



Radiation is everywhere Demo

Equipment

- Geiger Counter
- Uranium glass egg cup holders and necklace (in Resin)
- UV light torch, batteries
- Low Salt
- You can add Brazil nuts and bananas
- Table, table cloth if possible
- “Diagnosing disease using radioactivity” leaflet and poster
- Level of Radioactivity quiz

Safety / Risk assessment notes

The uranium glass is no more radioactive than the bananas or most background radiation so there are no risks attached to the material. The main risks would be injuries if any equipment falls off the table and hurts someone or if the glass breaks up.

Background

The idea of this demo is to show how radioactivity is everywhere around us and part of everyday life. The Geiger counter can detect background radiation.

- **Details**
Start with a question about what the kids think when they hear “radioactive”.
- Then explain that radioactivity is everywhere around us and explain that the Geiger Counter can detect the radiation. Explain that Uranium glass, which used to be really popular at the beginning of last century, has had [uranium](#), a radioactive substance, added to a glass mix before melting for coloration.
- Uranium fluoresces under UV light (so get out the UV torch, it just looks pretty)
- Then look at the flashcards and ask the kids to sort them in terms of radiation – demonstrating that every time they fly they get more radiation than an X-Ray.
- Finally, end by saying that in medicine radioactivity can be extremely useful and is used to diagnose disease and also to treat cancer. You can show them the poster and leaflet.