Unit 3: Heredity: Inheritance and Variation of Traits

Content Area: **Science**
Course(s): **Biology, Earth Science, Physical Science**
Time Period: **Generic Time Period**
Length: **5 weeks**
Status: **Published**

Standards

MA.1.1.MD.A.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.
SCI.1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
LA.1.W.1.7	Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
LA.1.W.1.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
LA.1.RL.1.1	Ask and answer questions about key details in a text.
SCI.1-LS3	Heredity: Inheritance and Variation of Traits

Learning Objectives

Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

Essential Questions

How are baby animals similar to adult animals?

How are "baby" plants similar to the adult plants?

How are you similar to your parents?

How do we predict inherited traits?

Learning Activities

-Baby/Adult animal project-Students will work with a partner to choose an animal & illustrate the baby and the adult. Then students will work together to list ways the baby & adult are similar and different

-Speaking and listening activity: Students partner up to give each other feedback

-Baby/Adult plant project-Students will work with a partner to choose a plant & illustrate the baby and the adult. Then students will work together to list ways the baby & adult are similar and different
-Speaking and listening activity: Students partner up to give each other feedback

Inherited traits activity
-Smartboard examples with eye color and hair color
-Students will list the genotype of their parents' eye colors and create a chart to see if they received dominant or recessive traits from each parent

Home connection project-request photos of student, mom, and dad (if available)
-Students will determine what they have that is similar to their parent(s) and what is different physically
-Students will list ways they are like their parents and ways they are different (I like spaghetti and my dad does too. My mom was a dancer and so am I.)

Materials & Resorces

www.mysteryscience.com

Smartboard with internet access

Science Smartboard files (W drive)

Interactive Science Notebook (www.NicoleAndEliceo.com)

scissors

glue sticks

pencils

crayons

construction paper

photos of students & parents

Genotype chart for eye/hair color

Assessment

Daily Interactive Science Notebook production

Finished baby/adult animal production

Finished baby/adult plant production

Genotype sheet

List of ways child is like parent(s) and ways they are different

Accommodations & Modifications

- Large print textbooks

- Additional time for assignments

- Review of directions

- Have student restate information

- Provision of notes or outlines

- Concrete examples

- Adaptive writing utensils

- Support auditory presentations with visuals

- Weekly home-school communication tools (notebook, daily log, phone calls or email messages)

- Space for movement or breaks

- Extra visual and verbal cues and prompts

- Books on tape

- Graphic organizers

- Quiet corner or room to calm down and relax when anxious

- Preferential seating

- Alteration of the classroom arrangement

- Reduction of distractions

- Answers to be dictated

- Hands-on activities

- Use of Manipulatives

- Follow a routine/schedule

- Alternate quiet and active time

- Teach time management skills

- Rest breaks

- Verbal and visual cues regarding directions and staying on task

- Daily check-in special education teacher

- Visual daily schedule

- Varied reinforcement procedures

- Immediate feedback

- Personalized examples