

## Tooth Fair Directions

- 1) Read Fact Sheets for calcium and strontium.
- 2) Re-read Tooth Fairy article
- 3) Create a model for calcium (3 points)
- 4) Create a model for strontium-90 (3 points)
- 5) On a separate piece of paper write a paragraph explaining how the human body is “tricked” into absorbing strontium-90 and depositing it into bones and teeth. Make sure to give supporting details from the article and both factsheets. (5 points)
- 6) Staple paragraph to atomic models and turn in.

# Strontium

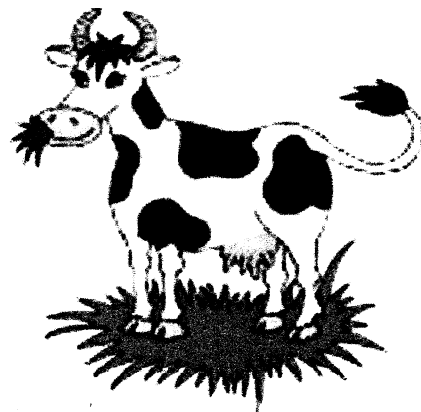
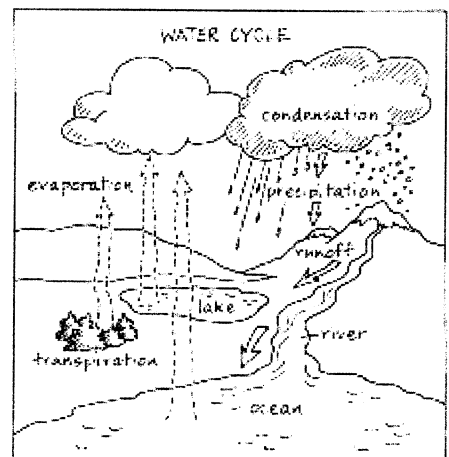
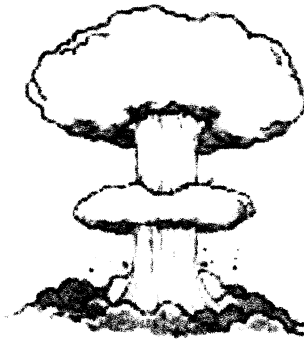
## Element Information

- Strontium is a chemical element with symbol Sr and atomic number 38.
- Strontium is a soft, silvery metal that burns in air and reacts with water.
- A form of Strontium (Sr -90) is radioactive.
- Strontium-90 does not occur naturally. It comes from three sources:

- fallout from above-ground explosions of nuclear weapons testing worldwide from 1963 to 1980;
- radioactive releases from the 1986 Chernobyl nuclear power plant accident in the Ukraine; and
- radioactive releases from nuclear power plants into the environment.

- In the United States, the primary pathway for Sr-90 to enter the body is through ingestion of contaminated foods and cow's milk.
- At high enough levels, Sr-90 can cause bone cancer.

How does it get into the environment and food sources?



# Calcium

## Element Information

- Calcium is a chemical element with symbol Ca and atomic number 20.
- Calcium is a soft gray Group 2 alkaline earth metal, fifth-most-abundant element by mass in the Earth's crust.
- Calcium is essential to all living things, particularly for the growth of healthy teeth and bones.
- Calcium phosphate is the main component of bone. The average human contains about 1 kilogram of calcium.
- Children and pregnant women are encouraged to eat foods rich in calcium, such as milk and dairy products, leafy green vegetables, fish and nuts and seeds.

## How do humans get it to use?

