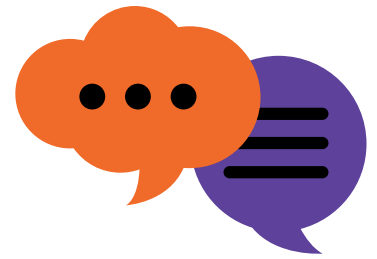


LESSON PLANS

The Science of Love



GRADE LEVEL	B1 - B2
CLIL SUBJECT	Science and psychology
OBJECTIVE	Students will debate the question, "Is love just chemistry, or is there something more?" while exploring how love affects the brain and body through simple explanations and discussions.
MATERIALS NEEDED	Printed copies of the text explaining how love affects the brain (provided to students). Whiteboard or flip chart for brainstorming and noting key points during the debate. Timer (optional) to manage debate time.
LESSON DURATION	50 minutes

LESSON PROCEDURE

1. Warm-up (10 minutes)

Briefly introduce the topic of love and ask students what they know about it.

Distribute the printed text that explains how love affects the brain and body.

Allow students a few minutes to read through it.

2. Introduction to debate (5 minutes)

Tell the students that they will be discussing whether "Love is just chemistry, or is there something more?"

Explain that in the debate, they will share their opinions, listen to each other, and support their views with the information they have learned or from their own thoughts.

They should follow discussion guidelines such as speaking one at a time, respecting each other's opinions, and using evidence or examples to support their arguments.

3. Debate preparation (10 minutes)

Divide the class into two groups: one will argue that love is just chemistry, and the other will argue that love is more than just chemicals.

Allow students to discuss with their group and gather their points for the debate. They should use information from the provided text, their own ideas, and any scientific reasoning they can think of to support their arguments.

4. Debate (20 minutes)

Set up a structured debate format.

Each side will have a few minutes to present their argument (use a timer if necessary).

After each side has presented, allow 5 minutes for rebuttals where students can answer points made by the other side.

Encourage respectful dialogue and ask students to listen to each other.

CLOSURE

Wrap up the debate by summarising key points from both sides.

Ask the students to reflect on what they've learned about love, chemistry, and emotions during the lesson.

Encourage them to think about how love affects both the mind and body, and whether they still agree with their initial stance.

ASSESSMENT

Evaluate students' understanding by observing their participation in the debate and their ability to present logical, well-supported arguments. Look for critical thinking and the ability to synthesise the biological and psychological aspects of love.

What happens in the brain when we fall in love?

When we fall in love, our brain releases a chemical called dopamine. Dopamine makes us feel happy, excited, and full of energy. It's the same chemical that is released when we get a reward or do something enjoyable, which is why falling in love can feel so euphoric.

Another important chemical is serotonin. This chemical affects mood and appetite. As we fall in love, the amount of serotonin in our brain decreases, which might explain why we feel less hungry and can become anxious or upset if things go wrong with the person we like. Lower serotonin levels may also be linked to obsessive thoughts about a new partner, which is why people in the early stages of love often struggle to focus on anything else.

Adrenaline is also released, which makes our hearts race and gives us the "butterflies in the stomach" feeling. This contributes to the nervous excitement we feel when we're around the person we're in love with. Along with adrenaline, the body releases norepinephrine, which increases alertness and heightens emotional responses, making interactions feel even more intense.

In the early stages of love, our brains focus on the positive aspects of the relationship, making it harder to notice any flaws in our partner. As a result, the brain's "danger centre" (the amygdala) becomes less active, leading to a reduction in fear and negative emotions. At the same time, the prefrontal cortex, responsible for rational thinking and decision-making, also slows down, which could explain why people in love tend to make more impulsive choices.

As the relationship develops, our brain starts producing oxytocin, often called the "love hormone." Oxytocin helps people bond and feel closer to one another, creating feelings of security and happiness. This hormone plays an important role in deepening trust and emotional connection.