

Rock-it Science Observations For Winter Lessons 2010

Sodium and Magnesium (Older Groups)

The students had small pieces of magnesium and then small pieces of sodium.

They might have noticed:

- The magnesium appeared to be dark gray but freshly drilled chips were shiny silver.
- The magnesium was very light and blows away easily.
- The magnesium doesn't burn easily with the flame of a barbeque lighter.
- The magnesium melts with the flame from a propane torch.
- If enough oxygen is present, the magnesium burns with a very intense white light.
- Burning magnesium produces dense white smoke.
- The magnesium burns hot enough to melt the fire brick.
- The burnt magnesium leaves a white ash.
- Small pieces of impure burning magnesium can be extinguished by dunking in water.
- Sodium metal comes coated with a brownish yellow crust.
- The sodium was stored in oil.
- Sodium can be cut easily with a pocket knife.
- When cut, sodium first appears silver but quickly turns dark gray.
- When small pieces of sodium (about the size of a grain of rice) are placed in water, they form a ball on the surface, fizz, and zoom all over the place bouncing off of the walls.
- When sodium is placed on a wet paper towel, it fizzes and produces an orange glow, and sometimes it explodes sending smoking streamers all over inside the fish tank.
- The fumes coming from the burning sodium don't smell good!