Samples from the Lab Portfolio of DelCastle High School

Genevieve Griffiths
Brian Gross

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GOALS

• Bring “real world” science into the classroom.

• Demonstrate that science is fun, practical and important.

• Engage students in hands on science.
Objective: Demonstrate osmosis by weighing decalcified eggs after submersion in varying concentrations of sucrose.
Objective: Measure CO2 levels in a beaker with plants and/or animals in it, demonstrating gas exchange
WHAT'S IN AN EGG?

Objective: Run tests determining the lipid, protein and carbohydrate levels in various parts of an egg
Objective: Dissect Fertilized chicken eggs and monitor embryonic development. Use caffeine to see the effect of drugs on heart rate.
DNA Extraction Lab

Objective: Use H₂O, NaCl, EtOH, and meat tenderizer to extract DNA from cheek cells.
The MR. POTATO HEAD Lab

Objective: Use “alleles” corresponding to features to create unique Mr. Potato Head characters
Reflections

• Teenagers are a difficult audience, heightened appreciation for high school teachers.

• Processing knowledge is unique to each student and individualized learning is very difficult to incorporate into a larger classroom.

• A little encouragement goes a long way!