

Egg Dissection Membrane

Time: 15mins

Age: Fun for all ages! See if you can make it a challenge against a family member!

Supplies:

1. Eggs
2. Plate
3. Paper Towel or something to wipe up with

Activity:

Follow along with the video or watch first then try on your own!

Step 1: Crack the egg on the paper plate like you would in a frying pan

Step 2: leave the yolk part off to the side of the plate. You will only be looking at the shell!

Step 3: Looking at the shell. Take one of the sides you cracked in half to work with. From here you will see, almost paper like lining the inside of the shell. That is the membrane!

Step 4: Ever so slowly peel the membrane inward towards itself. You will see it starts to peel away.

Step 5: After you have peeled it out, play with it!

How strong is it?

Can you see through it?

Does it have only one or two layers?

Does it have a smell to it?

Knowledge:

a. Membrane: Located just under the eggshell, is a thin whitish covering

- Made from transparent proteins, this provides efficient defense against bacterial invasion. They're made partly of keratin, a protein that's also in human hair.

- This is one of the chick's defense systems against germs

- What is one way we protect ourselves from germs?

- Yup, you guessed it! Washing our hands!

b. Colors of Shells: all eggshells start out white. The breed of chicken determines the pigment that is applied to the outside of the shell.

There are only two pigment colors, Brown or Blue.

- How: early in the laying process the blue pigment is applied and the color seeps through to the inside of the shell. Brown pigments is applied later, this means the inside eggshells are still white in a brown egg!

- Green: Some breeds have both brown and blue pigment, which make their eggs green and insides blue

c. Washing Eggs: removes the bloom, allowing the egg to age more quickly and lose its freshness. Also, increasing the chance of bacteria entering the egg.

d. The Shell: has between 7,000-17,000 tiny pores on the outside of shell. These regulate the movement of air and bacteria into the egg and carbon dioxide and moisture out of the egg

e. Single or Double yolk eggs are dependent on when the two yolks are released into the hen's oviducts too close together and they are both encased in the same shell.

f. 24 or 26 hours to produce and lay an egg

Tips:

Fresh Eggs don't peel well because there's not enough air in between the membranes to allow them to separate for you to peel the shell off!