

# The Alchemist's Code: Decoding Altruism

## (Year 7 - Ages 12-13)

### Lesson 1 of 9

#### Teacher Preparation

##### Introduction for Teachers

This lesson serves as the "Initiation" into the Year 7 unit. At 12-13 years old, students are transitioning from primary school to high school, and their understanding of the world is shifting from "rules" to "values."

This lesson moves beyond the "Hero" and "Detective" themes of earlier years. Instead, we frame the donor as a "Modern Alchemist." In ancient times, alchemists sought to turn lead into gold. In modern medicine, organ and tissue donation is the only process that can turn a tragic loss (end of life) into "Human Gold" (saved lives).

The objective is to engage students with the philosophy of helping (Altruism) and the biology of the result. We want them to view the body not just as a collection of parts, but as a system capable of miraculous transformation.

#### Safety and Sensitivity Considerations

- Managing the "Cool vs. Gross" Factor: Year 7 students often mask discomfort with humour or by calling things "gross."
  - Strategy: Validate the reaction but pivot immediately to the science.
  - Say: "It is wild to think about, isn't it? It seems gross or sci-fi, but it's actually pure biology. It's the ultimate form of recycling—taking something that isn't needed anymore and using it to restart a life."
- Handling the Topic of Death: Unlike primary students, Year 7s understand the finality of death.
  - Strategy: Be direct but soft. Avoid euphemisms like "went to sleep."
  - Say: "Donation is rare because it can only happen when a person dies in a hospital in a very specific way. It's a hard time for a family, but for many, knowing their loved one is saving others is a huge comfort. It turns a sad ending into a hopeful new beginning."
- Privacy: Remind students that while we discuss the science and ethics of donation, we do not need to share personal medical histories unless they want to.

#### Teacher Resources

- Whiteboard or Smartboard.
- Resource: "Motive Cards" (Scenarios printed on cards to sort into Intrinsic vs. Extrinsic motivation).
- Student Worksheet: "The Alchemist's Journal."
- Video Hook: A clip showing a recipient's "moment of transformation" (e.g., a corneal transplant recipient seeing for the first time).
- Prop (Optional): An "Alchemist's Vial" (a jar with glitter or coloured water) to represent the "Elixir of Life."



# Key Concepts & Language for Teachers

- 1. Decoding Altruism: The "Why"
  - At this age, students are exploring their identity. We use this lesson to distinguish between two types of motivation:
    - Extrinsic Motivation (Fool's Gold): Doing good to get a reward, praise, or money. (e.g., "I'll donate if you pay me.") Note: Selling organs is illegal in Australia.
    - Intrinsic Motivation (Pure Gold): Doing good because it aligns with your internal values, with no expectation of reward. (e.g., "I'll donate because I want to help someone live.")
  - The Lesson: Organ donation in Australia is pure Altruism. It is a gift, never a transaction.
- 2. Biological Alchemy: The "How"
  - This metaphor helps explain the medical process without getting bogged down in surgical details.
    - The Transformation: Explain that the donor provides the "spark" or "missing element" that allows the recipient's body to function again.
    - The Multiplier Effect: Just as an alchemist multiplies value, one donor multiplies life.
      - 1 Donor = Up to 7 Lives Saved (Heart, Lungs x2, Liver, Kidneys x2, Pancreas).
      - 1 Donor = Many Lives Restored (Tissues like eyes, bone, skin, heart valves).

## The Alchemist's Data: Magical Body Facts (Year 7)

- Use these facts to spark curiosity during the lesson. They highlight the "supernatural" abilities of the human body.
- The Regenerating Engine (The Liver) The liver is the only internal organ that can regenerate (regrow) itself! You can donate a portion of your liver to someone else while you are still alive (usually to a family member), and your liver will grow back to its full size in a few weeks. It is the closest thing humans have to a superpower.
- The Bloodless Window (The Cornea) The cornea (the clear front window of the eye) is one of the only tissues in the body that has no blood vessels. It gets its oxygen directly from the air! Because it doesn't have blood, it is much easier to transplant than other parts because the body is less likely to reject it. It is the "Universal Window."
- The Body's Treatment Plant (The Kidneys) Your kidneys are only the size of a computer mouse, but they filter every drop of blood in your body 60 times a day. If they fail, a person must be hooked up to a dialysis machine for hours several times a week just to survive. A donated kidney sets them free from the machine.
- The Fortress (The Immune System) Our bodies are built to attack anything "foreign" (like viruses). For an organ transplant to work, doctors must play the role of "Peacekeepers." They have to match the donor and recipient carefully (like cracking a code) and use special medicine to tell the immune system, "Do not attack! This new part is a friend."
- The Rare Element Donation is incredibly rare. Only about 2% of people who die in hospital are able to become organ donors. This makes the organs "rarer than diamonds." This is why registering your decision and telling your family is so critical—we cannot afford to miss a single opportunity to save a life.

