

# Radioactive Tag (Tracer Tag)

## Concept

How radiotracers travel through the body

## How It Works

- One student = “radiotracer”
- Tagged students raise their hand = radioactive signal
- Play a few rounds

Alternative version: Give one student a flashlight, turn off the lights.

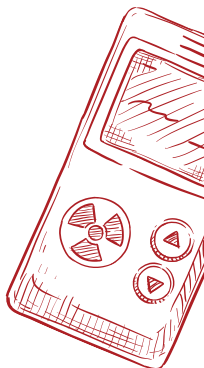
They have 10 seconds to shine the light on several students → those students raise their hand.

## Discussion Prompt

How do tracers move through the body? How do technologists detect them?

## Learning Point

Nuclear medicine helps us trace movement inside the body (blood flow, metabolism, etc.).



# Half-Life Candy Game



## Concept

Understanding radioactive decay

## Materials Needed

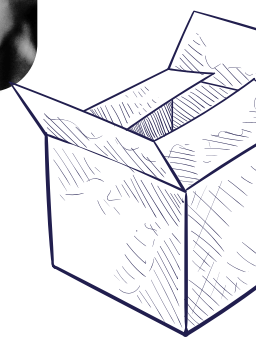
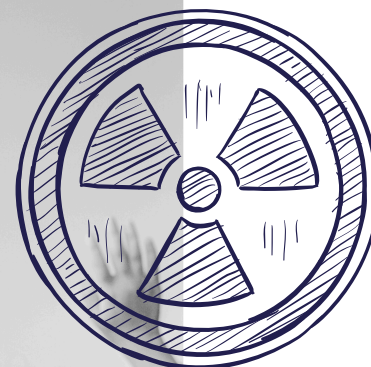
- M&Ms, Skittles, coins, or dice
- Container or cup
- Graph or worksheet (optional)

## How It Works

- Each candy = radioactive atom
- Shake the container
- Remove candies that land on a designated side (ex: "M" facing up)
- Count how many remain each round
- Graph the decay pattern

## Learning Point

Half-life shows how radioactivity decreases over time in predictable steps.



# “Cancer Seek-and-Destroy” Beanbag Game



## Concept

How targeted radiotherapy works

## Setup

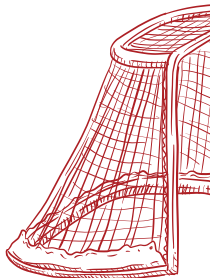
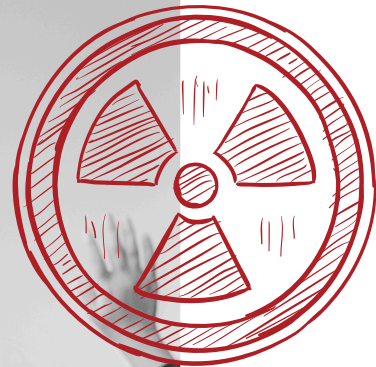
- Poster with “cells”
- Healthy cells
- Tumor cells
- Beanbags = “radiation”

## How It Works

- Students aim beanbags only at tumor cells
- Avoid healthy cells → just like targeted therapy

## Learning Point

Theranostics targets cancer cells while protecting healthy tissue.



# “Find the Source” Scavenger Hunt

## Concept

How technologists locate radioactive sources

## How It Works

- Hide “hot spots” (stickers, QR codes, toy beacons)
- Students use simple “detectors” (phone compass, beeping toy, or clues)
- Students mark each hotspot on a room map

## Learning Point

Technologists use detectors to find radiation for scans and treatments.

