical evacuation helicopter until all the other wounded men had been flown.

A citation proposing the Medal of Honor for Cashe reads: “SFC Cashe’s selfless and gallant actions allowed the loved ones of these brave soldiers to spend precious time by their sides before they succumbed.”

Cashe’s sister, Kasinal Cashe White, spent three weeks at her brother’s bedside at a military hospital in Texas as doctors treated his extensive burns. She knew nothing of his actions during the bomb attack until a nurse asked her, “You know your brother’s a hero, don’t you?”

When Cashe was able to speak, White said, his first words were: “How are my boys?”—his soldiers, she said.

Then he began weeping, she said. He told her: “I couldn’t get to them fast enough.”

Cashe died Nov. 8, 2005.

“My little brother lived by the code that you never leave your soldiers behind,” White said. “That wasn’t just something from a movie. He lived it.”

## **2. Margaret Hargrove (text from *The Cosmic Ocean*, Chappell 2015)**

[In 2002 I heard an interview] with a seventy-three-year-old woman, Margaret Hargrove. Her story reinforced what the military taught me about love creating courage. She described how she had been walking in her neighborhood when she saw an aggressive pit bull running toward her. What would you do in this situation? Because our flight response is more powerful than our fight response, most people would rather run to a safe place than fight a large animal.

But Mrs. Hargrove was not alone. She was walking Alex, her small nine-month-old Scottish terrier. Reaching them, the pit bull latched its jaws onto her tiny dog. Mrs. Hargrove, driven by concern for her loved one, bent down and bit the pit bull on the neck until it let go.

How would you react if you saw a large animal attacking your dog, child, spouse, parent, or friend? Would you not feel compelled to protect your loved one? Although our flight response is usually more powerful than our fight response when violence threatens us, our instinct to protect our loved ones is usually stronger than our flight response. Protecting those we love can even be more powerful than self-preservation, and military history confirms this. When we see our loved ones in danger and our concern for them fuses with adrenaline, causing us to rush to their aid, I call this emotion fury.



When asked if she was afraid for her safety during the attack, Mrs. Hargrove said, “I wasn’t scared. I was scared my dog was dying. I wasn’t afraid of danger. I will never get over the look in Alex’s eyes while I was trying to get him loose . . . I’m fortunate not to have been killed. I’m very lucky, and Alex is very lucky. I hope he knows how much I was willing to do for him.”

### **3. Bruiser, military working dog (text from *Will War Ever End?*, Chappell 2009)**

During the Vietnam War, the most dangerous position for a soldier on patrol was walking “point.” Because the soldier marched in front of the patrol, he would be the first person attacked by the enemy during an ambush and the most likely person to die from a booby trap. Due to these dangers, the soldier walking point was often a dog handler. Military working dogs were trained to smell enemy ambushes, locate snipers, and could even hear trip wires vibrating in the breeze.

In 1969, Corporal John Flannelly served as a dog handler in Vietnam with a German shepherd named Bruiser. “They had told us that this dog was going to be my new best friend,” he said, “and that I would probably get closer to him than any human being that I have ever known in my entire life, and they were right. I was closer with that dog than most people are with their wives, their children . . . we were inseparable.”

In September of 1969, Flannelly and Bruiser were leading their platoon on a patrol through enemy territory when Bruiser spotted danger. “All of a sudden Bruiser stopped dead in his tracks. His nose was up and his ears were twitching, and I noticed some movement from the bush. I had to make a decision, and I chose to fire. The next thing I knew, all hell broke loose. There were automatic weapons fired, hand grenades, rockets being fired.”

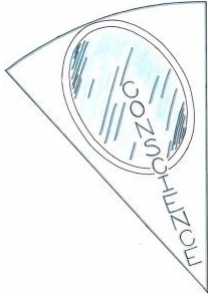
An explosion tore Flannelly’s body apart and knocked him to the ground. “I looked down. I thought my arm was blown off. My whole side was blown open. I could actually watch my left lung filling up and down, and then I watched it slowly deflate. Bruiser was just standing next to me, looking at me. He had a very sad look in his eyes. He knew we were in way over our heads. I didn’t want him to be there. I didn’t want him to have to see me die. I told him, ‘Bruiser . . . go . . . go.’ It was very hard, because every time I spoke I was just spitting up blood, and I was just trying to stay conscious, because I just wanted to get him out of there before I died. He wouldn’t leave.”

Instead of leaving, Bruiser tugged on Flannelly’s uniform with his teeth. Realizing that Bruiser was trying to pull him to safety, Flannelly grabbed on to Bruiser’s body harness with his good arm. Bruiser then dragged Flannelly away



from the gunfire and explosions. “He dragged me back. I’m not sure how far it was. It seemed like forever. I don’t know where he got the strength to pull me. While he was dragging me, he was hit I believe two times, but he was determined to get me out of there. His loyalty was immeasurable. I’ll never be able to thank him enough for that. I owe my life to that dog.”

## 8. Conscience = Mirror (Silver)



**Share the text box with students:**

Our conscience is a mirror that empowers us to see our behavior in more objective ways.

### Two Paragraph Description of Conscience from the Supplemental Reading

Our conscience is a mirror that enables us to see our behavior in more objective ways. When we look in the mirror of conscience, we can recognize when we acted selfishly, when we were cruel, when we were dishonest, and when we behaved unjustly. Although it is not always easy to look in the mirror of conscience, it can become our best friend by helping us learn from our mistakes and develop as human beings. The mirror of conscience also allows us to see our society’s behavior in more objective ways. When Henry David Thoreau looked at his culture in the mirror of conscience, he realized slavery was wrong, even though it was legal to buy and sell “men, women, and children, like cattle at the door of its senate-house.” Just as silver is the most reflective metal and is often used in mirrors, we need our conscience to be lustrous and large enough to help us reflect not only upon ourselves, but also upon our society and civilization.

Physical fury occurs when empathy for our loved ones fuses with adrenaline, causing us to rush to their aid. Physical fury erupts like an intense burst of flame, causing us to rush toward danger to protect others. Moral fury is empathy, fusing with our conscience, coming to a slow boil. When millions of people turned on their televisions during the 1960s and saw unarmed African Americans being assaulted while peacefully struggling for freedom, the conscience of many Americans boiled and erupted in moral fury. Physical fury reacts to immediate physical danger, while moral fury responds to injustice, and these two forms of fury can overlap. When we see someone being assaulted, bullied, or abused in some other way, instead of being a bystander that allows a crime or abusive act to happen (this is known as the “bystander effect”), moral fury can motivate us to use our metis to make good decisions and take effective actions that provide help. Moral fury is the highest expression of conscience.

**Note:** Conscience also ties into not stealing, cheating, lying, and bullying. In order to discuss anti-bullying in a deep way, conscience must also be discussed. Integrity can be motivated not only

by conscience, but also by high ideals that are part of a strong muscle of hope, a sense of stewardship that is part of a strong muscle of appreciation, and a strong muscle of discipline that empowers us to focus and follow-through on what we believe in.

### **Conscience Probing Questions:**

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- What kind of person would you be if you had no conscience?
- What would the world be like if nobody had any conscience?
  - What types of behavior would be okay?
- What is an issue that you care about?
  - Why do you need conscience to help solve that problem?
- Is denying the existence of a problem a lack of conscience? Explain your thinking.
- Read the following to students: “Humans are fallible. Our metis (the power of thought) can help us make fewer mistakes and help us learn from our mistakes, but metis cannot make us completely immune to making mistakes. No matter how much metis we have, we will still be fallible because we are human. However, when we flex our muscles of empathy and conscience when making decisions, we are far less likely to make the kinds of mistakes that destroy shared trust.” Then ask them: What should you say or do if you realize that you have been cruel to someone and damaged shared trust with them?
- Identify some people who model moral fury and have responded to injustice.
  - What traits did these people have? What would the world be like if more people had these traits?
  - What would the world be like if nobody had these traits?
- Have you ever seen someone stand up for others? In what way did they do this?
  - What did they do? What did they say?
  - Why do you think they chose to stand up for others instead of being a bystander?
  - How was their behavior an example of moral fury?
- Does it take courage to express moral fury? Explain your thinking.

### Conscience Classroom Exercise

- Provide 8 to 10 examples of people who demonstrated moral fury. Have each table analyze one example and share back with the entire class. Examples could include Gandhi, the people involved in Operation Valkyrie, Hugh Thompson, Harriet Beecher Stowe, Harriet Tubman, Malala Yousafzai, Archbishop Oscar Romero, Wangari Maathai, Martin Luther King Jr., Antigone, Dr. Bennet Omalu, and Socrates.
- Provide a description of Galileo and his choice to recant his ideas. Galileo is a contrast to those who would not back down, even when threatened with death. Have students discuss the question: Did Galileo exhibit moral fury?
  - Does it hurt anyone if people don't know the earth goes around the sun?
  - If you aren't doing it for other people, is it moral fury?
  - Can you have moral fury over inaccurate knowledge?
  - Does it matter that he backed down to save his own life if nobody else's life was on the line?
  - If he had not backed down, might that have had a positive impact and in some way helped others?

### 9. Imagination = Galaxy (purple)



#### Share the text box with students:

Our imagination has the power to be its own kind of world, galaxy, and universe. It also has the power to influence the events that we experience in this world, galaxy, and universe.

### Two Paragraph Description of Imagination from the Supplemental Reading

Every invention, idea, and story that people ever created resulted from the human imagination. When we tell a compelling story, we also rely on people's ability to imagine the events we are depicting with our words. The Allegory of Metis is just one example of a story that

could not exist without the imagination of those who created it and the ability of those who hear this allegory to imagine it. We use our imagination when we create jokes that make people laugh, especially when we tell funny stories that create mental images in their imagination. Without imagination there would be no movies, television shows, video games, music, paintings, sculptures, books, technological breakthroughs, or scientific discoveries. Our cities, countries, and global civilization result from our imagination, because everything we create requires us to imagine.

Our imagination also gives us a greater capacity to hurt and destroy. Before people can commit any premeditated harm such as genocide, the enslavement of others, or a mass shooting, they must first use their imagination to make a plan. As a result, our imagination can be used in ways that are very harmful or very helpful to the well-being of others. The highest expression of our imagination is vision, which is our ability to imagine a brighter future that enhances well-being (such as a world where there are no genocides, slavery systems, or mass shootings). Vision also involves imagining the practical steps we can take to create such a future. Our imagination not only has the power to be its own kind of world, galaxy, and universe, but it also has the power to drastically influence the events that we experience in this world, galaxy, and universe.

### **Imagination Probing Questions:**

- How do you think human beings would be living if there had never been a person with an imagination?
  - Where would we be living?
  - What would we be doing?
  - What would we be eating?
  - Can human beings even survive in the wild if we lack an imagination?
  - This quote from *The Cosmic Ocean* (Chappell, 2015) can help students think about why human beings cannot survive in the wild without our imagination:

Our nomadic ancestors were the most vulnerable mammals in Africa. We are too slow to outspurt predators and too weak to quickly climb trees. Lions and leopards can climb trees much faster than the average human. We are too big to burrow underground for safety, and because our large brains take so long to develop, human children remain helpless for a longer period of time than the offspring of any other mammal. To make matters worse, we have no natural weapons such as fangs, claws, tusks, or horns. With no natural weapons, relatively weak bodies (in comparison to chimpanzees and gorillas), and the inability to outspurt much faster predators, how did our early ancestors survive?

- Of all the technological advancements that started with human imagination, which one do you appreciate most? Why?
- Of all the artistic creations forged from human imagination, which type would you be saddest to see disappear? Why?
- How does imagination affect our ability to hope? Explain your answer.
- The preceding description of imagination states: “The highest expression of our imagination is vision, which is our ability to imagine a brighter future that enhances well-being. Vision also involves imagining the practical steps we can take to create such a future.”
  - What is the difference between imagining the future and having a vision of the future?
  - Why does transforming a vision of the future into a reality require discipline? Why does it require hope? Why does it require reason?
- Gwendolyn Brooks, in her poem “Boy Breaking Glass,” writes:
 

“I shall create! If not a note, a hole.  
If not an overture, a desecration.”

  - What do you think she is saying about the muscle of imagination?
- Is your imagination unique to you?
  - Can your imagination build on someone else’s imagination?
  - How do you feel when someone builds on or changes something you imagined?
  - What would you do if you didn’t like the changes?
- We can imagine futures for humanity in which our deepest fears or our greatest hopes are actualized (made real).
  - What do you fear the future will be like?
  - What do you hope the future will be like?

## Peace Literacy Curriculum: An Introduction

### Part 2: The Muscles of Metis / The Muscles of Our Humanity

#### General Questions to Ask After Completing the Nine Muscles of Metis:

- What information do you get from viewing empathy as a muscle, and what different information do you get from viewing empathy as an eye?
  - Why depict empathy as both a muscle and an eye?
  - What is the value of using two metaphors?
  - How do these metaphors complement each other?
- How does using the balance exercise as a metaphor give us additional information about the nature and importance of empathy and the other metis muscles? (You can fall over and hurt yourself or fall on others if you lack balance/metis.)
- You can have students read the following *Seattle Times* article about a group of car salespeople who stole a mentally ill man's entire savings after he came in to buy a truck.

<https://www.seattletimes.com/seattle-news/car-salesmen-accused-of-bilking-mentally-ill-man/>

Then ask students the following questions.

- What metis muscles were the car salespeople using?
- What metis muscles were the car salespeople not using?
- If someone has strong muscles of language, reason, discipline, and imagination, but has weak muscles of empathy and conscience, what kind of person is this?
  - You can discuss many historical examples of people who have strong muscles of language, reason, discipline, and imagination but lack empathy and conscience (such as Hitler). You can also discuss examples from literature and films. You can ask students: how does a lack of empathy and conscience affect language, reason, discipline, and imagination? How can a lack of empathy and conscience reduce the full potential of our language, reason, discipline, and imagination?
  - Tell students, "It can be dangerous when our education system teaches some metis muscles, such as language, but not other metis muscles such as empathy and conscience. Hitler (and others like him) had a strong muscle of language but weak muscles of empathy and conscience. List some problems that can happen in a family,

- school, workplace, or on a national and global scale, when people have a highly developed muscle of language but weak muscles of empathy and conscience.” Ask students: if Hitler (and others like him) had a strong muscle of language but weak muscles of empathy and conscience, then should our education system teach all the muscles of metis? What are some ways in which this can be done?
- Can history and science be taught in a way that also strengthens our muscles of curiosity, imagination, appreciation, empathy, discipline, reason, hope, or conscience? What are some creative ways to do this?
- How is metis important in the workplace? In a workplace, what metis muscles would you want your coworkers and supervisor to have when they interact with you? Do any metis muscles seem more important than the others in a workplace?

## Peace Literacy Curriculum: An Introduction

### Part 2: The Muscles of Metis / The Muscles of Our Humanity

The culmination of the Muscles of Metis lesson is a “World Café” exercise, a rotating student-facilitated discussion. For more information about how to run a World Cafe, you can download a free guide here: <http://www.theworldcafe.com/tools-store/hosting-tool-kit/>

#### Directions:

Set up the room with five tables. Have the students cycle through all five tables over a 2-day period. Have the questions written out at each table ahead of time (modify the questions as needed for your students’ reading level). When you help students answer the questions at each table, encourage them to try to incorporate their own ideas, as well as the perspectives brought by the balance metaphor, the muscle metaphor, and the specific metaphor linked to that component of metis.

### Day 1

#### Table 1 – HOPE KEY QUESTIONS:

- Why is hope included as one of the nine muscles of metis?
- Why is hope important at all levels - to individuals, families, cities, countries, and the world, and what happens when it disappears at one of these levels?

#### Table 2 – REASON KEY QUESTIONS:

- Why is it so important to strengthen our muscle of reason?
- How does the strength of our muscle of reason affect us and how others perceive us?
- How does the strength of a leader’s muscle of reason impact companies and countries and the way they are perceived?

#### Table 3 – APPRECIATION KEY QUESTIONS:

- Try to remember that just because someone does something we find annoying, this doesn’t remove their positive qualities.
  - What are some positive qualities in people that we can appreciate?



- How can we use the muscle of appreciation to reduce our feelings of annoyance?
- What is an obstacle you overcame?
- What skills did you have to use to overcome it?
- How can we use overcoming obstacles, or just obstacles, to increase our appreciation?

**Table 4 – DISCIPLINE KEY QUESTIONS:**

- Why is discipline an important, but often overlooked, aspect of problem-solving, discernment, and taking effective actions?
- How do we increase our appreciation and even enjoyment (sense of fun) of discipline (timing, focus, and follow-through)?

**Table 5 – CURIOSITY KEY QUESTIONS:**

- What is the impact of curiosity on society?
- Provide some examples of curiosity and the impact you think they have had.

## Day 2

**Table 1 – LANGUAGE KEY QUESTIONS:**

- How do language skills affect our metis?
- How do the other muscles of metis affect how we use language?

**Table 2 – CONSCIENCE KEY QUESTIONS:**

- How does the presence, absence, strength, and/or weakness of the muscle of conscience affect us on an individual, family, community, and global level?

**Table 3 – EMPATHY KEY QUESTIONS:**

- How does adding or removing empathy alter the decisions and actions of individuals, companies, and countries?
- How does the muscle of empathy enhance the other muscles of metis?

**Table 4 – IMAGINATION KEY QUESTIONS:**

- Imagination can be an escape route from boredom. What are other benefits of using and strengthening your imagination?

- How does adding or removing the other muscles of metis transform our imagination, creativity, and vision for the future?

**Table 5 – “BECAUSE” KEY QUESTIONS:**

- The word “because” is the most persuasive word in the English language *because* of the human need for explanations, as well the human need for purpose. So, why should we talk about the nine muscles of metis?

As a final exercise for the World Café ask students to come up with their own metaphor for each one of the nine muscles of metis.