1) “How Do You Feel Today?” Activity
- Ask→  **How were you able to identify your emotion?
    Can you name any other emotions besides the ones we provided?**

-Discussion: We know our emotions through our own experiences. We can tell when we are mad about something, upset, or so excited that we can’t focus. However, most students in elementary haven’t developed that sense to the extent we have through years of experience. High school students may know what they are feeling, but haven’t quite figured out how to appropriately address them.

^ 5 mins

2) Chart Activity
Give a chart to each group that shows 9 different emotions. Ask them to list the different physical characteristics associated with each emotion.
-Give them a few minutes to complete this, and then show them the Master Chart
-Create a discussion with the following questions:

**Where did you learn these characteristics?  (prompt that we know from our own experiences)**

**Some families don’t discuss emotions with their children. Do you think this is the family’s or school’s responsibility to educate children on this?
-**Explain how this chart is useful because it creates opportunities discuss these emotions with students. Some students may not know how to identify their emotions yet, so this gives them ideas as to how they might be feeling at certain times, what their body might be doing, and how to tell how others might be feeling.
-Explain that we know these emotions from our experiences, but most students have seen these emotions modelled in their parents.
-For example, if a student is kicking a chair and swearing every time someone won’t share with them or every time their name gets called out in class, you can assume that these behaviours have been learned.
^ 10 mins

3) The Emotional Brain - The Limbic System

-The Limbic System is the area in our brain responsible for emotion

-The Limbic System is comprised of the thalamus, hypothalamus, frontal lobe, olfactory bulb, amygdala and hippocampus

-Thalamus receives impulses from the body as primitive sensations and sends them to the cerebral cortex for interpretation

-The Cerebral Cortex is a large sheet of neural tissue deeply folded around the Limbic System. The Cerebral Cortex occupies 85% of the brain's mass. The Frontal Lobe is one of four lobes in the Cerebral Cortex which receives and interprets sensory information, makes rational decisions and activates behavioural responses.

-The Hypothalamus and the Hippocampus are responsible for emotional expression

-The Olfactory Bulb is purely sensory and concerned with the sense of smell, the olfactory bulb reads these senses and passes them into the brain

-The Amygdala is an inch long, almond like structure which processes emotions, memories and motivation. Information entering the amygdala is processed to create an appropriate response to the message. When stimulated, the amygdala can cause intense responses of emotions and is well known for it’s importance in fear conditioning, attention and decision making

-Play video

-Much research has been done on this area of the brain, one of them through the analysis of gambling activity, so now we’d like to introduce our next activity that will help us understand this concept a little better

^ 10 minutes

4) Identifying Emotion Adults vs. Teenagers

**Looking at this facial expression, what would you describe it as?
-Do you think being able to identify expressions depends on your age?**

-In a recent study by Dr. Deborah Yurgelun-Todd, University of Utah, a pilot group of teenagers (aged 11-17) and adults were asked to identify a facial expression while undergoing an MRI. It is important to note that the study size was notably small, however, 100% of the adults identified the facial expression correctly as fear. While less than half the teenagers were able to correctly identify the expression, stating that they thought the expression was shock, confusion or sadness. The MRI study displayed more activity in the prefrontal brain of adults when assessing the facial expression. The prefrontal brain is responsible for planning, goal-directed behaviour, judgement and insight; suggesting that teenagers tend to respond with a gut response rather than evaluating the consequences of what they are doing

**How would these findings relate to a high school class? (1 minute to talk in groups)**

* When students are relating to parents, teachers or friends they may be misperceiving or misunderstanding some of the feelings we have as adults; that is they see anger when there isn’t anger or sadness when there isn’t sadness
* There will be miscommunication both in what they think the adult is feeling and what their response should then be to that

^ 10 minutes

5) Explain Gambling Activity

-Have a person from the classroom pick from the two different decks of cards for a minute or two. If they start to consistently pick from the reliable pile, stop the activity.
-Ask the person if they noticed a pattern in the decks, how long it took them to figure it out.
-This activity was based off of the Iowa Gambling Task, which serves as an explanation for emotional intuition.
-In the real Task, people have four decks of cards. They are able to pick from these 4 decks, not knowing some decks contain larger wins but also much larger losses. Continuing to pick from the higher risk decks results in a bad choice in the long run.
-the process of learning this game involves both emotional and cognitive processing. As you begin the game, you randomly select cards from the different decks, noting wins and losses as they come.
- before becoming consciously aware that the decks are biased, you begin to show an anticipatory emotional response in the moment before choosing a card from the high risk deck (palms begin to sweat).
-Nonconsciously, you are accumulating emotional information about the relative riskiness of some decks. As you proceed, this emotional information steers you toward the “safe” decks and from those with high gains but the possibility of large losses.
-So the whole process begins with the development of nonconscious emotional intuitions that eventually become conscious rules, which you can actually describe in words at the end.
So how does this relate to the classroom?
-Learner’s emotional reactions to their behaviour choices (such as in this activity) become attached to the cognitive knowledge about the domain. For example, this could be anything in learning such as writing essays or math class. These academic activities are no longer neutral to the learner, they become risky and uncomfortable or exciting and challenging, depending on the learner’s emotional interpretation of the outcome. This will consciously or even nonconsciously shape your future behaviours.
-Kids are developing their emotional intuition all of the time. Think of a young kid who incorrectly solves a math problem and gets a big red X on his paper. How is this going to affect his thinking of making mistakes, tests, and math.
^10 minutes

BREAK (10 mins)

6) Emotion & Cognition - 5 Contributions from Neuroscience

-The Iowa Gambling Task aided in identifying 5 contributions which link cognition and emotion.

1. Emotion guides cognitive learning
* This idea suggests that factual knowledge is useless without guiding emotional intuition
* Guiding emotional intuition isn’t always visible, it can be a subconscious guiding factor

2. Emotional contributors to learning can be conscious or nonconscious

* In the IGT the player first became very nervous, with sweating palms prior to picking their next card, this was done subconsciously
* This subconscious nervousness guided the player to act advantageously in future experiences by ceasing from choosing from the risky decks, not losing any money

3. Emotional learning shapes future behaviour

* Once the player learned that one deck contained large losses, the player changed their behaviour by ceasing to choose from that deck

4. Emotion is most effective at facilitating knowledge when it is relevant to the task at hand

* students leaving emotions at the door, but these does not aid them in learning
* emotions aid academic intuition which are specific to the context in which they are learned
* relevant and irrelevant emotions - when students aid emotions of excitement or anxiety in this sense emotional intuition is hindered

5. Without emotion learning is impaired

* students with brain damage may not develop the anticipatory emotional response, relating back to the IGT a player with damage to their cortex remained attracted to the large gain/loses deck
* the ventromedial prefrontal cortex patients continued to choose from the disadvantageous deck

^ 5 minutes

7) Emotions in the classroom - Show “Inside Out” video

-Discussion: discuss video and the emotions involved

**How might this affect the classroom?**

8) Matching Game and Discussion
Prompts for Discussion:
**Did anything like this happen to you during your practicum?**
**Think back to the Iowa Gambling Task, distractions interfere with academic intuition.
-**In the chapter, it discusses how the Iowa Task would have played out differently if the woman in the study if she could not concentrate on the task at hand- such as being too excited for something later that night, etc…
-Consider this in the classroom when seeing all types of student behaviour
^15/20 minutes

9) Classroom Strategies Which Nurture Emotion

1. Foster an emotional connection to the material
* design an educational experiences which encourage relevant emotional connection to the material being learned
* have leeway when deciding topics, listen to the students’ opinion
* try and relate material to everyday experiences

**What are some ways we can incorporate this strategy in our classroom? (1min to discuss with group)**

2. Encourage students to develop academic intuition

* allow students to take academic risks and learn from their mistakes to develop academic intuition
* without the development of sound intuitions, students are less likely to remember the material over the long term

**What are some ways we can incorporate this strategy in our classroom? (1min to discuss with group)**

3. Actively manage the social and emotional climate of the classroom
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**What are some ways we can incorporate this strategy in our classroom? (1min to discuss with group)**

^ 10 minutes

Discuss strategies for both elementary and secondary

Various Activities:
Have students draw a picture of themselves, let them colour according to how they feel, associating colours with feelings
-Let them journal and openly talk about emotions so there is no taboo
-Model healthy behaviour
-build an “activity kit” for calming down
-build a strong vocabulary

When dealing with emotions in the classroom:
-Make sure to listen to your students fully before trying to talk to them
-Ask open ended questions rather than being like “You must be mad today”
-Allow the student to express their emotion rather than brushing it to the side
-If they seem to be expressing a negative emotion, do not bring attention to them or embarrass them