

Spooky Science Lesson Plan

Meet kids at closed door which has a sign that says "Spooky science lab" "Enter at your own risk". Kids enter pick up donut treat to eat during first two demonstrations

1. Demonstration of life size skeleton – Ask kids why we have a skeleton and discuss function- Give hand out- Show how contraction of bicep causes lower arm to lift to hinge position.
2. Dry ice demonstration- Solid, liquid, gas

What is dry ice? Solid CO₂ at -110 Fahrenheit

Dry ice unlike water does not have a liquid phase. Ice first melts at >32 degrees Fahrenheit to first become liquid and then in order to become gas form it has to heat up to >212 degrees Fahrenheit

Dry ice "sublimates" which means it goes straight from a solid state to a gas state.

Do demonstration – As the dry ice sublimates the bubbles you see in the water are the gas form of CO₂ the vapor that you see is actually water vapor. It is the water that is in the air that condensates from the cold CO₂ bubbles. It is just like when you go out on a very cold day and you breathe out the vapor you see is the water vapor form your breath that is condensating in the cold air.

Add dish washing liquid and see bubbles full of water vapor form.

3. Experiment 1- Static Electricity- Balloons moving ghosts. All kids perform at their desks
Hand out. Explain electrons negative on the balloon and attracting the positive protons in the tissue paper.
4. Experiment 2 – Baking soda and vinegar- Floating gummy worms. All kids perform at desk
Hand out. Explain What is happening in the equation. Run experiment. Point CO₂ bubbles.
Explain why cakes rise
5. If time allows, team work exercise/game
Divide into groups of 5/6 kids – 5 minutes to make one of their members into a mummy.
Winning team will have the best coverage and mummy must be able to walk and move their arms.

Send home with goody bag