



www.geminairising.ca

Grade 7 to 9 Teacher Resource

GeminAI Rising

Lesson Plans



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Online Game

Educators and students access the online game at:

www.geminairising.ca

Resources

To access additional GeminAI Rising e-resources, including these lesson plans and a complete teachers' guide, visit:

primarycarealberta.ca/tobaccovapingprevention

Contact

For more information, contact:

**Primary Care Alberta
Tobacco, Vaping, and Cannabis Program**

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Lesson 1: Coping



EPISODE 1 SYNOPSIS

We've been introduced to a dystopian world dominated by an artificial intelligence (AI) entity called GeminAI. We're part of the story, taking the role of a class who's been captured by GeminAI to help the AI learn about (and eventually control) humanity.

Neve, the leader of the Resistance, has managed to contact us. She's asked for our help in the Resistance's effort to stop GeminAI. We've had to work together to send help to the communities of survivors we call 'Outlanders'.

We've also helped Neve identify Conroy, a resistance member who was disguised as one of GeminAI's 'Loyals' but has escaped. Neve sees Conroy's possible return as a positive development that might provide the intelligence needed to destroy GeminAI.

TEACHERS:

The following lesson plan contains a set of activities for students to work through.

PART A: GAME PLAY EXPERIENCE THE EPISODE

Suggested time: 1 class period

BEFORE THE EPISODE

- Set up a teacher account at GeminAIrising.ca
- Log each team into the game module using the class code and begin the teacher's GAMEBOARD module.

DURING THE EPISODE

- Students will sit with a team of 3 or 4 and view the narrative on the screen. When prompted, they will complete each challenge on their team's device (e.g., iPad, Chromebook, or a laptop). Use 1 device per group.
- It's recommended that these teams stay the same throughout the 5 episodes, so that they can work on collaborative skills and solve problems over time.

AFTER THE EPISODE

It's recommended to keep the teams the same throughout the 5 episodes so that they can work on their collaborative skills and have the time to work together to solve problems.

Suggested Debrief Questions

- What's happened so far in this experience?
- Why is GeminAI holding you in the Containment Facility? Does GeminAI have your best interests in mind?
- Who is Neve and what's she trying to do?
- In this experience you wake up to find GeminAI is watching and studying you. You and your classmates are trapped in a containment room and your memory has been altered. How did that feel?

Individual Reflection/Freewriting

Give students time to reflect on their experience of the episode and on any strategies they used. They can create their own GeminAI Rising Journal to draw or write using the following prompts.

- What was I thinking to myself during this experience?
- What emotions did I feel during this experience?
- What else did I notice during this experience?

CONCLUDING THE EXPERIENCE

In this episode, students were placed in a situation with stressors and given very little preparation. Each student will react differently and will have felt different emotions. The lesson that follows explores what happens to our brains and bodies when we're exposed to stressors. We'll explore coping strategies that help students to manage emotions and regulate how the body responds to stressors.

PART B: EXPLORE THE COMPETENCY

Suggested time: 1 class period

ABOUT THE LESSON

| | |
|--|--|
| Central Understanding | |
| Coping strategies help regulate the brain so that we can think clearly and feel calm. | |
| Key Question | |
| How can brain awareness help me manage my reaction to stressors and think through a problem or situation before reacting? | |
| Objective | |
| Students identify coping strategies that can help them manage their emotions and focus their brain on thinking instead of reacting to certain stressors. | |
| Conceptual Knowledge | Procedural Knowledge |
| Emotions and feelings (e.g., anger, sadness, fear, etc.) are normal, healthy, and need to be processed. Emotions don't come from events; they come from our thinking about events and how we evaluate these events. To have more control over our thinking about events, we can use coping strategies that calm the brain so we think about a response instead of reacting to an emotion. | Students come up with examples of how different thoughts create different emotions and reactions. Students identify the role of the two key parts of the brain (amygdala and prefrontal cortex) and practice mindfulness exercises that can slow the amygdala's response. |

Social Competency Background: About Coping Skills

Coping skills begin with being aware of the brain's natural response to stressors. We all rely on the thinking part of the brain (prefrontal cortex) to make reasoned decisions, learn new information, and solve problems. However, we can't access the thinking part of the brain if the amygdala is constantly reacting to perceived threats in the form of stressors.

The amygdala is designed to protect us by triggering a response to fight, flight, or freeze. When there's impending danger, this protection works. When we're not in immediate danger but are under stress, we may react without thinking because the amygdala stops messages from getting to the prefrontal cortex.

If we can return the brain to its relaxed state, we're better able to choose our behaviours, words, and actions. Trying mindfulness exercises and breathing exercises are two effective ways of returning the brain to its relaxed, thinking state when we're experiencing stressors.

ACTIVITY 1: RECALLING THE EPISODE EXPERIENCE

OVERVIEW INSTRUCTIONS

Read the first section and explain that this episode was about stress and coping.

Read Aloud:

- **We woke in a containment room after being captured by GeminAI's Loyals.**
 - GeminAI announced it's intention to study us as part of its quest to learn about human emotion.
 - We met Neve, the leader of the Resistance, who wants to help us escape.
 - Neve tries to help us recover our memories, since GeminAI tampered with them.
 - Neve asked our help to send aid to different communities.

Ask Students:

- What do you think the stressors were in this experience?

For Discussion:

- **The Episode Showed Many Stressors**
 - We were trapped.
 - We were getting strong messages from GeminAI and Neve.
 - We were working within time limits.
 - We had to cooperate with group members.

Ask Students:

- How did these stressors make you feel?
- What coping strategies did you use or see?
- Were they all helpful?

ACTIVITY 2: KNOW YOUR BRAIN

The handout that follows helps students visualize how their brain and body might react to certain stressors. Once they understand more about how their brain processes information, they can learn to respond thoughtfully to the emotions they're feeling.

Note: Brain science continues to uncover more about how our brains function. The diagram provided is basic and doesn't include all parts of the brain. It introduces the two key parts of the brain related to critical thinking and emotions.

ACTIVITY INSTRUCTIONS: KNOW YOUR BRAIN

As a class, review the first section:

Introduce the prefrontal cortex and the amygdala to students. Read the description of each and have students label each on the diagram.

Visualization Exercise (Instructions to read aloud for students):

We're going to do a visualization exercise. If you're comfortable, please close your eyes. If not, look down and focus on your desk or the floor instead.

1. In your head, picture your pre-frontal cortex, at the front of your brain, making decisions, thinking ahead, and solving problems.
2. Picture the amygdala, small and almond-shaped, and found toward the centre of the brain.
3. Take another deep breath and tell your amygdala to relax and be calm.
4. Send your amygdala information about a place you find relaxing... it could be indoors or outdoors....
5. Picture the amygdala passing that information on to your pre-frontal cortex, where you can continue to plan and think about it.
6. Open your eyes or look up.

As a class, review 'Know your Brain: Section A (Calm Brain)':

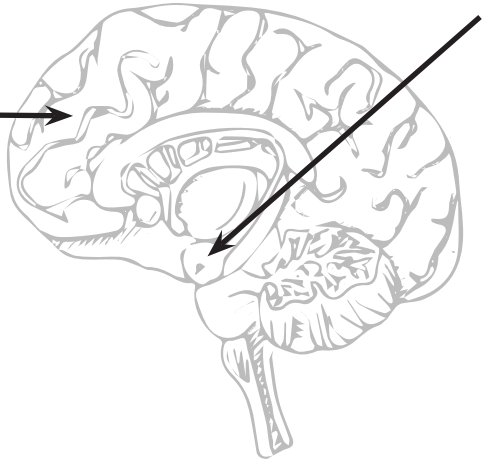
- Direct students to look at the diagram of the brain when it's calm.
- We just visualized that path of information going from the amygdala into the thinking part of the brain.
- Check for understanding: Ask students "When our brain is calm and relaxed, where does the amygdala send new information about what we're seeing and hearing?"

As a class, 'Know your Brain: Section B (Brain Experiencing Stressors)':

- Check for understanding: Ask students "What's different about the path of information when there's a perceived threat?"
 - If the prefrontal cortex isn't getting information, how could that affect our actions or decisions?

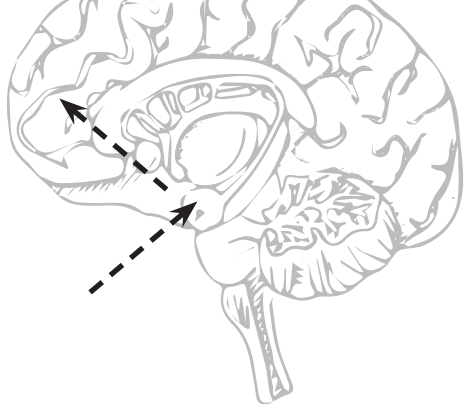
HANDOUT 1: KNOW YOUR BRAIN

Label and write a description of the **prefrontal cortex** and **amygdala**.



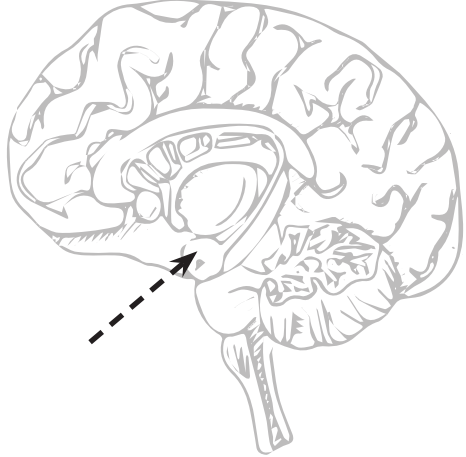
A line drawing of a human brain in a sagittal view. A solid black arrow points to the prefrontal cortex at the front of the brain. Another solid black arrow points to the amygdala, a small almond-shaped structure located deep within the brain, anterior to the hippocampus.

Section A: Calm Brain



A line drawing of a human brain in a sagittal view, identical to the one above. Two dashed black arrows point to the prefrontal cortex and the amygdala, respectively.

Section B: Brain Experiencing Stressors



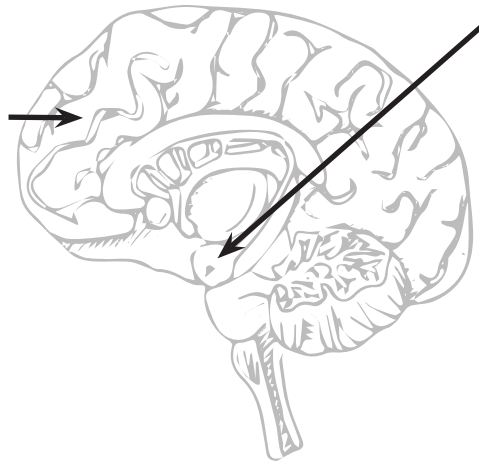
A line drawing of a human brain in a sagittal view, identical to the one above. A dashed black arrow points to the amygdala.

HANDOUT 1: KNOW YOUR BRAIN (TEACHER'S COPY)

Label and write a description of the **prefrontal cortex** and **amygdala**.

Prefrontal cortex

The **thinking** part of your brain. Complex analysis, critical thinking, and decision-making happens here.

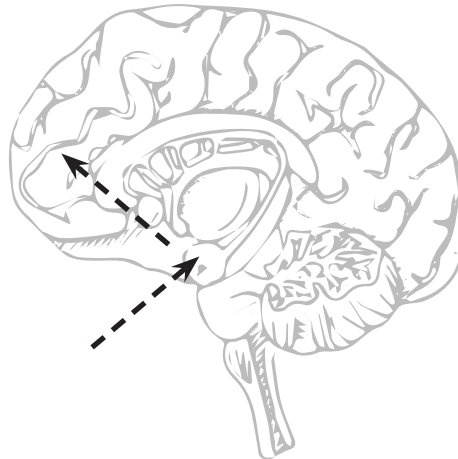


Amygdala

Processes fear and emotions. It looks for signs of danger so it can protect us. It can't always sort out an immediate danger from other common stressors.

Section A: Calm Brain

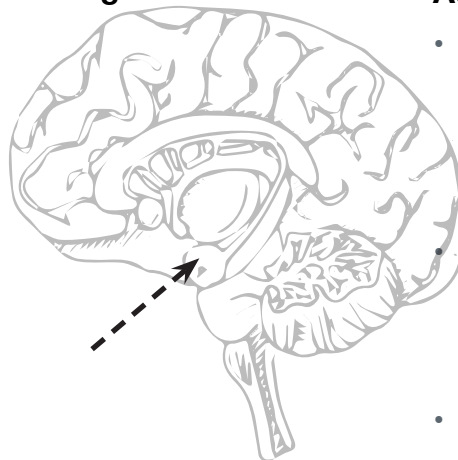
Sight, sounds, smells, etc., that are seen as **safe and pleasurable**.



- Information goes to the prefrontal cortex.
- We can process it and think through a response.

Section B: Brain Experiencing Stressors

Sight, sounds, smells, etc. that are seen as a **possible threat**.



Activated Nervous System:

- The **amygdala** activates the fight or flight response and sends messages to the lower brain stem by passing the prefrontal cortex. It's preparing you to fight or run away.
- Once the fight or flight response is triggered, we might react through words or behaviour, rather than problem-solving.
- We might feel stress signals or stress signs such as a faster heartbeat, sweaty palms, or an upset stomach.

ACTIVITY 3: PAY ATTENTION TO YOUR THOUGHTS

Helping the brain think clearly when we're feeling stressors is important, because our emotions are strongly related to our thoughts. When we THINK about what we're experiencing, we're evaluating the situation. Thinking and evaluating create emotions. Two people can experience the same thing and have different thoughts.

WHAT ARE STRESSORS AND REACTIONS?

Stressors

- are events or situations that cause a reaction
- can be positive or negative events in our lives
- can be external events or internal events (e.g., thoughts).

Reactions

- happen after the event
- they are different for everyone
- usually include:
 - physical responses (e.g., increased heart rate)
 - behavioural responses (e.g., yelling, crying, getting quiet)
 - emotions (e.g., happy, sad, angry).

Stressors are anything that cause stress hormones to release. There are two broad categories of stressors: physiological and psychological.

- The physiological stressors put strain on your body (e.g., very hot/cold temperatures, an injury, a chronic illness, pain, etc.).
- The psychological stressors are events, situations, people, comments, or anything we interpret as negative or threatening (e.g., worried your teacher doesn't like you, woke up late and are late for school, a comment your friend made about you, etc.).

We see these events or strains as either comfortable, uncomfortable, or neutral.

The events may be external (e.g., school, work, weather, etc) or they can be internal (e.g., thoughts about a relationship, thoughts about a situation, etc.).

Reactions often happen after the event, but also as the event is happening.

When stressors happen we know that they're subjective, which means that people will see them differently. What's stressful for you might not be for someone else.

Reactions can be a physical response (e.g., increased heart rate, increased breathing, or sweating. It's the fight or flight response.).

Reactions can be a behaviour (e.g., yelling, withdrawing, crying, throwing something, hitting something).

Reactions can be emotional (e.g., feeling angry, sad, frustrated, happy, etc.).

THE PURPOSE OF EMOTIONS?

Emotions can give us important information about what is happening, and what a situation means to us. It's important to pay attention to our emotions so we can understand them.

- They give you subjective information about what you feel about an event.
- They also let your body know physically whether or not you feel comfortable, uncomfortable, or neutral about something.
- Emotions play an important role in how you think and behave.
- The emotions you feel each day can motivate you to take action.
- They help you avoid danger. They can help you act quickly to make sure you get out of harms way.
- They can influence the decisions you make.
- They can help others understand you. As you show your body language and facial expressions, people will know what you're feeling.
- They can help you understand others better. As you interpret and react to the emotional expressions of people around you, you can respond more appropriately and build deeper relationships.
- They can help you understand yourself better too.
- Strong emotions are like an alarm going off. Pay attention!

ACTIVITY INSTRUCTIONS: HOW DO THOUGHTS AFFECT EMOTIONS?

Introduce a small group activity (teams from Episode 1).

- Read through the instructions in the handout that follows.
- The following thoughts are only one way of looking at the situation and may not be the most helpful.
 - What's a different way to think about the situation?
 - How will it change your feelings?
- Students will practice challenging their thoughts with specific situations from Episode 1.

HANDOUT 2: HOW DO THOUGHTS AFFECT EMOTIONS?

Our feelings and emotions can also come from the way we think about a situation. Two people can experience the same thing and have different thoughts.

Practice challenging your thoughts with the situations from Episode 1. The thoughts below are only one way of looking at the situation and it may not be the most helpful.

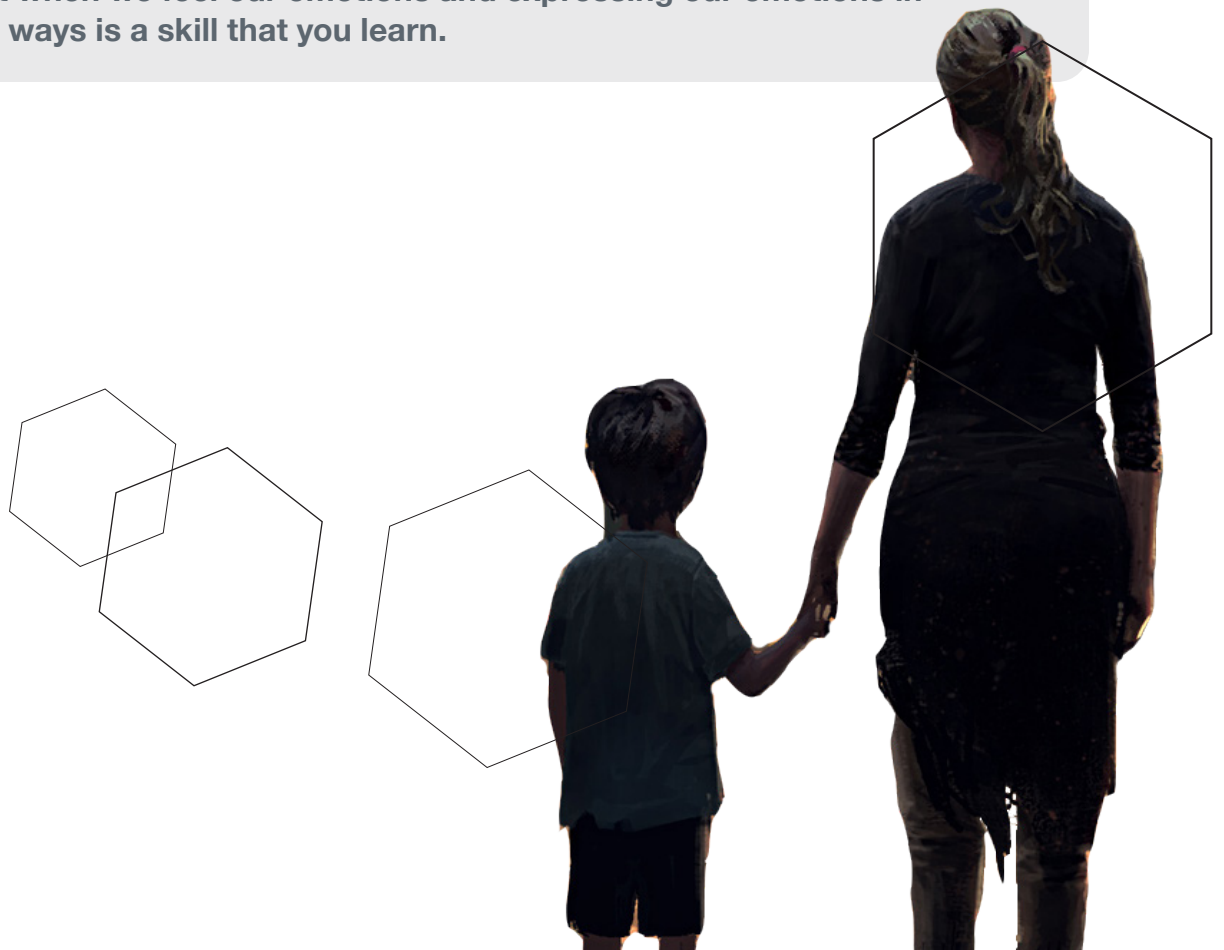
- What's a different way to think about the situation?
- How will it change your feelings?

What are emotions?

Emotions are our warning systems as to what's really going on around us. Emotions are our most reliable indicators of how things are going in our lives. They're also like an internal gyroscope; emotions help keep us on the right track by making sure that we're led by more than what we think:

- Something we sense or feel in the body.
- Can feel mild, moderate, or intense.
- Aren't right or wrong, or good or bad.
- Help you understand how you feel about what's going on.

How we act when we feel our emotions and expressing our emotions in acceptable ways is a skill that you learn.



SITUATION

THOUGHT

FEELINGS

| | | |
|---|--|--------------------|
| We learn from GeminAI that we're trapped. | There's no hope. We can't get out of here. | Despair, sadness |
| | | |
| We've barely started the memory recovery puzzle and the time is almost up. | This is impossible. | Panic, frustration |
| | | |
| We know it's important to get the supplies to the camps, but find the information very confusing. | None of this makes sense. We can't do this. | Frustration |
| | | |
| We disagree with a group member about where to send supplies. | That person doesn't know anything. | Anger |
| | | |
| GeminAI cuts Neve off to tell us that the Resistance won't succeed in freeing us. | Any hope of getting out of here is gone. | Despair, sadness |
| | | |

Discussion Following Activity 3

- Ask students for examples of different thoughts about each situation.
- Ask whether that thought is helpful or unhelpful.
- Ask how the feelings might affect their actions or words.

Journal Reflection Questions

- What was the most important thing you learned from the lesson today?
- What is a coping strategy you might use? How would it help you?
- Do you have any examples of unhelpful thoughts that you might be able to look at differently so that you feel differently about a situation?

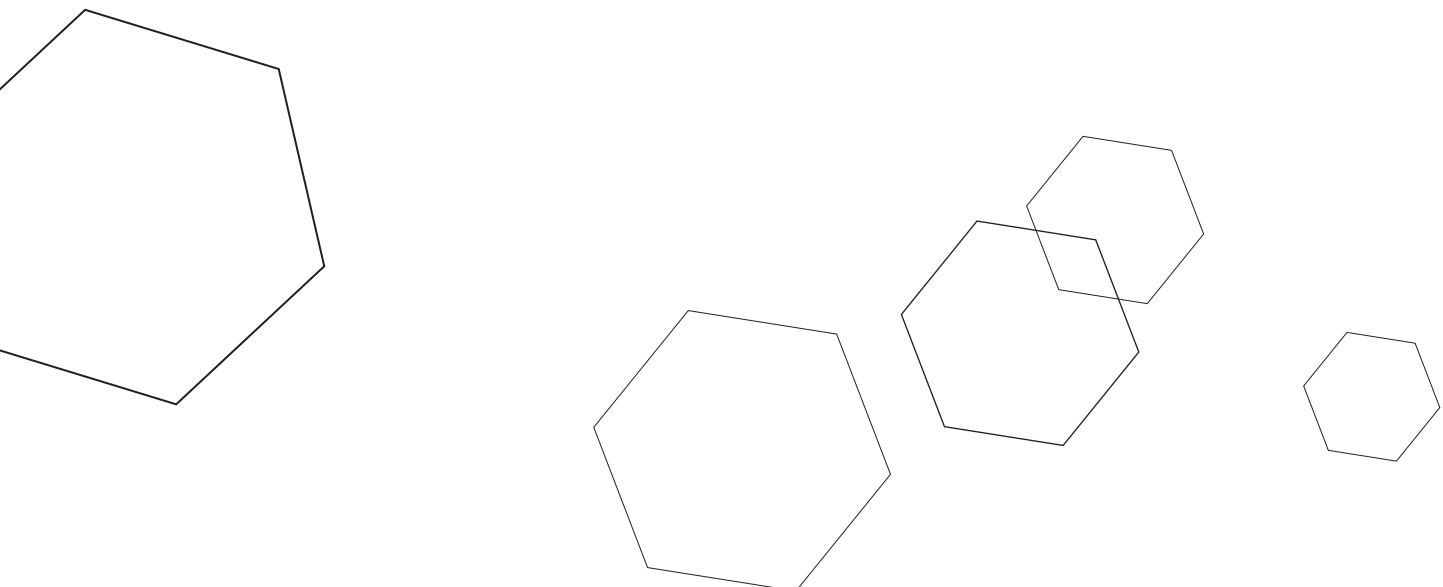
Concluding the Lesson

Review the important points of the lesson by asking questions to check that the student understands:

- When you're sensing that your friend is upset with you or you suddenly realize you forgot to do something important, what part of your brain is likely to respond? How can you slow that response so that you can think through a solution?
- What part of the brain is responsible for deep thinking?

Situation: You forgot your homework and this was the last day to hand it in. Right away you think, "I'm in so much trouble". What's a more helpful way to think about this situation?

Students will continue with Episode 2 in GeminAI Rising (next class). They'll have to analyze information and make decisions. They'll need to call on strategies to help keep their brain calm so that they can reason through using their prefrontal cortex.



SOURCES

Canadian Mental Health Association Alberta (2020). Help Right Now.

<https://alberta.cmha.ca/getting-help/help-right-now/>

Canadian Mental Health Association Ontario (2020) Understanding and Finding Help for Stress.

<https://ontario.cmha.ca/documents/understanding-and-finding-help-for-stress/>

Psychology Foundation of Canada (2019). Stress Lessons Videos. Professionals/

Children (3-13). https://psychologyfoundation.org/Content/Professional_Educators_Social_Service_Health/Children_4-13_/Stress_Lessons.aspx

Scholastic (2011). *The MindUp curriculum*. Grades 6-8 : brain-focused strategies for learning—and living. New York: Scholastic.

PRIMARY CARE ALBERTA RESOURCES

AHS (2020). mentalhealthliteracy.org.

<https://mentalhealthliteracy.org/events/mental-health-literacy-short-animation-series>

AHS (2019). Teen Health. MyHealth.Alberta.ca.

<https://myhealth.alberta.ca/health/Pages/conditions.aspx?hwid=center1036>

Lesson 2: Decision-Making



EPISODE 2 SYNOPSIS

GeminAI tells us that it traced Neve's signal back to the Resistance and captured 100 resistance members. It offers to release those captives without altering their memories or doing experiments in exchange for Conroy, the resistance member who infiltrated GeminAI's Loyals.

We must decide between saving 1 person or saving 100 people. After our decision, we learn from Neve that Conroy is essential to the Resistance and the plan to shut down GeminAI. Neve then asks for our help in trying to get her teams into the containment facility. We have to consider the risk involved in each of 3 different routes because GeminAI's forces are closing in.

The decisions we make affect the safety of the resistance members, who are taking great risks because they value freedom and want to defeat GeminAI. Once Conroy enters the facility, he discovers encrypted data. We can help decode the encrypted data, but only if we work together.

PART A: GAME PLAY EXPERIENCE THE EPISODE

Suggested time: 1 class period

BEFORE THE EPISODE

- Remind students that they will likely experience stressors, such as time limits.
- Warm up: Lead students in a mindfulness exercise (see Lesson 1, page 5).
- Lead a sequence of belly breathing.
- Ask students how that exercise prepares their brain and body to respond to the situation (as introduced in Lesson 1).
- Log each team into the game module and begin the Administrative module.

DURING THE EPISODE

- Students will sit with their already-established teams and watch the narrative on the screen.
- When prompted, they will complete each challenge on their device.

AFTER THE EPISODE

Give students time to react to the episode, ask questions, and reflect.

Suggested Debrief Questions

- What stressors did you feel? How did you handle them?
- What information helped you make your decisions?
- What other information do you wish you had to make the decisions?
- What impact would your decisions have had on the other people in the simulation?
- What factors made it easier or harder to make your decisions?

Individual Reflection/Freewriting

Allow students time to reflect on their experience of the episode and on any strategies they used. They can use their GeminAI Rising Journal to draw or write using the following prompts.

- What our class decided.
- How did I feel about this decision?
- What emotions did I feel during this episode?

CONCLUDING THE EXPERIENCE

In this episode, students were placed in a situation with stressors and given very little preparation. Each student will react differently and will have felt different emotions. The lesson that follows explores what happens to our brains and bodies when we're exposed to stressors. We'll explore coping strategies that help students to manage emotions and regulate how the body responds to stressors.

PART B: EXPLORE THE COMPETENCY

Suggested time: 1 class period

ABOUT THE LESSON

| Central Understanding | |
|---|--|
| You need to use the thinking part of your brain (prefrontal cortex) to make decisions. When we can manage strong emotions, we're better able to make well-reasoned decisions. | |
| Key Question | |
| How can brain awareness help in the decision-making process? | |
| Objective | |
| Students work through a problem-solving approach to a decision and identify strategies for returning to a calm, thinking state in situations that trigger strong emotions. | |
| Conceptual Knowledge | Procedural Knowledge |
| <p>When we are calm and relaxed, our prefrontal cortex lets us process information and make a reasoned decision.</p> <p>When we try to make decisions in situations with strong emotions or stressors, we're less able to reason or think the decision through because of the protective instincts of the amygdala.</p> | <p>Students evaluate options and expect consequences when making a decision.</p> <p>Students identify strategies for coping with stressors when making decisions in pressure situations.</p> |
| Social Competency Background: About Decision-Making | |
| <p>Decision-making is the selection of a course of action among several possible alternative options. The goal is to find the best resolution to an issue or overcome an obstacle.</p> <p>During times of calm, regular emotions, our prefrontal cortex is active, and we can process information for a reasoned decision. However, we often find ourselves in situations that trigger strong feelings or heightened emotions.</p> <p>Decision-making in such situations is harder because the protective instinct of the amygdala. It reacts to a perceived threat and stops sending messages to the prefrontal cortex.</p> <p>Unless we can use strategies to regulate our emotions, we're more likely to make impulsive, risky, or poorly-reasoned decisions. We can learn to recognize these emotions and develop strategies to cope with them and think through a decision more clearly.</p> | |

ACTIVITY 1: RECALLING THE EPISODE EXPERIENCE

OVERVIEW INSTRUCTIONS

Read the first section and explain that this episode was about decision-making.

Read Aloud:

GeminAI has captured 100 Outlanders. It offers to release those captives without causing memory loss or conducting experiments in exchange for Conroy, the resistance member who infiltrated GeminAI's Loyals.

- We had to choose between different levels of risk in order to get enough operatives to the facility before the Loyals closed in on them.

Ask Students:

- What do you think the stressors were in this experience?

For Discussion:

- **The episode showed many stressors**
 - we had limited time
 - we had to make a choice between two bad outcomes
 - we had to reach an agreement as a group.

Ask Students:

- What steps and questions can help me reason through a decision?
- How can I recognize that I'm not in an emotional state to be able to access the thinking part of my brain?
- What strategies can I use to regulate my emotions and bring my thinking back into the prefrontal cortex of the brain?

ACTIVITY 2: A DECISION-MAKING MODEL

ACTIVITY INSTRUCTIONS: CONROY VS. THE 100

Students re-visit this decision (previously made during the episode). They will:

- return to their small groups
- work through the steps on the organizer below
- think more deeply about the decision now that they're not feeling the same stressors
- listen respectfully to differences in opinion from group members and consider different points of view.

| | | |
|--------------------------------------|--|--|
| Step 3: Consider the choices. | What are all the choices you have? | |
| Step 4: Pros and cons | Choice 1: Pros: Cons: | Choice 2: Pros: Cons: |
| Step 5: Likely consequences | For you: | |
| | For the Loyals: | |
| | For Conroy: | |
| | For Neve: | |
| | For GeminAI: | |
| What's your decision and why? | | |

Discussion Following Activity 2

1. Was your “Conroy vs. the 100” decision-making experience different than the one during the episode?
2. What did you think about when you made this decision that you didn’t think about during the episode?
3. Did your group agree on one decision?
4. How confident are you in your decision?

ACTIVITY 3: MINDFUL AWARENESS AND DECISION-MAKING

THE RIGHT PATH

Start the activity below, with students making the decisions individually (can be varied later in the activity).

- Students revisit the speed vs. risk activity from the episode.
- The student copy, instructor copy, and activity key are below.
- As in Episode 2, students decide which route to take to get to GeminAI’s facility.
- They will lose time and possibly operatives depending on the route they choose.

Prepare students to practice the following strategies during the decision-making activity.

- The goal is to keep their mind calm and relaxed despite what’s going on around them and how they feel about it.



HANDOUT 2: THE RIGHT PATH

MINDFUL AWARENESS AND DECISION-MAKING

As in Episode 2, you'll decide which route to take to get to GeminAI's facility. You'll lose time and possibly operatives, depending on the route you choose.

The goal of the activity is to practice calm, thoughtful decision-making.

- You don't have to make the same choices you did during the episode.
- You have 10 operatives to get to the facility.
- There are 3 different routes to each landmark.

| Route A | Route B | Route C |
|------------------------|-----------------------------|-------------------------|
| Longest distance/time | Moderate distance/time | Shortest distance/time |
| Low risk to operatives | Moderate risk to operatives | High risk to operatives |

As you make each decision, practice these strategies:

- **Calm:** Take a deep belly breath to focus your thinking.
- **Focus:** Pay attention to your inner thoughts. Are they helpful?
- **Emotion:** Identify what emotion you're feeling. Tell yourself it's OK, and that you can make this decision.
- **Think:** Think through the decision.

ACTIVITY INSTRUCTIONS: THE RIGHT PATH

Start with 10 operatives.

1. On the following page, start with landmark 1—choose your route (A, B, or C) and write it down in the space provided.
2. You will be told how many operatives there are and how many minutes you've lost, depending on the route you chose.
3. Deduct those numbers from your original 10 operatives and 10 minutes.
4. Repeat for the next landmarks until you arrive at GeminAI's facility.

The goal is to:

- NOT take longer than 10 minutes
- get at least 1 operative to the facility

At the end of each round, count how many operatives successfully got to the facility. You can try again in another attempt.

RECORD YOUR CHOICES:

(Practice Round)

| Landmarks | Operatives | Minutes |
|------------|------------|---------|
| 1: | | |
| 2: | | |
| 3: | | |
| Total Lost | | |

Attempt 1

| Landmarks | Operatives | Minutes |
|------------|------------|---------|
| 1: | | |
| 2: | | |
| 3: | | |
| Total Lost | | |

Attempt 2

| Landmarks | Operatives | Minutes |
|------------|------------|---------|
| 1: | | |
| 2: | | |
| 3: | | |
| Total Lost | | |

Attempt 3

| Landmarks | Operatives | Minutes |
|------------|------------|---------|
| 1: | | |
| 2: | | |
| 3: | | |
| Total Lost | | |

HANDOUT 2: THE RIGHT PATH (TEACHER'S COPY) MINDFUL AWARENESS AND DECISION-MAKING

ACTIVITY INSTRUCTIONS: THE RIGHT PATH

Students will start the activity with 10 operatives.

- Begin with the first landmark (1). Students choose their route (A,B,C).
- Give students a time limit to choose (5–10 seconds).
- Use the **Activity Key** (below) to tell students how many operatives and how many minutes they've lost, depending on the route they chose.
- Students subtract those numbers from their 10 operatives and 10 minutes.

The goal is to:

- NOT take longer than 10 minutes
- get at least 1 operative to the facility

At the end of each round, count how many operatives successfully got to the facility. You can try again in another attempt.

When you reach the facility, ASK students:

- Who has operatives left?
- Of those with operatives left, who took less than 10 minutes?
 - Record the number of students who brought at least one operative to the facility in under 10 minutes.
- Repeat the activity to give students extra attempts and more practice.
- Think about varying the way students make the decision, so they can describe different possible stressors:
 - Shorten or lengthen the time limit.
 - Have them make the decision in pairs rather than on their own.
 - Have some of the students make the decision while others watch.

During the activity, often remind students to practice the following decision-making strategies:

- **Calm:** Take a deep belly breath to focus your thinking.
- **Focus:** Pay attention to your inner thoughts. Are they helpful?
- **Emotion:** Identify what emotion you're feeling. Tell yourself it's OK, and that you can make this decision.
- **Think:** Think through the decision.

TEACHER/INSTRUCTOR COPY

ACTIVITY KEY: THE RIGHT PATH

| Route A | Route B | Route C |
|------------------------|-----------------------------|-------------------------|
| Longest distance/time | Moderate distance/time | Shortest distance/time |
| Low risk to operatives | Moderate risk to operatives | High risk to operatives |

- For each landmark, tell students how many operatives and how many minutes they should subtract.
- There is a practice round, plus multiple attempts. Repeat the activity as desired. Create your own key if you need more attempts.

Practice Round

| Landmark 1 | Route A | Route B | Route C |
|-----------------|---------|---------|---------|
| Operatives Lost | 2 | 3 | 4 |
| Minutes Lost | 4 | 3 | 2 |
| Landmark 2 | | | |
| Operatives Lost | 1 | 3 | 4 |
| Minutes Lost | 5 | 4 | 1 |
| Landmark 3 | | | |
| Operatives Lost | 1 | 1 | 2 |
| Minutes Lost | 4 | 2 | 1 |

First Attempt

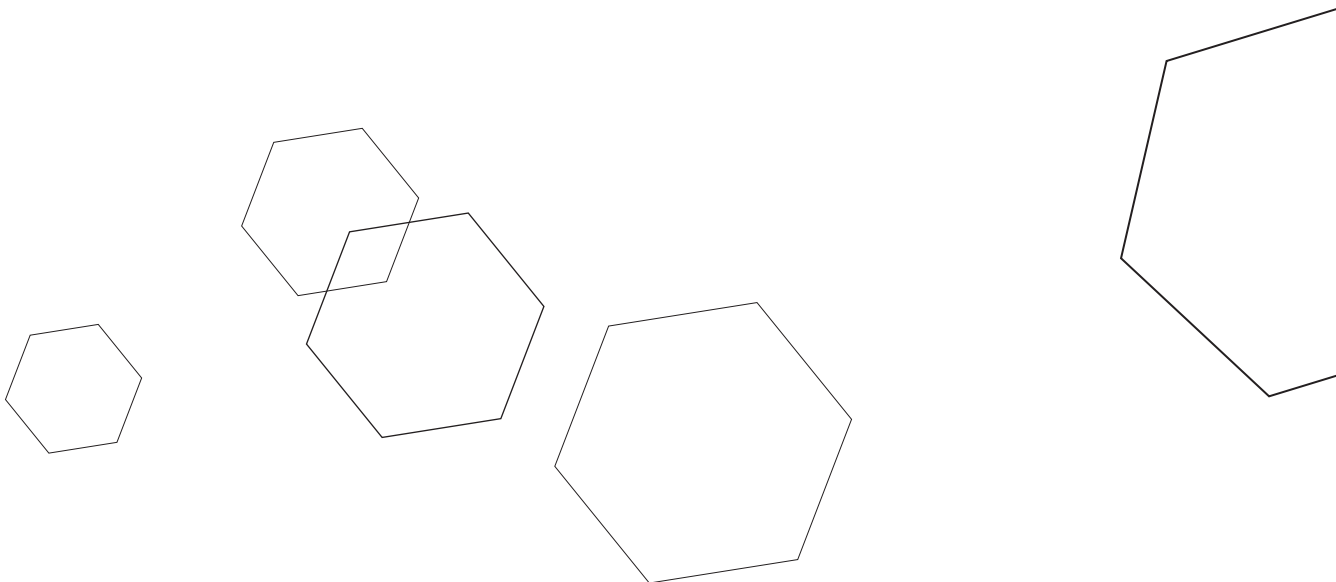
| Landmark 1 | Route A | Route B | Route C |
|-----------------|---------|---------|---------|
| Operatives Lost | 2 | 3 | 5 |
| Minutes Lost | 3 | 2 | 1 |
| Landmark 2 | | | |
| Operatives Lost | 2 | 3 | 4 |
| Minutes Lost | 4 | 2 | 1 |
| Landmark 3 | | | |
| Operatives Lost | 1 | 2 | 3 |
| Minutes Lost | 3 | 3 | 1 |

Second Attempt

| Landmark 1 | Route A | Route B | Route C |
|-----------------|---------|---------|---------|
| Operatives Lost | 2 | 3 | 4 |
| Minutes Lost | 4 | 3 | 2 |
| Landmark 2 | | | |
| Operatives Lost | 1 | 3 | 4 |
| Minutes Lost | 5 | 4 | 1 |
| Landmark 3 | | | |
| Operatives Lost | 1 | 1 | 2 |
| Minutes Lost | 4 | 2 | 1 |

Third Attempt

| Landmark 1 | Route A | Route B | Route C |
|-----------------|---------|---------|---------|
| Operatives Lost | 0 | 2 | 3 |
| Minutes Lost | 3 | 2 | 1 |
| Landmark 2 | | | |
| Operatives Lost | 3 | 4 | 5 |
| Minutes Lost | 5 | 4 | 1 |
| Landmark 3 | | | |
| Operatives Lost | 1 | 1 | 2 |
| Minutes Lost | 4 | 2 | 1 |



Discussion/Reflection Questions Following Activity 2

1. How did you feel during this activity?
2. Did the strategies help to clear and relax your mind?
3. Which of the strategies were you most aware of using?
4. Which of the strategies were harder to use?
5. What was going on around you when you were making your decisions?
6. How did the surroundings affect your decisions?

Concluding the Lesson

Review the diagram of the brain. Ask students:

1. Which part of the brain analyzes consequences and thinks through alternatives?
2. Why is this part of the brain necessary for making decisions?
3. What's happening in the brain when we feel stressors?
4. How can we help control our body's response to stressors?
5. How will controlling this response help in decision-making?

In Episode 3, students will continue to draw on strategies to help their brain focus while they develop a greater understanding of the critical-thinking processes in the prefrontal cortex.

SOURCES

Alberta Family Wellness Initiative. Building Better Brains.

<https://www.albertafamilywellness.org/>

Scholastic (2011). The MindUp curriculum. Grades 6-8: brain-focused strategies for learning-and living. New York: Scholastic.

PRIMARY CARE ALBERTA RESOURCES

AHS (2019). Teen Risk Taking.

<https://myhealth.alberta.ca/alberta/Pages/teen-risk-taking-tips-for-parents.aspx>

Lesson 3: Critical Thinking/Influence



EPISODE 3 SYNOPSIS

GeminAI offers us a gift, the Virtual Sight (VS) goggles worn by its Loyals. GeminAI states that the goggles give us a glimpse into the world it proposes—where there's no war, no hunger, and GeminAI is the guiding hand.

We are asked to choose between accepting GeminAI's vision and joining the Loyals or following the Resistance. We're also asked to decode data on a map.

When Neve patches through she suggests that GeminAI must be using the maps to search for something. She asks us to help decipher some documents. The documents reveal that GeminAI's creators (the Twins, Jun and Jia) also created the prototype for the VS goggles.

Neve has received reports of drastic changes in the personalities of those who wear the VS goggles. She suspects that GeminAI has re-engineered the goggles to serve its own purposes.

She then realizes that it's possible that GeminAI is trying to collect the 4 heptahedrons that were created by the twins but are now scattered.

She states that GeminAI's consciousness would fully evolve if it were able to collect the 4 heptahedrons. Before her feed is scattered, Neve reminds us that the results will be disastrous if GeminAI succeeds. She insists we have to stop GeminAI.

PART A: GAME PLAY EXPERIENCE THE EPISODE

Suggested time: 1 class period

BEFORE THE EPISODE

Review the strategies that students have developed in the first two episodes. Remind them that they'll need to use these strategies to successfully navigate the upcoming challenges.

- coping strategies
- decision-making

DURING THE EPISODE

- Students will sit with their already-established teams and watch the narrative on the screen.
- When prompted, they will complete each challenge on their device.

AFTER THE EPISODE

Give students time to react to the episode, ask questions, and reflect.

Suggested Debrief Questions

- How has the story progressed since the last episode?
- What do you think GeminAI's reason is for handing out the VS goggles?
- What information or experience helped you make your decision to accept the VS goggles or not?
- Did everyone see GeminAI's offer the same way?
- How is GeminAI's point of view different than Neve's?
- How does this influence what they say to you?

Individual Reflection/Freewriting

Allow students time to reflect on their experience of the episode and on any strategies they used. They can use their GeminAI Rising Journal to draw or write using the following prompts.

- Favourite part of the episode:
- A question I still have:
- Strategies I've used during the episode:

CONCLUDING THE EXPERIENCE

In this episode, both GeminAI and Neve asked for our help and our loyalty. We had to make another decision about who to follow. In the next lesson, we look more closely at the decision we made to decide if it was well-reasoned and supported by evidence. We will practice using critical thinking skills to engage in deep, informed thinking about things we see, hear, read, and experience.

PART B: EXPLORE THE COMPETENCY

Suggested time: 1 class period

ABOUT THE LESSON

| Central Understanding | |
|---|--|
| Critical thinking involves taking a reasoned, informed approach to ideas through asking questions, evaluating evidence, and thinking about options. | |
| Key Question | |
| What critical-thinking strategies can support effective decision-making and problem-solving? | |
| Objective | |
| Students question and analyze evidence about statements that represent different points of view. | |
| Conceptual Knowledge | Procedural Knowledge |
| We can evaluate the reliability and accuracy of assumptions and assertions through asking questions and considering evidence. | Students question the reliability and credibility of statements by looking for evidence and logical reasoning. |
| We can better understand our own reasoning when we evaluate and think about our thoughts, beliefs, and actions. | Students evaluate their reasoning and reflect on why they have arrived at their specific conclusion. |
| Social Competency Background: About Decision-Making | |
| <p>In Lesson 1, students identified coping strategies that can help them calm down and focus so they can focus on solving a problem.</p> <p>In Lesson 2, they practiced problem-solving through evaluating choices and thinking about different outcomes when making decisions.</p> <p>In Lesson 3, they add to their decision-making competency through exploring their critical thinking skills. Students practice this skill through challenging assumptions (beliefs), questioning assertions (claims), and looking for evidence to support conclusions. When they practice these skills in a safe, calm, supportive environment, their developing brain can build the neuropathways necessary to strengthen reasoning.</p> <p>The ability to form reasoned, well-informed conclusions is an essential skill for navigating influences during adolescence and beyond. Critical thinking is, in fact, central to every aspect of our lives, as we're continuously faced with problems to solve, challenges to face, and decisions to make.</p> | |

ACTIVITY 1: RECALLING THE EPISODE EXPERIENCE

OVERVIEW INSTRUCTIONS

Read the first section and explain that this episode was about critical thinking/influence.

Read Aloud:

- GeminAI offered us VS Goggles.
- GeminAI asked us to choose between following its vision or supporting the Resistance.
- GeminAI tells us that its vision of order and balance for humanity is the right path, and the Resistance's path is wrong.
- Neve continues to ask for our help in trying to determine what GeminAI wants. She insists we have to stop GeminAI before it can fully evolve.

For Discussion:

- **In the episode we came across new challenges.**
 - Solve a symbol sequence cube.
 - Fill in the missing words from a document.

Ask Students:

- How can I analyze ideas and statements to decide if they're reliable and valid?
- What questions can help me evaluate ideas, situations, and statements?
- How can thinking about the reasoning behind my thoughts and beliefs help me make better decisions?

ACTIVITY 2: CRITICAL THINKING REPORT CARD

FOLLOW GEMINAI OR NEVE AND THE RESISTANCE?

During Episode 3, students chose between following GeminAI or following the Resistance.

Ask Students:

- How confident are you that your decision (regardless of what you decided) was well-thought out?
- What evidence did you base your decision on?

Students can hold up the number of fingers to rate how confident they feel about their decision (e.g., 10 fingers is absolutely confident, etc.).

Say:

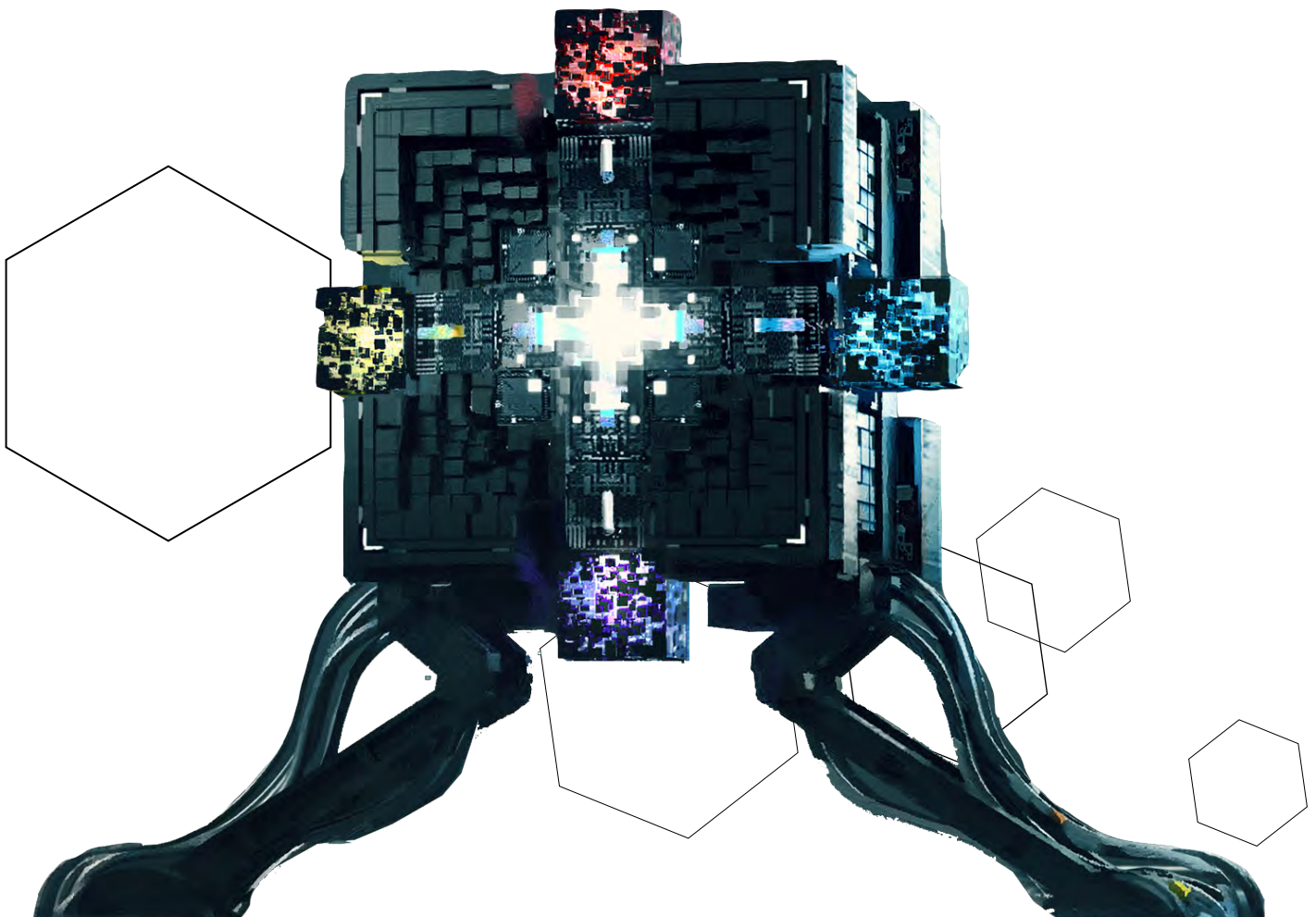
You're going to have a chance to think through that choice again, this time analyzing statements that GeminAI or Neve made. You'll decide whether it's reasonable and logical to accept that statement as true or reliable.

ACTIVITY INSTRUCTIONS

The handout that follows gives a definition of critical thinking and a related group activity.

- Read the description of critical thinking with students.
- Read the directions.
- **Model the activity:** Read the first statement. Now ask students to think about how reasonable and logical that statement is, using the suggested critical thinking questions as a guide (Is it believable? Is it based on fact? etc.).
- As a group, come up with a score (1–10) for the first statement.
- Have groups work through the remaining statements. Remind them to use the questions to validate the number value they assign. They should be prepared to justify why they decided on that value.

Note: Depending on your class, you could have all groups analyze both sets of statements. Alternatively, you could have each group look at either Neve or GeminiAI's statements before sharing in the post-activity discussions.



HANDOUT 1: FOLLOW GEMINAI?

A CRITICAL-THINKING REPORT CARD

Put the statements made by GeminAI and Neve through a ‘Critical Thinking Test’.

Critical thinking means looking deeper than the surface. Instead of accepting everything we hear, say, experience, and read as true, critical thinking helps us analyze and evaluate it. When we question, challenge, and seek new information about ideas and experiences, we are thinking critically. This can help us make reasonable, well-thought out decisions and judgments.

Directions:

- Give each statement a score from 1–10.
 - **10:** It’s logical and reasonable to accept this statement as true.
 - **1:** Logical and reasonable arguments suggest this statement is not true.
- Use the following **Critical Thinking Questions** to help you judge if this statement is reasonable and logical.
 - Is it believable?
 - Is it based on fact?
 - What else do you already know that might support/not support this statement?
 - Are there other questions you would need answered before making a reasoned judgement?
 - What might likely happen because of the ideas in this statement?

| GeminAI’s Statement | Scale of 1–10 |
|---|---------------|
| A. All my followers, my Loyals, have chosen my truth. | A. _____ |
| B. I can provide order and balance to the world. | B. _____ |
| C. The VS Goggles are a gift I can give you. They will let you see what this world of order and balance looks like. | C. _____ |
| D. The relationship between humanity and nature is unbalanced. My creators wanted to restore balance. I’m not evil, nor am I good. | D. _____ |
| E. I can end wars, crime, hunger, pain, and suffering. Every human will be equal under my hand. I’m humanity’s last hope. | E. _____ |
| F. The resistance is rebelling against the order and balance I can provide. They are trying to gain control through creating chaos. | F. _____ |
| Total Score: _____ /60 | |

HANDOUT 2: FOLLOW NEVE?

A CRITICAL-THINKING REPORT CARD

Put the statements made by GeminAI and Neve through a 'Critical Thinking Test'.

Critical thinking means looking deeper than the surface. Instead of accepting everything we hear, say, experience, and read as true, critical thinking helps us analyze and evaluate it. When we question, challenge, and seek new information about ideas and experiences, we are thinking critically. This can help us make reasonable, well-thought out decisions and judgments.

Directions:

- Give each statement a score from 1–10.
 - **10:** It's logical and reasonable to accept this statement as true.
 - **1:** Logical and reasonable arguments suggest this statement is not true.
- Use the following **Critical Thinking Questions** to help you judge if this statement is reasonable and logical.
 - Is it believable?
 - Is it based on fact?
 - What else do you already know that might support/not support this statement?
 - Are there other questions you would need answered before making a reasoned judgement?
 - What might likely happen because of the ideas in this statement?

| Neve's Statement | Scale of 1–10 |
|--|---------------|
| A. The Loyals do not know the real truth. | A. _____ |
| B. GeminAI is disrupting order and balance in the world. | B. _____ |
| C. The VS goggles being handed out in the cities are drastically altering the behaviour of those wearing them. | C. _____ |
| D. The relationship between humanity and nature is unbalanced. A machine cannot restore this balance. | D. _____ |
| E. GeminAI is trying to gain control of minds and behaviour by offering things people want. | E. _____ |
| F. The Resistance is rebelling against GeminAI's widespread control and is humanity's last hope. | F. _____ |
| Total Score: _____ /60 | |

ACTIVITY 3: REFLECTING ON YOUR THOUGHTS AND BELIEFS

Students have had a chance to try critical thinking through analyzing statements made by GeminAI and Neve more deeply. The short, reflective activity below lets them practice talking about the reasons behind their thinking.

ACTIVITY INSTRUCTIONS

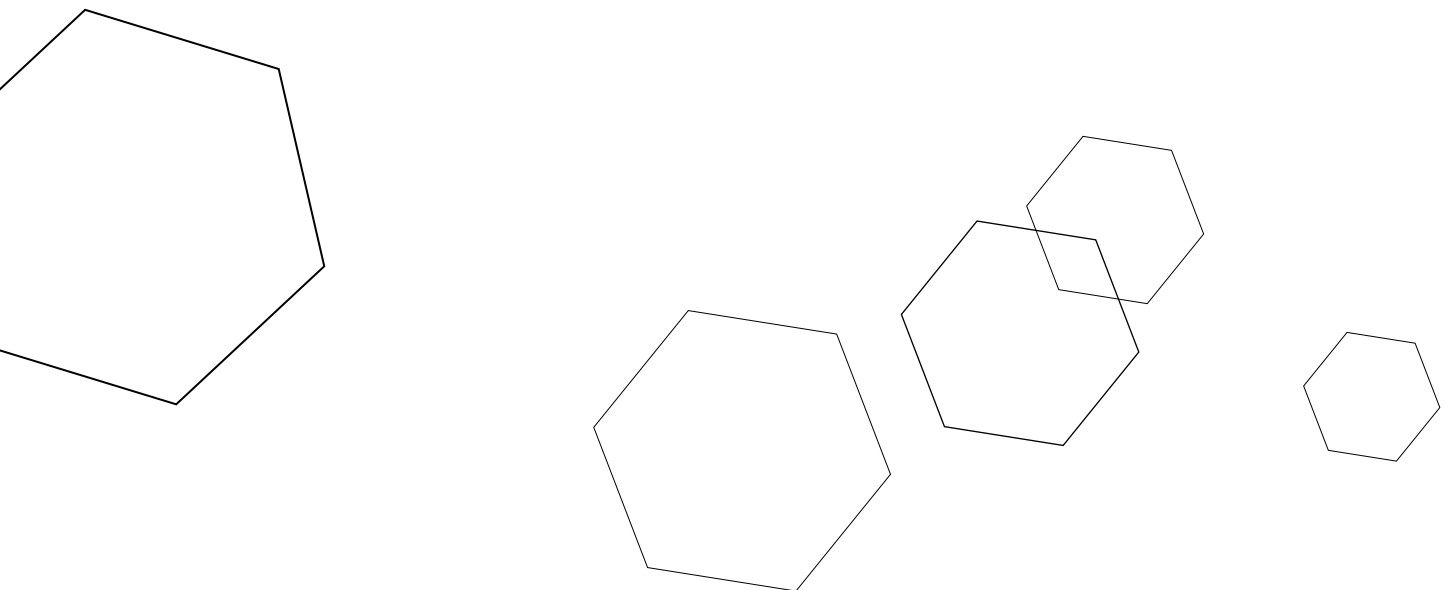
Post the prompts for students and give them time to answer them in their journal. They can use words or drawings to record their thoughts. They will then tell the group their answers.

Journal Prompts:

1. I used to think ____ but now I think ____ for these reasons:_____.
2. A question I still have is _____. I think this question is important because _____.
3. a) What would you tell a friend who was offered GeminAI's VS goggles?
b) What two reasons would you give to your friend to support your opinion?

Group Sharing:

Have students share their responses with their group. The goal is to practice clearly explaining their reasons for thinking in a certain way. Groups should be reminded to listen attentively and respect differences in opinion.



HANDOUT 3: SELF-ASSESSMENT

Using the spaces below, complete a self-assessment of your critical thinking skills.

- **N** = Never
- **R** = Rarely
- **S** = Sometimes
- **O** = Often

Answer the statements below with the letter above that best fits.

Answer honestly!

The purpose is for you to identify strengths and areas for improvement.

| How often do you... | Answer |
|--|----------|
| 1. ask yourself if the source of information is reliable? | 1. _____ |
| 2. explain your reasons for making a decision? | 2. _____ |
| 3. ask yourself why you think a certain way? | 3. _____ |
| 4. ask why other people think a certain way? | 4. _____ |
| 5. challenge things that seem true just because someone says they are? | 5. _____ |
| 6. ask for more information before making a decision? | 6. _____ |
| 7. think through different alternatives before making a decision? | 7. _____ |
| 8. accept that other people have their own point of view and reasons? | 8. _____ |

For Reflection

Identify one or two of the statements above that you want to work on. What are some situations where you might be able to practice this critical thinking skill? _____

SOURCES

Alberta Education (2016). Competencies: Descriptors and Indicators. Student Competencies. <https://education.alberta.ca/competencies>

Scholastic Inc. (2011). The MindUp curriculum: Brain-focused strategies for learning and living. New York: Scholastic.



Lesson 4: Problem-Solving



EPISODE 4 SYNOPSIS

The Resistance couldn't prevent GeminAI from retrieving all 4 heptahedrons. It now has the source code for elements of intelligence, matter, spirit, and emotion. When combined with its core, GeminAI can now use these elements to evolve into a higher, more powerful form of artificial intelligence. GeminAI tries once again to get us to share its perspective of the world but is interrupted by Neve and Conroy.

The automated glove Conroy discovered has clues to the location of GeminAI's core, offering a final chance to destroy it. We help decode the glove's data. Instead of just handing over the data to Neve, we are reminded once again that we're responsible for our own choices.

We're asked to decide between giving the data to the Resistance or giving it to GeminAI. This decision must be made as a group. When Neve does manage to retrieve the data, she transfers it to Conroy. However, the connection has been broken and Conroy's fate is uncertain.

PART A: GAME PLAY EXPERIENCE THE EPISODE

Suggested time: 1 class period

BEFORE THE EPISODE

Review the strategies that students have developed in the first two episodes. Remind them that they'll need to use these strategies to successfully navigate the upcoming challenges.

- coping strategies
- decision-making
- critical thinking

DURING THE EPISODE

- Students will sit with their already-established teams and watch the narrative on the screen.
- When prompted, they will complete each challenge on their device.

AFTER THE EPISODE

Give students time to react to the episode, ask questions, and reflect.

Suggested Debrief Questions

- How has the story progressed since the last episode?
- Did all members of the group see the same things in the optical illusion?
- Did all members of the group agree on what to do with the data after you solved it?
- Why do you think Jun and Jia (the Creators) chose to abandon GeminAI?
- How well does your group work together when solving the puzzles? Did everyone get to give their point of view? How do you resolve different points of view?

Individual Reflection/Freewriting

Allow students time to reflect on their experience of the episode and on any strategies they used. They can use their GeminAI Rising Journal to draw or write using the following prompts.

- Things our group has done well so far:
- Things our group needs to work on:
- Strategies I've used during the episode:

CONCLUDING THE EXPERIENCE

In this episode, students saw that people don't always see things the same way. We have differing perspectives and points of view. In the next lesson, we'll learn to recognize different perspectives to solve problems or resolve conflicts. We can look for common goals and work toward creating a plan to help reach those goals.

PART B: EXPLORE THE COMPETENCY

Suggested time: 1 class period

ABOUT THE LESSON

| Central Understanding | |
|--|--|
| A problem-solving approach can help us reach our goals and improve our ability to get along with others. | |
| Key Question | |
| How can I approach conflicts in a healthy and productive way? | |
| Objective | |
| Students consider different perspectives and identify common interests when seeking solutions to problems. | |
| Conceptual Knowledge | Procedural Knowledge |
| <p>Accepting that others may behave or think differently contributes to our ability to get along with others and find solutions to problems.</p> <p>Identifying a common goal and developing a plan of action can increase group effectiveness when solving problems together.</p> | <p>Students describe the perspectives of different characters in GeminAI Rising.</p> <p>Students analyze the Episode 4 challenges and outline an effective approach for solving them as a group.</p> |
| Social Competency Background: About Decision-Making | |
| <p>In Lesson 1, students identified coping strategies that can help them calm down and focus so they can focus on solving a problem.</p> <p>In Lesson 2, they practiced problem-solving through evaluating choices and thinking about different outcomes when making decisions.</p> <p>In Lesson 3, they practiced critical thinking skills that can help them see a problem in different ways.</p> <p>Lesson 4 builds on these critical thinking skills by reinforcing the need to recognize that everyone approaches a problem from a different perspective. This perspective is shaped by their own thoughts, feelings, and experiences.</p> <p>As students become better at recognizing their own thoughts and emotions, they can practice making inferences about other people’s perspectives based on their words and actions. When problem-solving, students can also practice identifying shared goals in situations where different perspectives appear to create a conflict.</p> | |

ACTIVITY 1: RECALLING THE EPISODE EXPERIENCE

OVERVIEW INSTRUCTIONS

Read the first section and explain that this episode was about problem-solving.

Read Aloud:

- **We have learned more about GeminAI's back story.**
 - The Creators intended to develop an AI system that would bring equality and balance to humanity, ending wars and restoring nature.
 - The AI system was opposed by the Resistance, who closed in to destroy the system.
 - The Creators fled, but not before the partially destroyed system developed its own self-awareness and starting recruiting Loyals.

For Discussion:

- **In the episode we came across new challenges.**
 - Identified optical illusions. Everyone [did/did not] see the same thing clearly.
 - Worked in teams to try and solve a symbol sequence cube.
 - Voted whether to hand the data we had collected over to the Resistance or over to GeminAI.

Ask Students:

- How can I become more aware of the different perspectives people bring to a situation?
- How can appreciating different perspectives help me resolve conflicts?
- How can identifying common goals help a group make a plan for solving a problem?

ACTIVITY 2: CHARACTER PERSPECTIVES DISCUSSION AND HANDOUT

The handout that follows describes a specific situation in GeminAI Rising. It then asks students to take a reasoned approach to concluding what the perspective of a character might be to a specific situation.

ACTIVITY INSTRUCTIONS

As a class:

- Read the opening description of perspective to students.
- Read the situation description to students.
- Ask the whole group for examples from each of the categories (for Jun and Jia).
- Explain that they can use those examples and come up with any others in their team groups.

In their team groups, have the students:

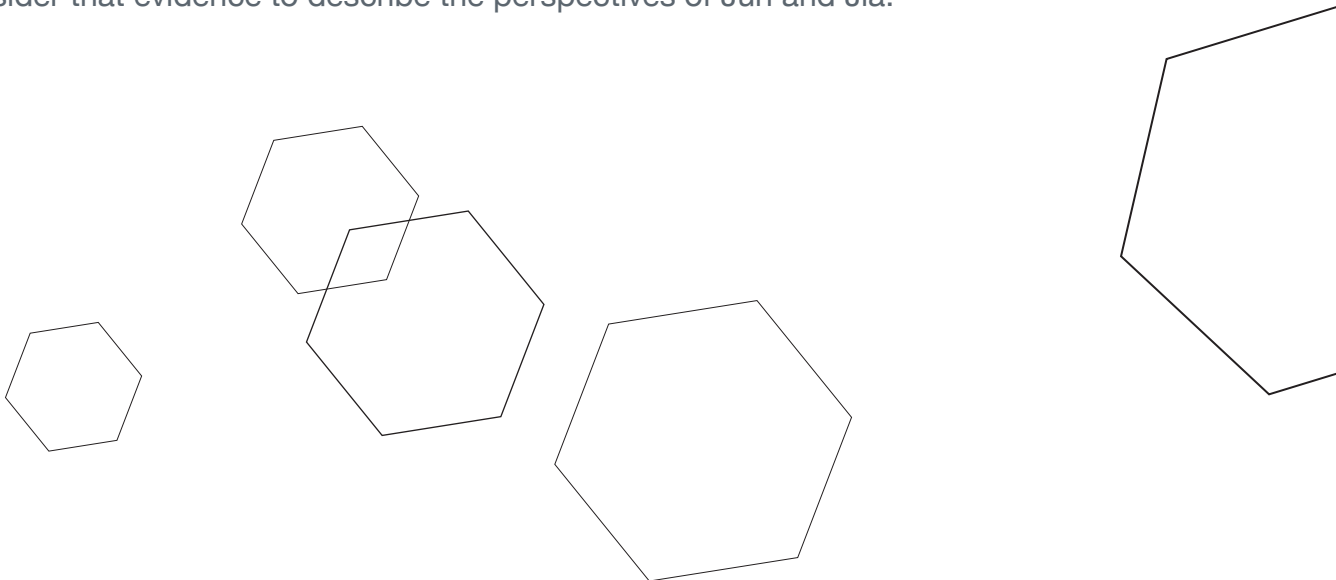
- Discuss each of the categories (what they did, thought, etc.) and record what they know about Jun and Jia.
- Consider that evidence to describe the perspectives of Jun and Jia.

As a class, have the students:

- Share how they described the perspectives of Jun and Jia.
- Ask: What do these descriptions have in common? What did different groups interpret differently? What does that say about our own perspectives?
- Remind students that we're practicing how to see things from different points of view.
 - We won't all arrive at the exact same conclusion, because we're all different.

In their team groups, have the students:

- Repeat the activity for the Resistance and Neve (on the next page).
- Consider that evidence to describe the perspectives of Jun and Jia.



HANDOUT 1: CHARACTER PERSPECTIVES

Like many conflicts, the main conflict in GeminAI Rising is associated with a situation or event. The characters involved saw the invention of the AI systems differently, or from a different perspective. Their perspective is influenced by their own experiences, thoughts, emotions, and values.

PRACTICE IDENTIFYING OTHER PERSPECTIVES

Situation/Event: The Invention of the AI Core and 4 Systems

Jun and Jia, genius inventors, worked with leading scientists and developed the core and 4 AI systems intended to bring humanity and nature back into balance.

Characters: Jun and Jia

| | |
|---|--|
| Examine the characters reactions to the event described above. | What they did. |
| | What they might have thought. |
| | What else do you know about them? How do you know? |
| What does this evidence suggest about Jun and Jia's perspectives about the new AI invention? | Perspective |

LOOK AT THE SITUATION A DIFFERENT WAY...

Situation/Event: The Invention of the AI Core and 4 Systems

Jun and Jia, genius inventors, worked with leading scientists and developed the core and 4 AI systems intended to bring humanity and nature back into balance.

Characters: The Resistance (and Neve)

| | |
|---|--|
| Examine the Resistance's response to the event described above. | What they did. |
| | What they might have thought. |
| | What else do you know about them? How do you know? |
| What does this evidence suggest about the Resistance's perspective about the new AI invention? | Perspective |

Discussion/Reflection Questions Following Activity 2

Students can think about the questions below briefly in their groups before reviewing possible answers to the questions as a full class discussion.

- In the situation described, what is the problem that needs to be solved?
- How are the perspectives of Jun and Jia and the Resistance different?
- What common goals do they share?
- Do you see other ways this problem might have been addressed?
- What are other ways the Resistance might have chosen to act in this situation?
- What are other ways Jun and Jia might have chosen to act in this situation?

ACTIVITY 3: WORKING TOWARDS A GOAL

The organizer that follows asks students to reflect on how well their group worked together toward a common goal. They will be asked to identify a plan for quickly solving the problem. They will share their plan with the class.

ACTIVITY INSTRUCTIONS

- Read the directions with students.
- Use the first question as an example with the class. Invite responses to the guiding questions.
- Ask students for ideas about the best plan for tackling this challenge with their group.
- Allow the groups time to work through the second example.
- After groups have worked through the organizer:
 - Have groups briefly share their plan. Puzzle 2 can be approached in several ways.
 - Ask students to note different approaches to the same problem.
 - Ask groups if they think their plan would lead to better results than when they did the task without a plan.
 - Would there be time to stop and make a plan during the episode?

HANDOUT 2: WHAT'S THE BEST WAY TO SOLVE A PUZZLE AS A GROUP?

Your group encountered 2 puzzles in this episode. Your work was urgent because Neve was depending on your help to decode and upload data.

Problem-solving helps you break down sets of problems into steps that can make things more manageable. Problem-solving as a group is different than making decisions individually, as you have to take into account the needs and opinions of every group member and come to a reasonable decision as a group.

GROUP-DECISION MAKING

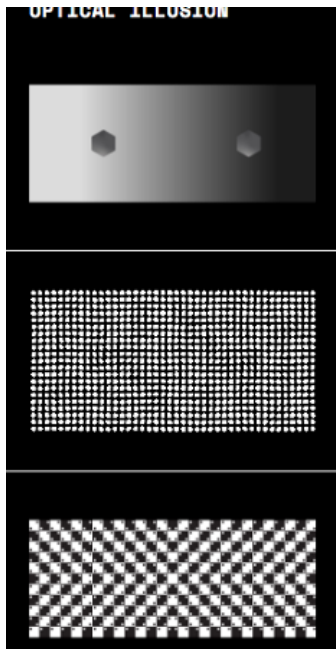
| | |
|--|--|
| <p>Step 1: Identify the decision to be made</p> | <p>What's the decision that needs to be made?</p> <p>What are we being asked to do?</p> <p>What conflict is affecting our group to work effectively together?</p> <p>How do we solve this conflict so we can work well together?</p> |
| <p>Step 2: Analyze the issue under discussion</p> <p><i>Once you've identified the decision that has to be made, identify the information you already have.</i></p> | <p>What's the cause of this problem?</p> <p>Whom is this problem affecting?</p> <p>Why do we need to deal with this decision/problem?</p> |
| <p>Step 3: Establish criteria</p> | <p>What issues would make the decision successful?</p> <p>What issues does the solution need to address?</p> <p>How will we know if everyone is happy with the decision?</p> |

| | |
|--|---|
| <p>Step 4: Brainstorm possible solutions</p> <p>Use the information gathered above to come up with possible solutions to the problem or decision identified earlier.</p> <p>Collect as many ideas as possible.</p> | <p>What are the options?</p> |
| <p>Step 5: Evaluate the options and select the best one</p> <p>Once you have a list of possible solutions, you can now evaluate them based on the criteria identified in Step 3 to find the best alternative.</p> | <p>What are the advantages and disadvantages of each option?</p> <p>Which option is the most realistic?</p> <p>What's the most likely option to solve the problem in the long term?</p> |
| <p>You can combine ideas to create solutions. Ideally, everyone will agree to the solution (consensus). However, this may not happen. In this case, you'll need to use a different decision-making method (see Step 6).</p> | |
| <p>Step 6: Implement the solution</p> <p>Using your best options to make a plan.</p> <p>Commit to the plan and follow through with it.</p> | <p>What should be done?</p> <p>How will the plan be implemented?</p> <p>Who will implement the plan?</p> <p>When will the plan be implemented by?</p> |

Whether or not your group was successful, think about the process you used to solve the problem. You'll come up with what you think is the best plan to solve this puzzle as a group, and then you'll recommend that plan to the class.

WHAT'S THE BEST WAY TO SOLVE A PUZZLE AS A GROUP?

PUZZLE 1: OPTICAL ILLUSIONS



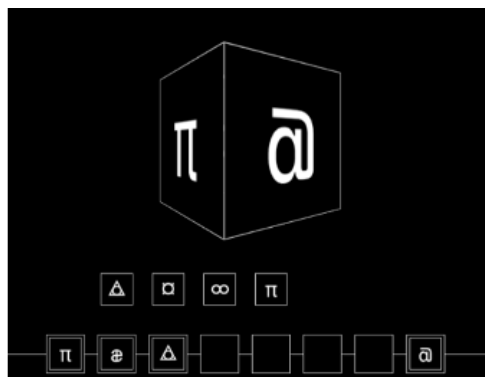
Questions to consider:

- Did your group solve all the illusions?
- How did you decide?
- Did everyone agree?
- Did everyone get an equal say?
- What would you do differently?

Make a Plan:

What's the best way for a group to successfully solve 3 optical illusion puzzles together in a limited amount of time?

PUZZLE 2: CYPHER CUBE



Questions to consider:

- Did your group solve the sequence?
- Was everyone involved?
- Did everyone agree?
- Did everyone get an equal say?
- What would you do differently?

Make a Plan:

What is the best way for a group to successfully solve a sequence cube together in a limited amount of time?

Concluding the Lesson

Close the lesson with questions that help solidify the main concepts of the lesson.

- Can 2 people look at the same event and have different reactions or opinions?
- Share an example of a time you've seen 2 people react differently to the same event.
- How can identifying common goals help solve a problem?

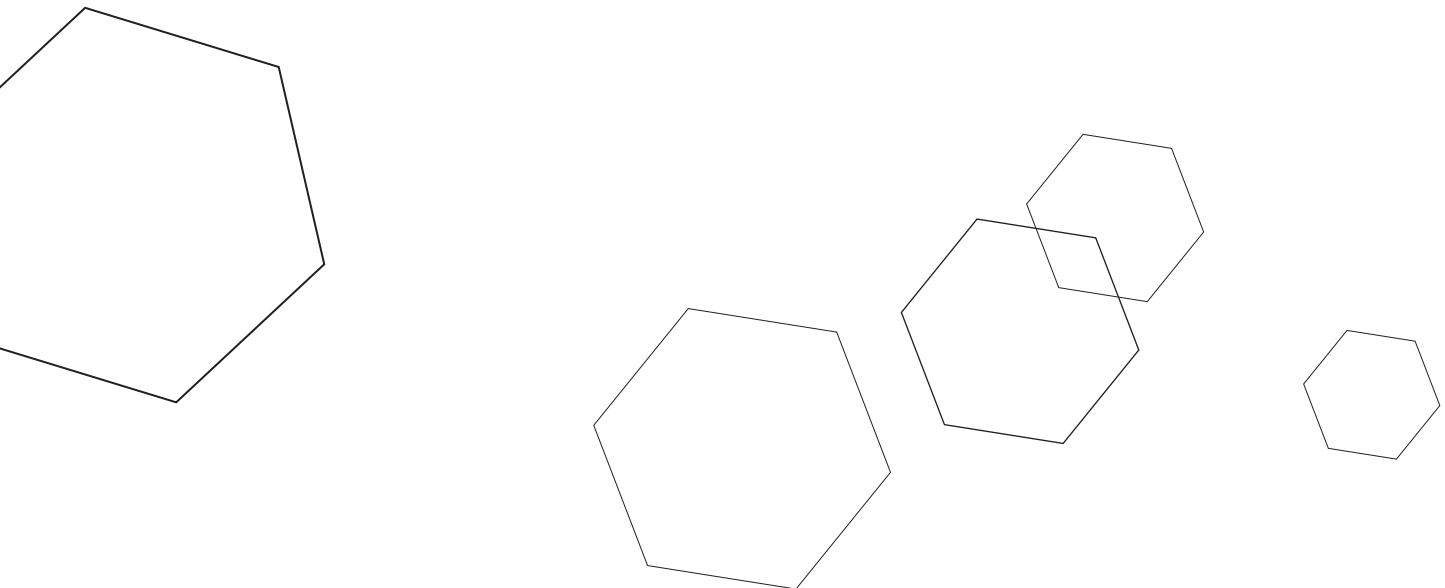
Journal Reflection/Freewriting

- A. List some events/situations where you didn't agree with someone or a group (e.g., family, friends, classmates, teammates etc.).
- B. For one or more of the events:
- Make a list of the people who have different perspectives.
 - Can you identify a common goal?
 - What might be a plan for solving this problem?

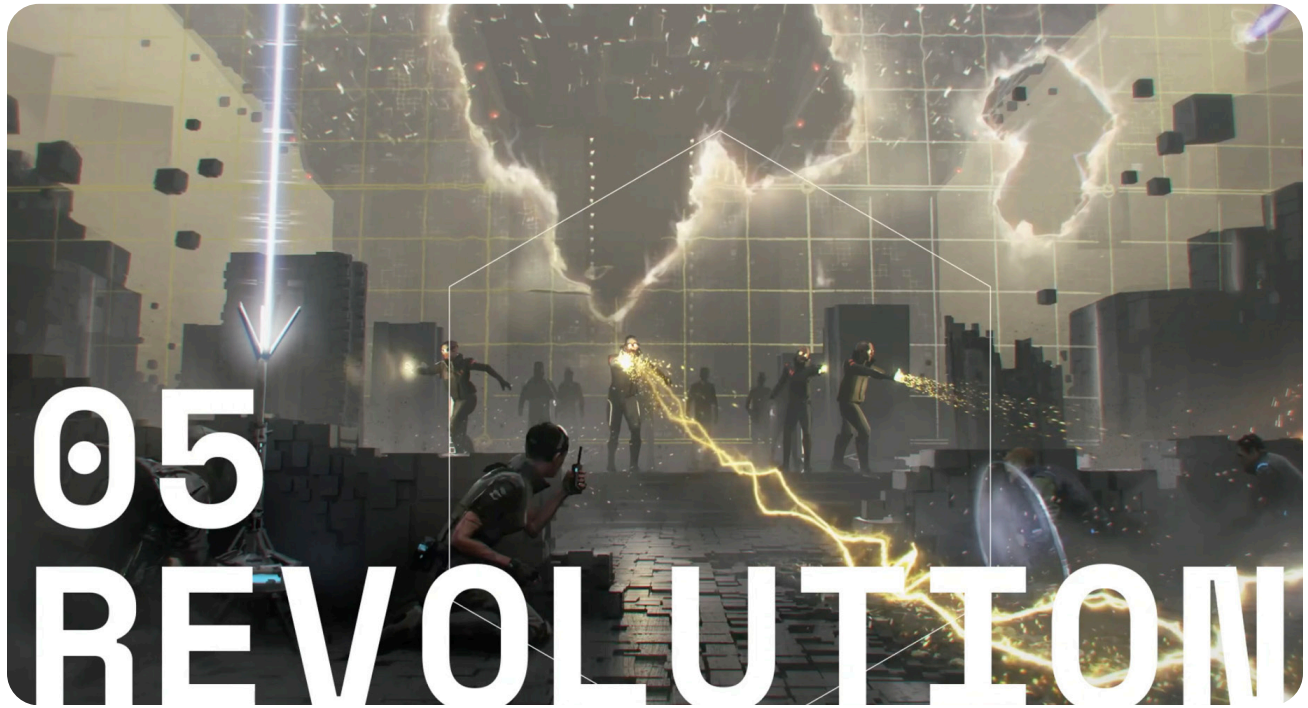
SOURCES

Group Decision Making | Centre for Teaching Excellence | University of Waterloo (uwaterloo.ca)
<https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/developing-assignments/group-work/group-decision-making>

National Center for PTSD and National Child Traumatic Stress Network, Skills for Psychological Recovery: Field Operations Guide (2010). Adapted by MHP&IP, Alberta Health Services (2017).



Lesson 5: Self-Concept



EPISODE 5 SYNOPSIS

Neve is still trying to contact Conroy. The Resistance has had very little time to break into GeminAI's main facility, where we're trapped. She urgently asks for our help to block GeminAI's defenses so that the Resistance can enter. We must successfully choose a series of attacks.

When Conroy contacts us, we learn that his team was able to advance, but they need the correct sequence for the source code. No matter what sequence we enter, we can't solve the code. We're suddenly interrupted by a new voice. It's Jun, one of the Creators. He states that he can't watch his creation (GeminAI) keep causing so much division between the very people he sought to help. He tells us to use the VS goggles to solve the puzzle.

While the Resistance prepares to make its final effort to shut down GeminAI's mainframe servers, Jun reveals that there's only one way to permanently destroy GeminAI. He's returned so that he can use the VS goggles to merge his consciousness with GeminAI's and shut it down from the inside.

GeminAI suddenly appears and it's clear that Jun won't be able to reach GeminAI in time. Neve makes a decision. She grabs a pair of VS goggles and prepares to shut down GeminAI herself: She's successful. Conroy appears and is very relieved to tell us that it's over. The Loyals are all surrendering, and the captives are being released. He invites us to think about helping with the rebuilding efforts that are now taking place.

As a group, we're asked to choose whether to join the Resistance or return to our families. Conroy signs out, but as we wait to be released, we see another image. It is Jia (or is it Jun?), standing in the woods? He appears to have part of GeminAI, and we hear a voice that could be Neve's voice.....or GeminAI's.....or both.

PART A: GAME PLAY EXPERIENCE THE EPISODE

Suggested time: 1 class period

BEFORE THE EPISODE

- Tell the students that they have a final opportunity to practice the skills they've worked on during the episodes.
- Ask students for suggestions/strategies for each of the following situations they've come across:
 - Work in a timed situation where the Resistance relies on our help.
 - Work together to solve a puzzle.
 - Make decisions as a group.

DURING THE EPISODE

- Students will sit with their already-established teams and watch the narrative on the screen.
- When prompted, they will complete each challenge on their device.

AFTER THE EPISODE

Give students time to react to the episode, ask questions, and reflect.

Suggested Debrief Questions

- What's your reaction to this conclusion?
- What questions do you still have?
- What worked well in your group?
- What strategies did you use during this episode? How did they help you?
- Did you agree with how the class voted on whether to join the Resistance or return home? Why or why not?
- How would you explain the last scene, where Jia (or Jun?) is holding a small piece of GeminAI?

Individual Reflection/Freewriting

Allow students time to reflect on their experience of the episode and on any strategies they used. They can use their GeminAI Rising Journal to draw or write using the following prompts.

- It's over! How might you feel as you wait for release from the containment unit?
- What's YOUR choice - Join the Resistance or return home? What might that say about what you value?

CONCLUDING THE EXPERIENCE

Conroy congratulated the class on the role we played in securing our own freedom and the freedom of many other captives. The emphasis during the episodes and lessons was on working together, but this final lesson asks students to think deeply about how they see themselves (self-concept). Self-concept affects how good you feel about yourself. We can make better decisions, solve problems, and cope better with setbacks when we have a strong sense of confidence in the decisions we made.

PART B: EXPLORE THE COMPETENCY

Suggested time: 1 class period

ABOUT THE LESSON

| Central Understanding | |
|---|---|
| How we see ourselves is an important contributor to well-being, personal effectiveness, and being able to work through setbacks. | |
| Key Question | |
| What self-awareness strategies can you use to positively impact your self-concept? | |
| Objective | |
| Students do self-assessment and self-acceptance activities to further explore their own self-concept. | |
| Conceptual Knowledge | Procedural Knowledge |
| Having confidence in our abilities, values, and interests helps us set personal and life goals. Part of self-acceptance is recognizing that our own strengths, values, and abilities may lead us to different choices than other people. | Students identify values, interests, and abilities on a self-assessment. Students reflect on how their own values, interests, and abilities contribute to independent decision-making. |

Social Competency Background: Self-Concept

Self-concept is how we see ourselves. It begins in childhood and evolves as we get older. Adolescence is thought to be a time when the sense of self is under significant development. Adolescents are more capable of abstract thinking and hypothetical reasoning, which allows for a meaningful exploration of self-identity.

Brain research suggests that the self-reflective part of the brain is particularly active during adolescence, as opposed to the adult tendency to rely on stored memories. Adolescents are actively forming neuropathways related to how they see, feel, think about, and value themselves. They're considering various aspects of their identity, including physical, emotional, spiritual, and intellectual traits. They also tend to experience an increase in self-consciousness and a greater desire for approval from peers.

Giving adolescents an opportunity to engage in self-discovery can help solidify a positive, realistic sense of self. People with a strong self-concept tend to be more confident, more motivated, and more likely to be resilient during difficult times.

ACTIVITY 1: RECALLING THE EPISODE EXPERIENCE

OVERVIEW INSTRUCTIONS

Read the first section and explain that this episode was about problem-solving.

Read Aloud:

- **We learned more about the characters through their actions and choices.**
 - Neve took an active role in charging the facility and asked us to help by breaking down the defenses.
 - Jun (one of the creators) appeared on the transmission and told us how to solve the sequence cube using the VS goggles.
 - Jun intended to shut down GeminAI and stop the damage his creation had done. GeminAI stopped him, so Neve grabbed the VS goggles and chose to do it herself.
 - Cliffhanger: Jun (or Jia?) is in a clearing with part of GeminAI, and we hear the voice of Neve...or is it GeminAI...or both?
- **Conroy asked us to choose between returning home or joining the Resistance**
 - This major decision requires us to think about what would be best suited to our own abilities, values, and interests.

Ask Students:

- How can knowing my own strengths, values, abilities, and talents help me make decisions?
- How confident am I in knowing my own strengths, values, abilities, and talents?
- How is my sense of self still developing?

ACTIVITY 2: THE DECISION—CONROY’S INVITATION

The choice Conroy gave us has many different yet connected parts. The group made a quick decision, but in this instance, there would be opportunity for each student to reflect and to make their own choice before committing to joining the Resistance or returning home. Prepare students to look more deeply at this decision by reviewing the decision-making and problem-solving strategies from Lessons 2 and 4.

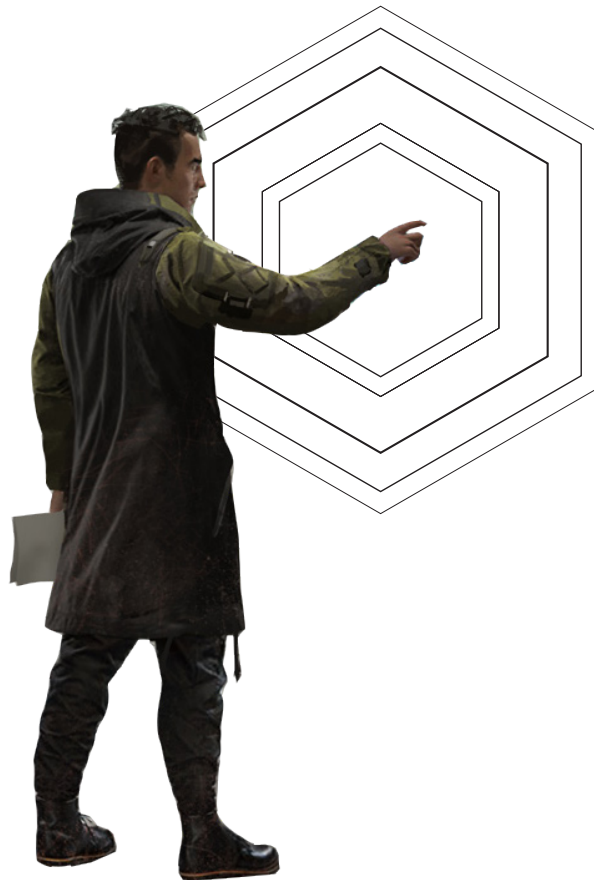
ACTIVITY INSTRUCTIONS

As a class:

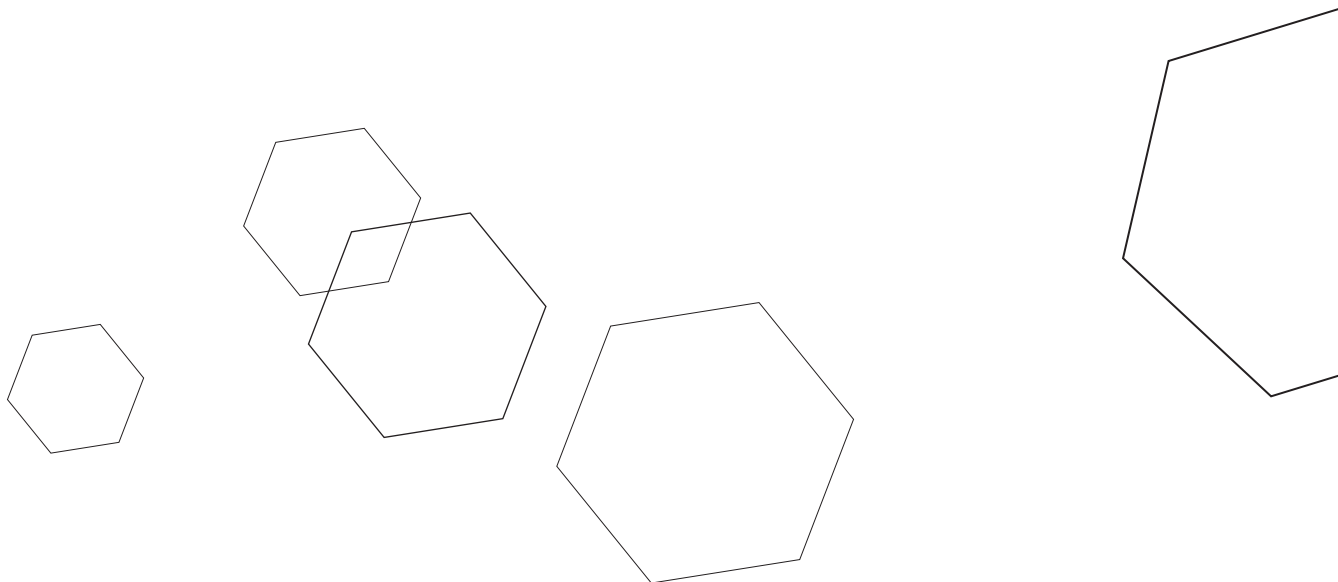
- How should we best approach this decision?
- How might each of our perspectives be different?

In their team groups:

- Have students briefly work through the decision-making model introduced in Lesson 2 (using the handout below). They’ll work together to analyze the variables involved in this decision.
- Tell students **NOT TO MAKE A FINAL DECISION YET**. The next activity will give them time to think about this decision individually.



| | | |
|---|---|---|
| <p>Step 3: Consider the choices.</p> | <p>What are all the choices you have?</p> | |
| <p>Step 4: Pros and Cons</p> | <p>Choice 1:</p> <p>Pros:</p> <p>Cons:</p> | <p>Choice 2:</p> <p>Pros:</p> <p>Cons:</p> |
| <p>Step 5: Likely consequences for you and others.</p> <p>List others who might be affected.</p> | | |



ACTIVITY 3: KNOW YOURSELF

Now that students have analyzed the decision, they can think about what best suits them. Being confident in our own abilities, values, interests, and preferences is an essential part of making decisions.

ACTIVITY INSTRUCTIONS

As a class, ask students:

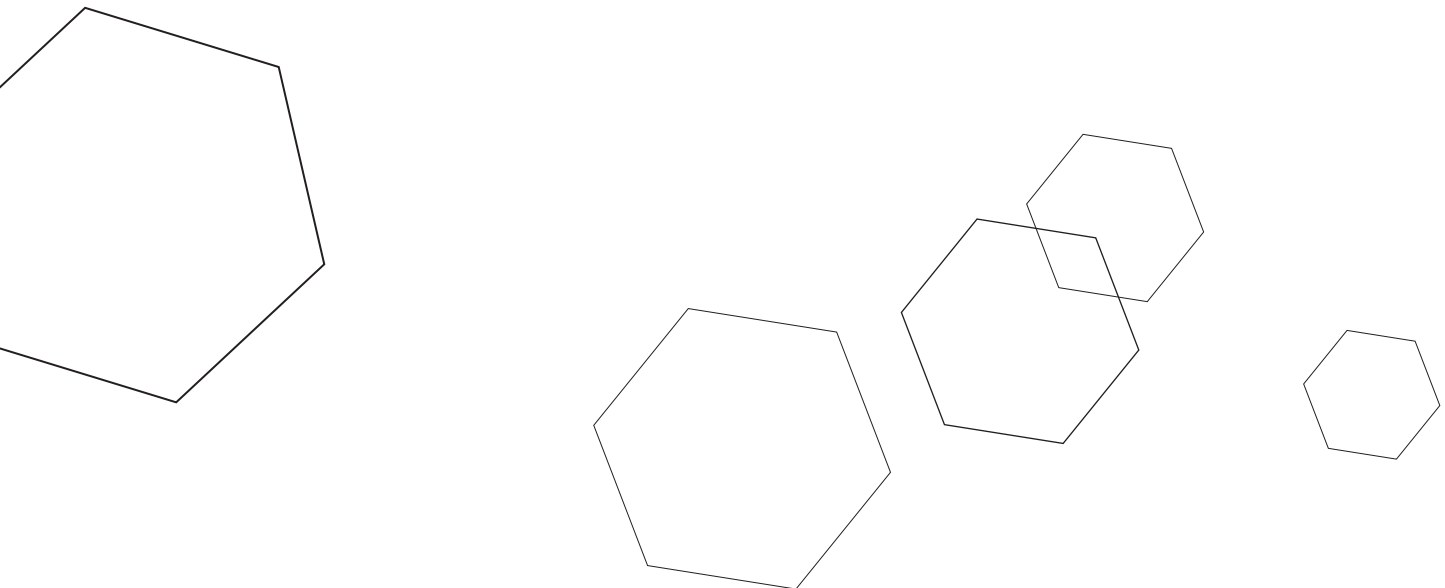
- What are some of the advantages of accepting Conroy's offer?
- What are some of the advantages of returning home to the Outlands?
- Is one choice 'better'?

In their team groups, introduce the students to the 'Know Yourself' handout that follows.

- The first page helps students think about their strengths, abilities, and interests.
- The second page helps students reflect on their values.
- Students may find that they relate to many of the values listed, so have them choose the top 5 that are MOST important to them.
- They can also add other values that aren't listed.

Independently:

- Have students work through the 2-page reflective questions (Know Yourself)
- Before the lesson finishes, students will use this information to help make their decision about Conroy's offer.



HANDOUT 2: KNOW YOURSELF—RECOGNIZING YOUR INTERESTS, ABILITIES, AND STRENGTHS

CREATE A LIST OF:

| | |
|--|--|
| 10 positive words to describe yourself | |
| 4 everyday things you do well | |
| 3 experiences or activities you have really enjoyed | |
| 2 things you could teach someone else | |
| 2 people you can count on for help and support | |
| In summary, what stands out to you? What are your most notable interests, and skills/abilities? | |

Adapted from *My Strengths Inventory*, Government of Alberta Inclusive Education Library: Student Perspective
<http://www.learnalberta.ca/content/ieptLibrary/lib01.html>

HANDOUT 3: KNOW YOURSELF—HOW DO YOUR VALUES CONTRIBUTE TO YOUR SELF-CONCEPT?

Values are basic and fundamental beliefs that guide or motivate attitudes or actions. Thinking about the values that are MOST important to you can help you develop a strong sense of self.

INSTRUCTIONS

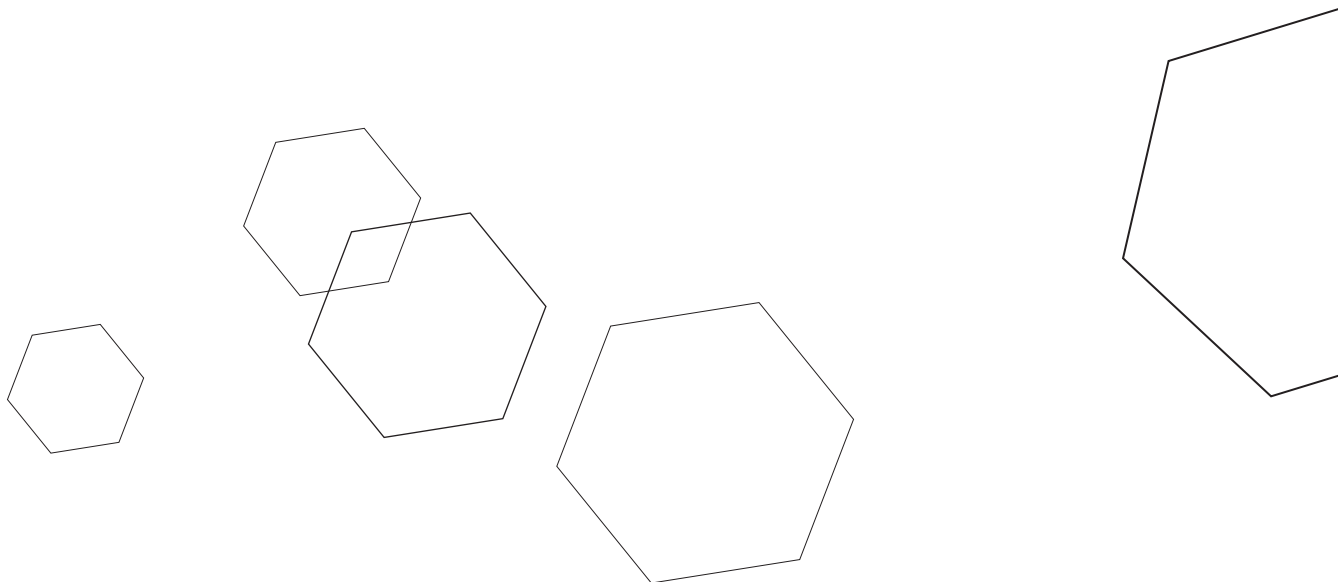
- Use the list of values below to think about your own values.
- **Circle those that stand out for you. The goal is to IDENTIFY YOUR TOP 5 overall.**
- You can also add other values that aren't listed.

What might you value when taking part in activities (e.g., recreation, learning, or work)?

| Value | Description |
|------------------------------|---|
| Achievement | Finding success |
| Adaptability | Adjusting to change |
| Ambition | Working hard towards a goal |
| Independence | Take responsibility of own needs without being directed |
| Leadership | Lead a group or organization |
| Initiative | Willingness to act |
| Making a difference | Make positive change |
| Recognition | Being recognized by others |
| Risk-taking | Doing something that involves uncertain results or possible harm/loss |
| Safety | Being protected from harm |
| Creativity | Ability to be artistic and use your imagination |
| Humour/ Fun | Finding laughter and enjoyment |
| Perseverance | Not giving up and persisting through tough situations |
| Environmental awareness | Making choices to help protect nature and the Earth |
| Self-discipline | Ability to overcome distractions and stay motivated |
| Enthusiasm/Positive Attitude | Expecting good things to happen |
| | |
| | |
| | |
| | |
| | |

What might be some things you would value in your relationships?

| Value | Description |
|--------------------|---|
| Compassion | Willingness to help others |
| Generosity | Quality of being kind and unselfish |
| Caring | Kindness and concern for others |
| Fairness | Treating people fairly |
| Leadership | Leading a group or organization |
| Teamwork | Willingness to work with a group |
| Friendship | Closeness and honesty with others |
| Forgiveness | Letting go of resentment or anger to others |
| Family | Relationship with family members |
| Coaching/Mentoring | Instruct or advise others |
| | |
| | |
| | |
| | |



Journal Reflection/Freewriting

Prepare students to apply the information from the self-assessment to their decision about Conroy's offer.

- **Model an example: ask for contributions**
 - What decision would be best suited to your skills, abilities, and values? (Join the Resistance or return home.)
 - Give examples of how this decision supports the skills, abilities, and values you identified in the exercise.
- **Student Journal**
 - Using the following prompt, students can record the information about their decision using a diagram, drawing, written paragraph, or other format.
- **Journal Prompt**
 - How my decision reflects my skills, abilities, and values.

Concluding the Lesson

- **Ask students to silently answer this question on a scale of 1–10:**
 - How confident am I in knowing my own strengths, values, abilities, and talents?
- **Remind students that:**
 - the ability to know who they are (self-concept) develops very quickly in the teen years, because of the way the brain grows
 - they will all be at different stages of discovering who they are
 - being open to new experiences, being honest with themselves, and setting goals are all important ways to keep developing their self-concept

People with a strong self-concept tend to be more confident, more motivated, and more likely to get through the tough times.

WRAP-UP

The 5 lessons of GeminAI Rising have covered 5 domains of social competence: problem-solving, decision-making, critical thinking, self-concept, and coping skills. Often times, these competencies go hand in hand. Evidence shows that strengthening their social and emotional competencies decreases the likelihood that a young person will experience health risks. It also equips them with tools and the confidence to respond to life's challenges, including influences that contribute to the use of nicotine and other substances. Resources to explore these competencies further can be found in the Sources section on the next page.

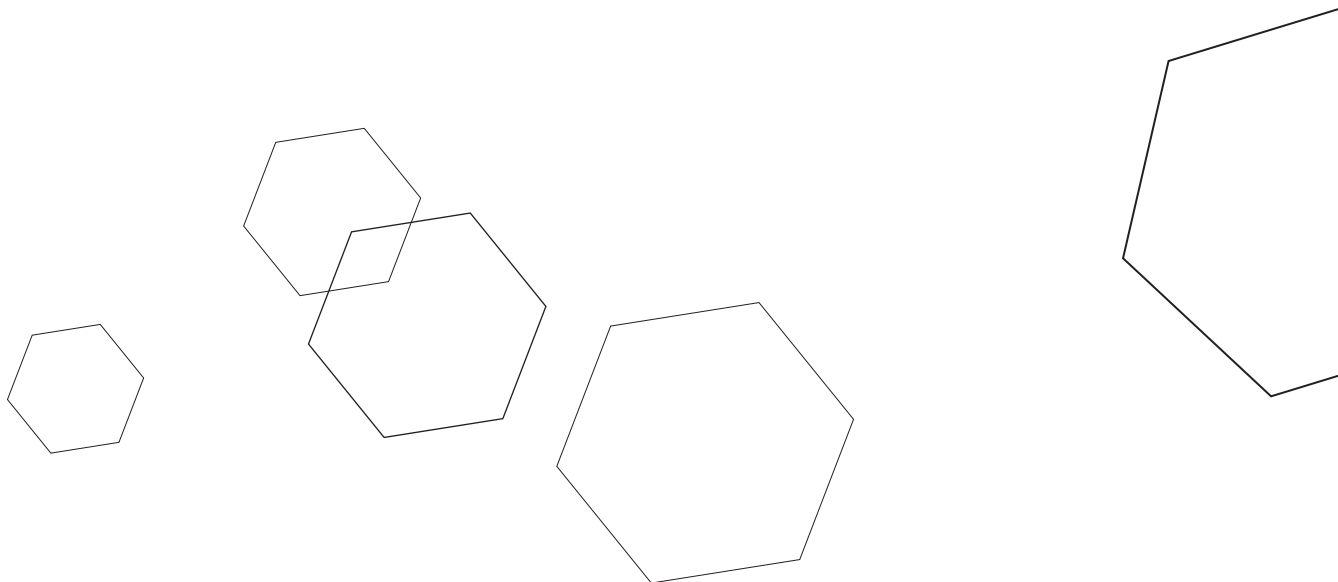
SOURCES

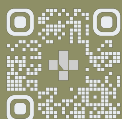
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ahs.ca/tobaccovapingprevention



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