Grade: 1st Grade

Program Title: Baby Animals

Related Iowa Core Performance Expectations:

1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. [Clarification Statement: Examples of patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.] [*Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.*]

1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.* [Clarification Statement: Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structures by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills; and, detecting intruders by mimicking eyes and ears.

1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. [Clarification Statement: Examples of patterns of behaviors could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).]

Future Considerations: Blend this program with the unit storyline developed by the classroom teacher.

Program alignment with the Iowa Core Science Standards:

Disciplinary Core Ideas (DCIs)	**Investigative Question**	**Investigative Phenomena**	**Practices (SEPs) Students will:**	**Cross Cutting Concepts (CCCs) Students will identify:**
LS3.A: Young animals are very much, but not exactly like, their parents. **LS1.D**: Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. **LS1.B:** Adult plants and animals can have young. In many kinds of animals, parents and the offspring	How are baby and their parents different or alike? How do they interact in order to survive?	Show a picture or mounted fawn (all alone) and ask where its mom is?	**Ask questions and define problems** when they voice observations of the phenomena **Develop and use models:** during the Marco Polo game by contributing a certain animal sound(s)	**Patterns** of baby animal care for different categories of animals.

themselves engage in behaviors that help the offspring to survive.				

Program Components: The presenter will help students use the CCCs, the SEPs and the phenomena to figure out how to answer the investigative question and to grasp the disciplinary core ideas.

1. Show a picture or mounted fawn (all alone) and ask where its mom is? Students make observations and ask or write down questions
2. Discuss additional major animal group parent behavior by observing pictures, or objects that represent the animal group ex: turtle shell, pelt, snake skin (reptile, amphibians, insects: lay eggs, provide minimal care, and leave in general), (fish: provide intermediate care), (mammals, birds: provide maximum amount of care)
3. While describing the different animal groups, point out that the adult may not look exactly like the baby ex: Frog and tadpole. Maybe point out different adaptations, camouflage ex: spots of fawn
4. Play Marco Polo Animal Babies Edition (from Fort Wayne Children's Zoo Bringing Up Baby)
    a. Start off game by giving an example of animal parenting behavior (signals the offspring or parent makes to locate each other for survival, such as sound and smell)
    b. Ask students to provide an animal and the sound that animal makes
    c. Pick a student to be the "parent" (Marco/caller)
    d. Other students group together away from the parent (the "babies")
    e. Instruct the parent to call for their baby with eyes closed
    f. The other students respond with the appropriate noise
    g. Once a baby is tagged then they are safe/survived (depending on situation, set a time or number of babies that need to be saved)
    h. Alternatively, the game may be played with smells. Film canisters work well for this. Each canister has a food flavoring/scent with a number scratched in the bottom and letters scratched (i.e. CY for cherry, VA for vanilla) in the lid to identify the pairs. Give parents plenty of time memorize the smell, then give the canister to the baby while the parent keeps the lid (for tracking purposes). Parents try to find their babies based on the smell.
    i. In addition if you want to find a specific baby, stick a color post-it note on their back and the same color on back of Marco/caller.
5. How are baby and their parents different or alike? How do they interact in order to survive?
    a. Show the pictures/objects that represent the different animal groups and ask the students how the parent communicates with the baby and level of care the parent provides.