Grades: intermediate

The Little Red Hen "Chicken Coop & Hatchery"

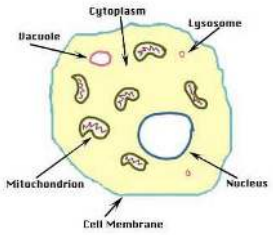
Before your visit:

*Read several books about chickens and discuss the information with the students.

*Review the stages in the life cycle of a chicken.

*Ask students if they think they can break an egg in the palm of their hand. Take a yes/no vote and make a graph if desired. Hold an uncooked egg over a bowl. Hold it in the palm of your hand and squeeze as hard as you can. (The egg should not break. The only reason it should break is if there is a tiny crack in the egg.) Allow students to try this activity. Guide discussion towards the fact that a hen's weight spreads out evenly over the rounded shape of the eggshell when she sits on the egg. The weight of the hen does not break the egg. (A typical chicken egg will support a weight of nine pounds before breaking.)

*Review the parts of an animal cell (cell membrane, cytoplasm, nucleus, vacuole, lysosome, and mitochondrion) to be used to compare with the parts of an egg after your visit. Have the students draw an animal cell diagram on a piece of paper. Have the students discuss in pairs or small groups the parts of the animal cell and their function.



*As a practice and preparation activity to demonstrate the importance of observing physical properties of objects, have the students pair up and hand each pair an apple and a circle thinking map. Tell students that they can't mark their apple in any manner. Have each pair observe and examine their apple and record the physical properties of their apple on the thinking map. Provide students with a string and a ruler to use for measuring their apple. Collect the apples from the students and mix them up. Have the students try to find their original apple again from the stack using their physical properties thinking map. The students will be completing a similar activity during their visit at Fairview Farms.

During your visit:

*Observe the hens, chicks and eggs at Fairview Farms. Do you notice anything unusual about the chicks or hens? Are they all the same size, shape, and color? Choose a specific chick or hen for the next activity and don't tell anyone.

*Have students fill out a circle map to note the physical properties of one of the chicks or hens at Fairview Farms. Remind them to be very specific on their description and to include physical properties of size, color, location of spots or stripes, and feathers. Have the students exchange their circle map with a partner to see if the partner can determine which chick or hen they were describing on their circle map. Have students return the circle map to the original owner and have the student add additional descriptive physical properties about their chick or hen. Exchange circle maps again to a new partner to see if they are more successful.

After your visit:

* Discuss the real hens, chicks, and eggs that you saw at Fairview Farms.

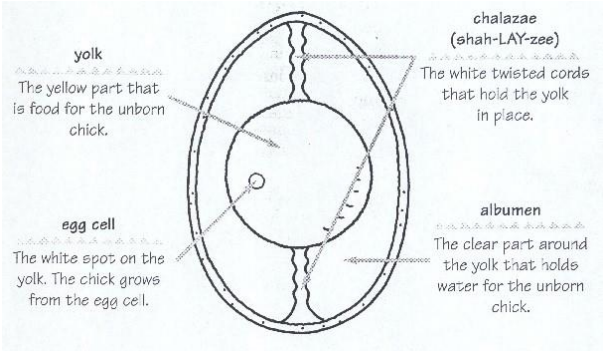
*Draw an outline of an egg on chart paper. Introduce and define the following parts of an egg as you label the drawing: yolk, albumen, chalazae, yolk, egg cell, inner membrane, outer membrane, air cell, and shell

*Have students draw and label their own egg.

*In pairs or small groups, break an uncooked egg into a small bowl. Look closely at the egg. Try to identify the parts of the egg.

*Relate the parts of the egg to the parts of a cell.

*Hand out a Venn diagram to all students and have them compare and contrast an egg with an animal cell.



*Write an opinion paragraph to answer this age-old question: Which came first, the chicken or the egg? The prompt is included.

Books About Chickens:

Cells For Kids by Nishi Singh

From Egg To Chicken by Gerald Legg

Learning About Cells, Grades 4-8 by Debbie Routh

Life Cycles—Chicken by David Schwartz

Where Do Chicks Come From? by Amy Sklansky