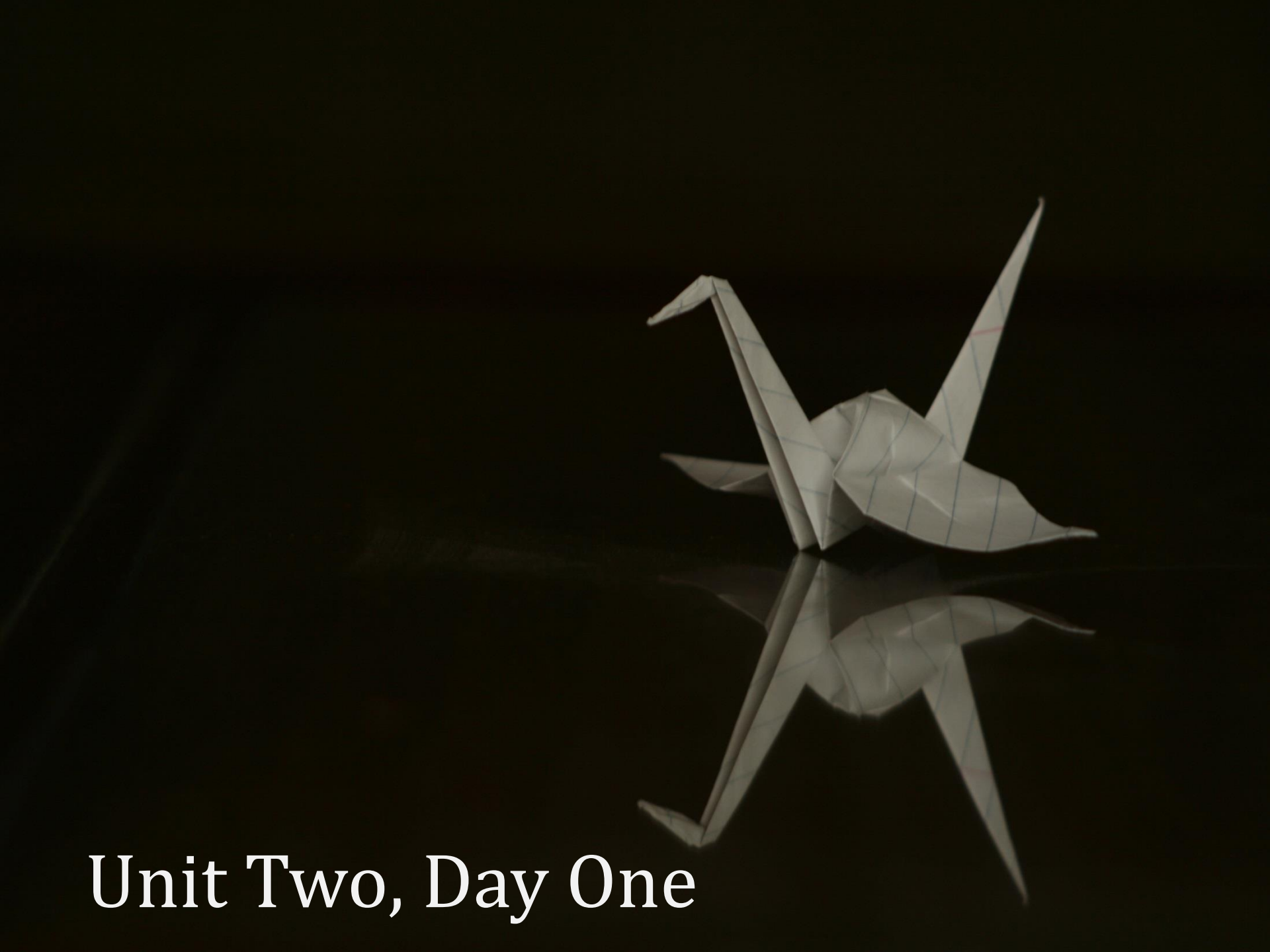
the wings of the crane

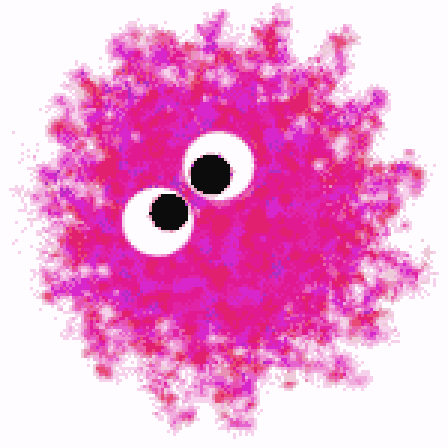
unit two

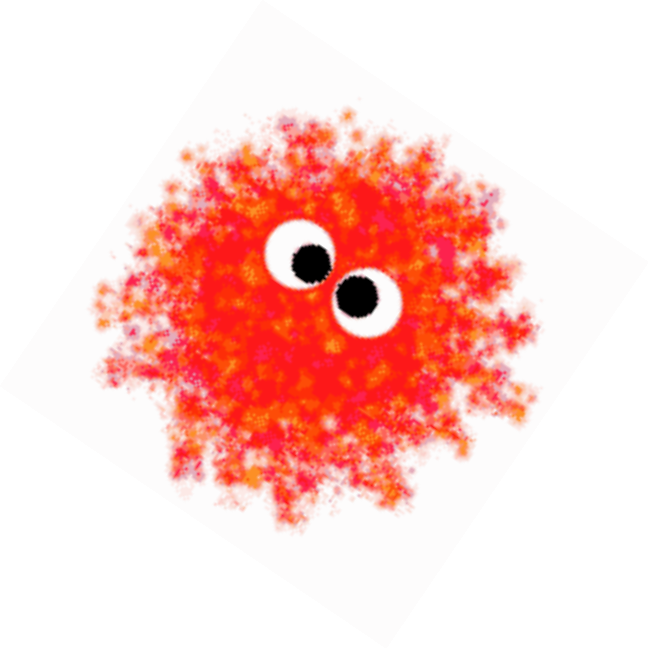


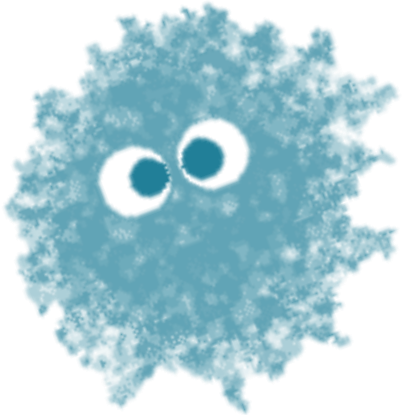
Unit Two, Day One

Atoms Give Me the Warm Fuzzies!

Begin to explore the cloudy nature of atoms and how theories of atomic make-up have changed over the years as scientific knowledge increases.





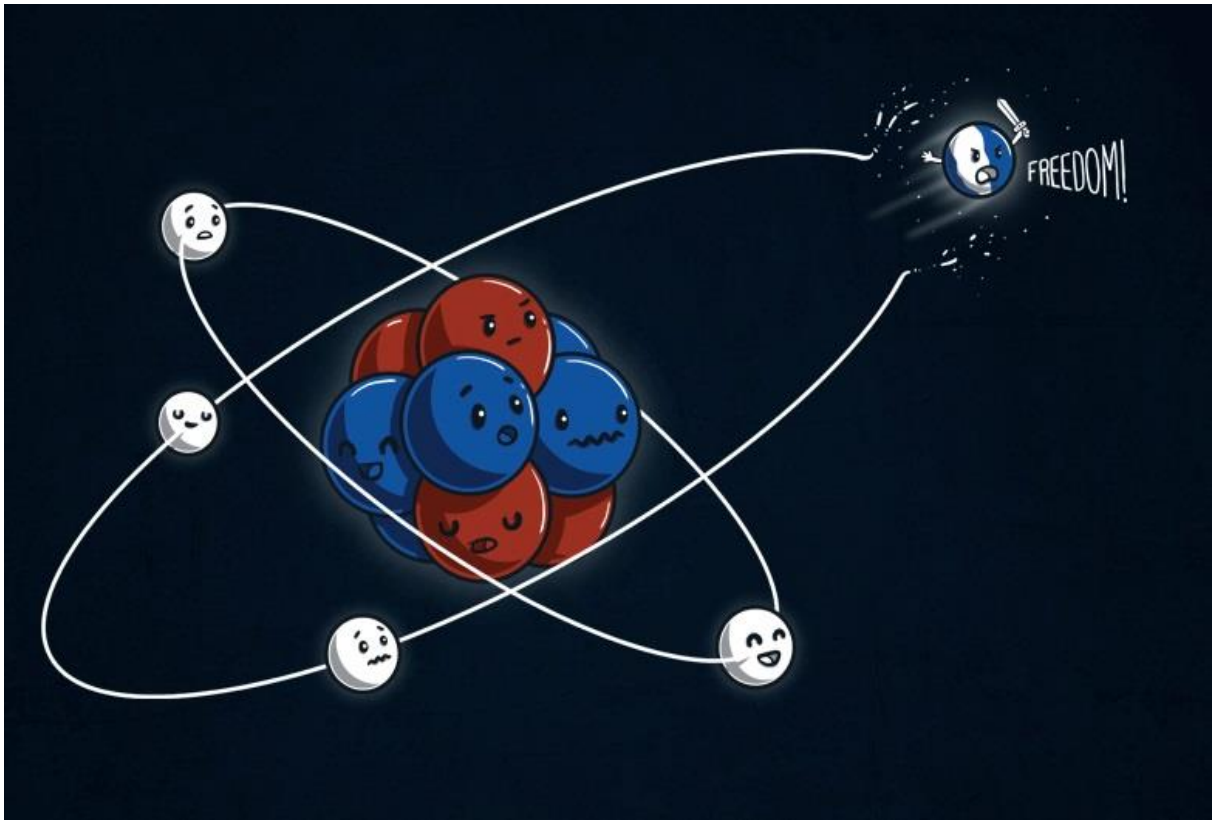


Sweet Atom of Mine

Model cloudy atom's layers…edibly.

Spitting Out Particles

Explore what happens during atomic decay.

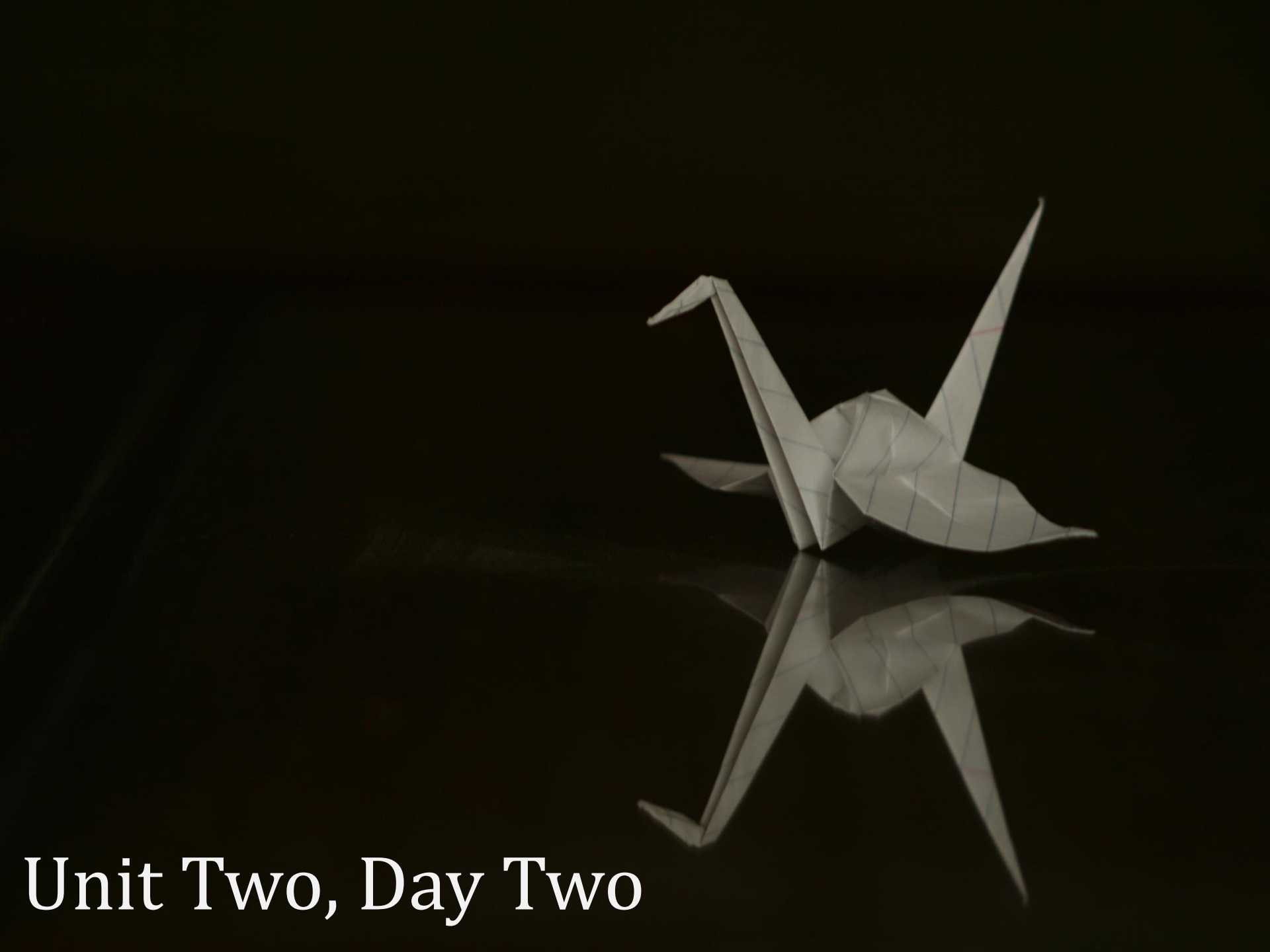


Radioactive Decay

Penny activity to help students visualize and model what happens when a nucleus decays, breaks down into smaller particles, and gives off energy.

The Radioactive Decay of ‘Candium’

A fun and sweet way to model radioactive decay!



Unit Two, Day Two

"Gone fission?"

Explore mousetraps and motion with several fun videos and see what a few ping pong balls flying has to do with nuclear reactions.

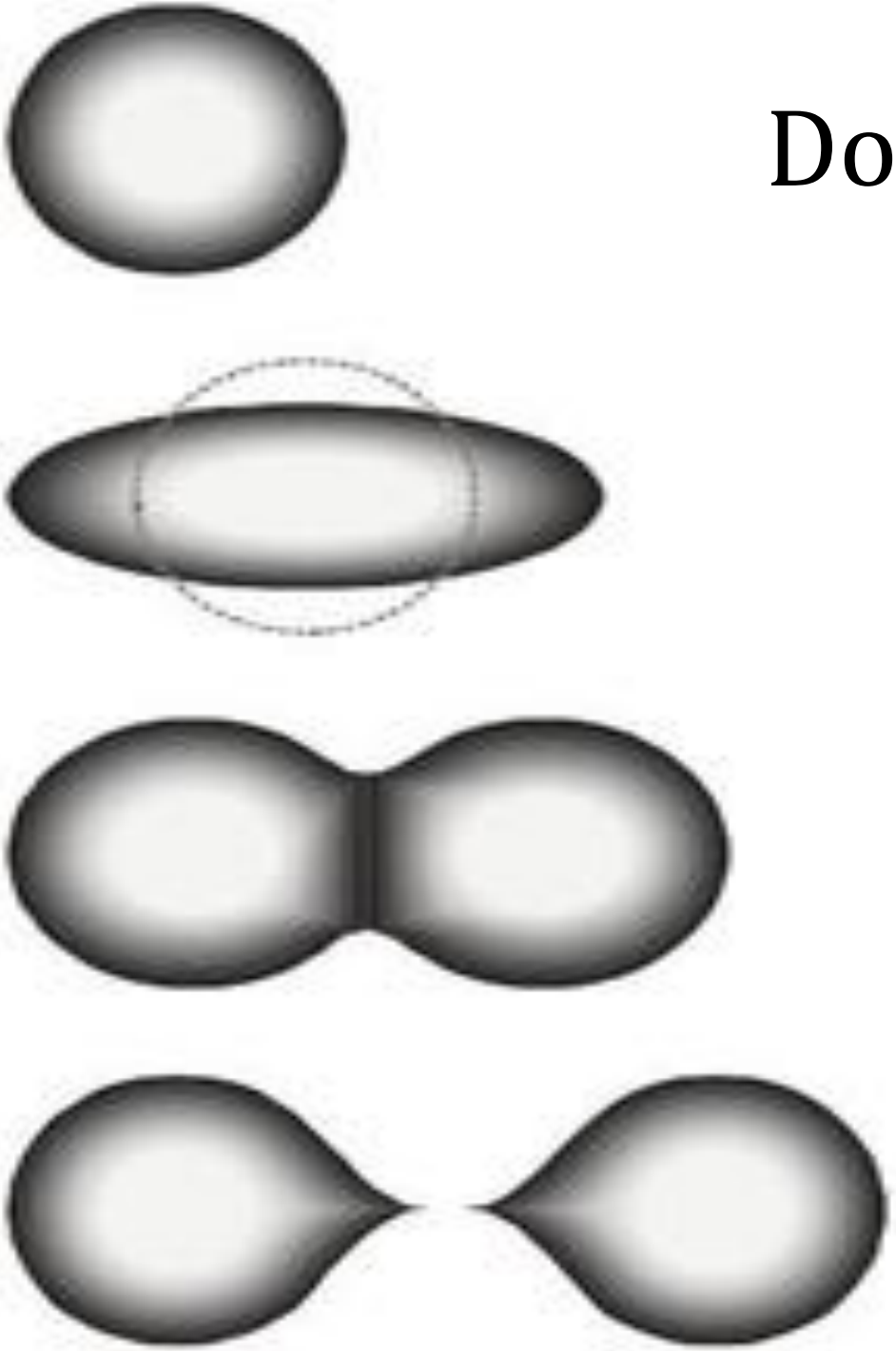
Gone ‘fission’?

Then explore the power of bombarding neutrons, the discovery of fission, and demonstrate the concepts with a twisted balloon experiment!

Stop, Drop, and Split? An Oil-Drop Model of a Splitting Atom

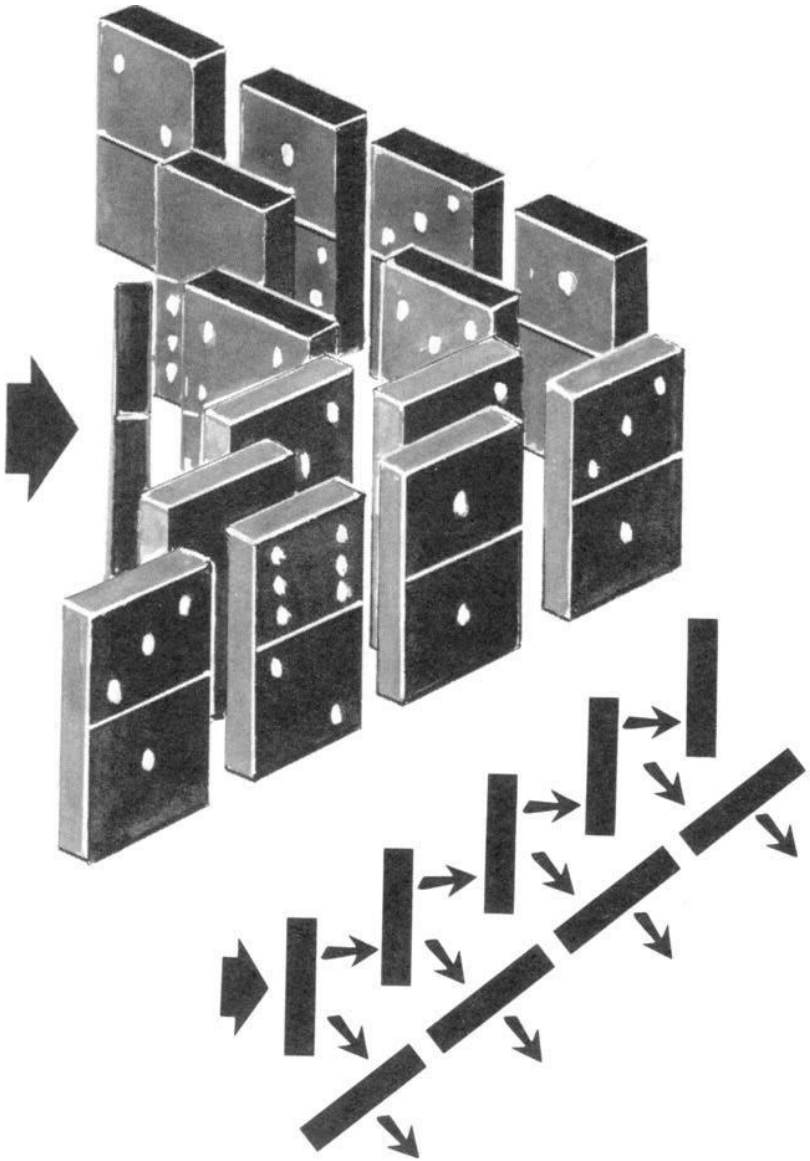
Many scientists have suggested that a splitting atom behaves somewhat like a drop of liquid when it breaks up into droplets. This experiment demonstrates the point.

Doing the Splits



Unit Two, Day Three

A Domino Model of a Chain Reaction



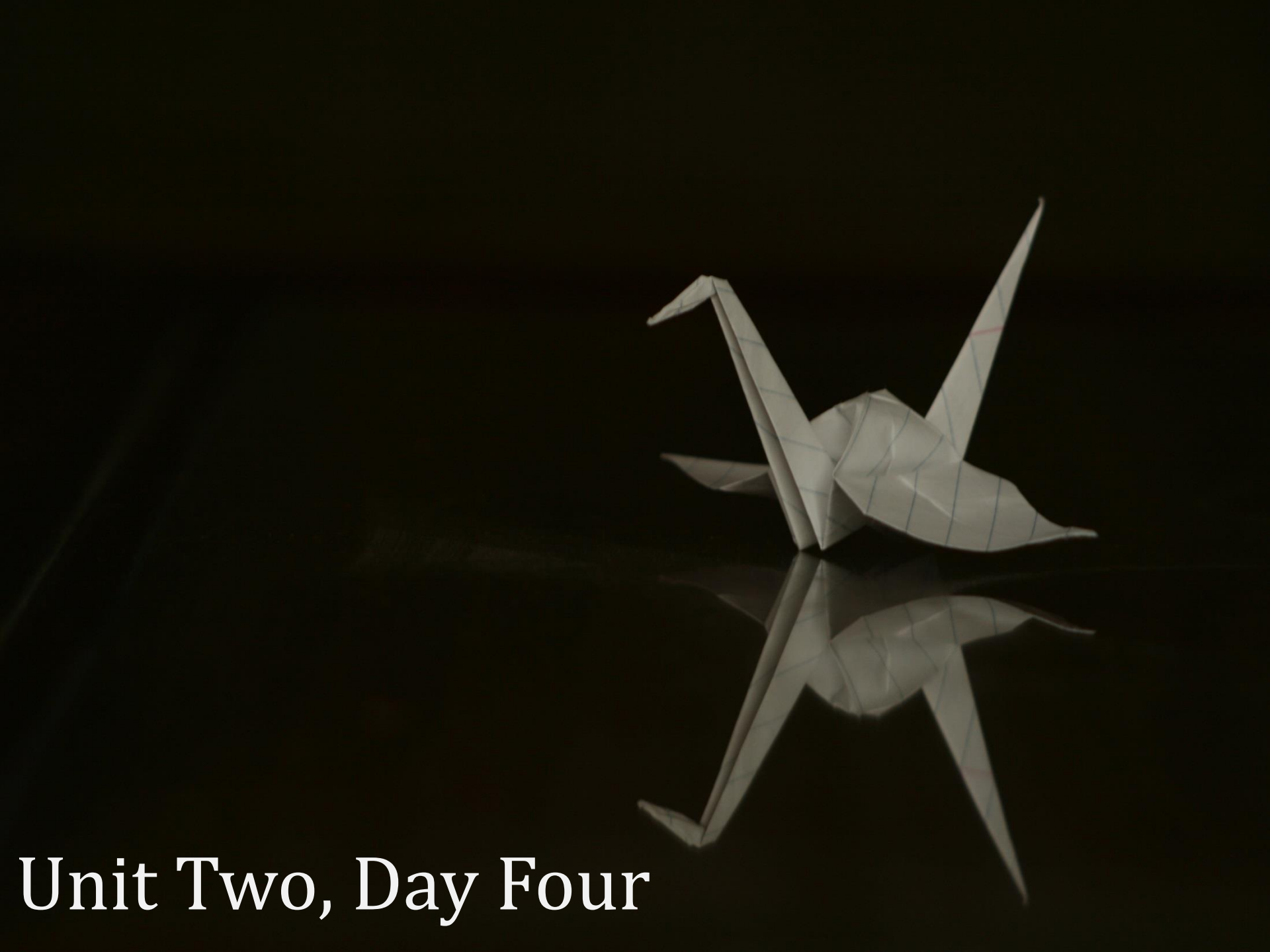
Students demonstrate a controlled type of rapid-fire chain reaction in a nuclear reactor with dominoes.

Then they use rulers to simulate the role of control rods in nuclear reactors.

Shut the Box!

Once your kids get hooked on this classic strategy game, you'll have a hard time getting them to stop! This game can help reinforce addition, multiplication and mental math skills. It’s incredibly easy to play, but just like in science and atoms, choose carefully, one wrong choice can start a chain reaction, or stop you in your tracks!

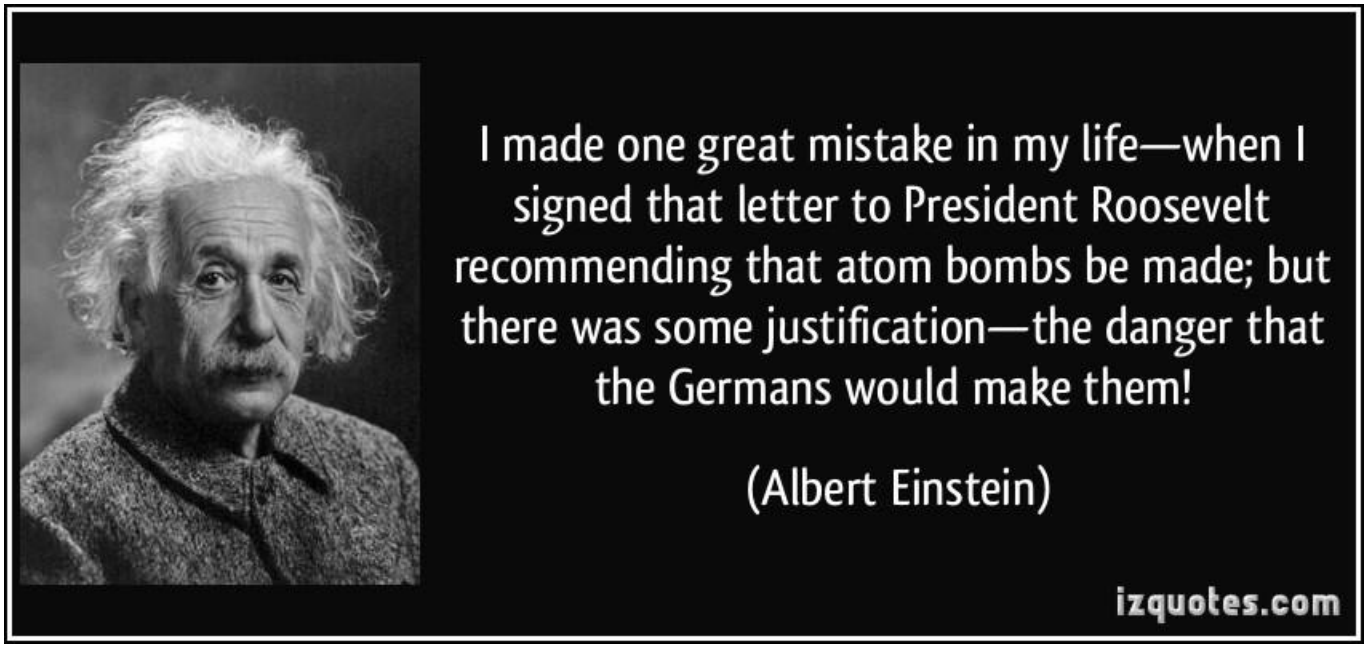
This fun game can even challenge adults!



Unit Two, Day Four

A World Changing Reaction

- Discuss and explore the triumph and horror the scientists felt at what they had discovered.
- Explore the intended benefits and unexpected side effects of nuclear power.
- Discuss what Albert Einstein did…



The Fission Game

This fun balloon activity is meant to demonstrate that a nuclear reaction is constantly producing energy and to help students understand how a large atomic nucleus can be split into two smaller particles, which produce energy for nuclear power.

Nuclear Clams! Stop the Leak

A fun tag style physical activity game to reinforce concepts discussed during the week.

Fast Fission!

A.k.a. Balloon Stomp!

Blow up two balloons (atoms) for each of the student‘s cientists’ and tie one to each of their ankles. Let the mayhem begin as the mad scientist quickly walk around the room trying to fissure (burst) each others atoms but at the same time trying to preserve their own. The scientists who manages to preserve the last atom is the winner.