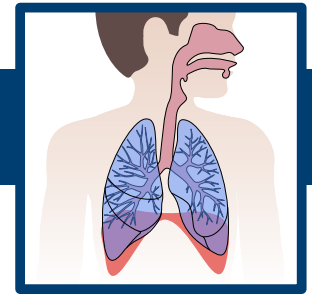


LESSON 3: RESPIRATORY EXPLORATORY

Exploratory Laboratory 3D: *Confusion About Diffusion*



In this lab, you will consider the problem: how can gases cross through or be contained by tissue or a membrane?

Materials:

- › 2 250 ml beakers
- › 2 snack-sized baggies
- › 200 ml water
- › 50 ml graduated cylinder
- › 1 bottle of iodine tincture
- › 10 grams cornstarch
- › Triple beam balance or electronic scale
- › Glass stirring rods or plastic spoons
- › Paper towel
- › Safety goggles



Safety:

Always be careful when handling glass in the lab. Avoid getting iodine tincture on your hands or clothing. Iodine tincture will stain! Iodine tincture is also an eye irritant which is why wearing goggles is so important.

Procedure:

1. Label the beakers: "A" and "B"
2. Label the baggies: "A" and "B"
3. Add 50 ml of water to beaker A and beaker B
4. **Beaker A:**
 - a. Add 5 grams cornstarch to the water in Beaker A
 - b. Stir and set aside
5. **Beaker B:**
 - a. Add 10 drops of iodine tincture to the water in Beaker B
 - b. Stir and set aside
6. **Baggie A:**
 - a. Add 50 ml of water to baggie A
 - b. Add 10 drops of iodine tincture to baggie A
 - c. Seal the baggie
7. **Baggie B:**
 - a. Add 50 ml of water to baggie B
 - b. Add 5 grams of cornstarch to baggie B
 - c. Seal the baggie
8. Place the sealed Baggie A in Beaker A
9. Place the sealed Baggie B in Beaker B
10. Record your observations on the Processing Out.

