FOR TEACHERS: PRE-VISIT ACTIVITIES grades 5-8

How to Use: Try any or all of the activities below in advance of your visit to the Spitzer Hall of Human Origins. You can also photocopy the worksheet on the opposite side of this page and distribute it to students to use as they walk through the exhibition. They'll need a pen or pencil and a hard surface to write on.

Diary of a Discovery:

To excite students about the famous fossils they'll see represented in the Spitzer Hall of Human Origins, visit **amnh.org/education/humanorigins**. You'll find firsthand accounts about the moment of discovery of Lucy, the Laetoli footprints, and Turkana Boy. Follow-up questions are suggested.

OLogy Activities:

Engage students in web and hands-on activities about genetics and fossils from OLogy, the Museum's website for kids. Visit:

ology.amnh.org/genetics
- *Go on a Genetic Journey* to track your unique traits
- *What Makes You YOU?* to zoom in on DNA in the body

ology.amnh.org/genetics/stufftodo
- *Wear a Chimp on Your Wrist* to make a bracelet of genetic code

ology.amnh.org/paleontology/layers
- *Layers of Time* to sort fossil layers by date

DNA Extraction:

Isolate DNA in the classroom using strawberries, salt, shampoo, and other basic materials. You'll find a lesson plan at **amnh.org/education/humanorigins**. (Alternatively, you can schedule a lab period for your students in the Sackler Educational Laboratory for Comparative Genomics and Human Origins, located in the Spitzer Hall of Human Origins, to perform the activity with an AMNH educator. Visit **amnh.org/education/sackler** for more information.)

Measuring Variation:

Give students 20 dried lima beans (or any other type of bean), rulers, and magnifying lenses.

1. Have the students observe the beans to see if they are identical. Then they can examine the beans to describe their variation, if any.
2. Have students measure the beans with the ruler and lens.
3. Use the following questions to guide a discussion of their observations and measurements:
   - How might the beans' variation affect what kind of plants they grow into?
   - What do your observations tell you about variation in living things?
   - Why is variation important?

You can correlate your visit to the Spitzer Hall of Human Origins to the NEW YORK CITY SCOPE AND SEQUENCE for grades 6-8.

Grade 6
Unit 3 Diversity of Life
Kingdoms of Life
- The cell is a basic unit of structure and function in living things.

Unit 4 Interdependence
Ecosystems and Interdependence
- Populations and definition of species

Grade 7
Unit 1 Geology
Fossils and Earth's History
- Where fossils are found
- Dating of rocks: Absolute and relative age
- The importance of the fossil record

Unit 3 Dynamic Equilibrium: The Human Animal
Levels of Organization
- Cells—structure and function

Grade 8
Unit 1 Reproduction, Heredity, and Evolution
Heredity
- Genes and DNA
- Mutations

Natural Selection: The Driving Mechanism Behind Evolution
- Sources of variation in organisms
- Adaptations
- Evidence for evolution