**Subject/Grade level:** Science/ 2nd grade

**Unit topic (if applicable): Science**

**Lesson goals**: The goal is for each student to investigate the physical characteristics of animals to meet their basic needs.

**Lesson title or topic:** Physical Characteristics

**Estimated length of lesson**: 45 minutes

**TEKS Standards:**

2.(10) Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments. The student is expected to:(A) observe, record, and compare how the physical characteristics and behaviors of animals help them meet their basic needs such as fins help fish move and balance in the water;

**Learning Objective(s):**

Student will use context to determine how the physical characteristics of animals helps them walk/run/hop/slither.

**Academic Language:**

* Walk
* Run
* Slither
* Hop
* Stomp
* Adaptation
* Behavior
* Camouflage

Grouping:

The students will begin on the carpet, while I frame the lesson, we will go into a discussion about animals and how we can categorize them. The students will then stand up and show examples of how they may walk as a certain animal. Then I will put up a video that shows different animal movement so they can follow along and represent the certain animas. The students will then by focusing on a certain animal, a duck and see the certain traits that help a specific animal has and how it helps it get its basic needs to survive. The beak- catch food, the webbed feet- to swim and escape from predators, the feathers- helps the duck stay dry with the oily coat and the color of the duck helps camouflage the duck for protection. A fish uses its fins to balance and swim. Some fish have certain colors to camouflage within their environment.

I will go over that we will be working as a team, and we will go over what “T.E.A.M.” represents and if we encounter any disagreements what is the proper way to express your disagreement. Together, Everyone, Accomplishes, More.

You may disagree, and I do not mind when we disagree, as long as you do so respectfully. Say “I disagree but can I suggest…”

Materials:

* Science ISN
* Pencil
* Crayons, Markers, & Color Pencils
* Charter Paper
* Animal Task Cards
* Laptops

Resources:

<https://www.youtube.com/watch?v=OwRmivbNgQk>

Connection to Other Subjects:

Physical Education

1. Movement. The student demonstrates competency in fundamental movement patterns and proficiency in a few specialized movement forms. The student is expected to: ( D) demonstrate mature form in walking, hopping, and skipping;

We can conduct animal movement by walking, skipping, hopping. While having reference to the animal movement the students can understand what physical characteristics that help the animal receive their basic needs.

Math

(10) Data analysis. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to: (D) draw conclusions and make predictions from information.

The students will draw conclusions from what they physically see on the animal and categorize what characteristics make them move, and by drawing conclusion of what helps that animal from the physical characteristics get their basic needs.

Gradual Release of Responsibility:

Introduction:

Rational: I will ask students how do animals move?

After I link the lesson to their prior knowledge of what type of movement there is, the students will work as a team to help determine why things like physical characteristics.

Teaching Modeling:

Framing the lesson:

Essential Question: What type of physical characteristics help make the animal move?

What physical characteristics help an animal receive their basic needs?

We will watch a video on animal movement and collaborate on a specific animal to find, what physical characteristics help them receive their needs.

I will work with my team to present my animal.

Body of Lesson:

We will work on understanding what a physical characteristics is and get responses of the student’s popcorning the answers out, and from what they respond after watching the video. I will reiterate what may miss out to help with filling the gaps of understanding.

Guided Practice:

I will ask students to stand up and have enough room to jump around. We will then watch the video on how animals move, to activate their prior knowledge that not all animals are alike and have different physical characteristics.

After the video I will go over academic vocabulary I will then ask them to give me examples of slither, swimming, hoping and waddling. We will transition into adaptation, and physical characteristics. I will go over an animals physical adaptions on a fish, why does a fish swim. A fish has fins to balance when they are swimming. Gills-breathing, the color of certain fish- help them avoid being eaten,

 Then give the task cards to the students within the group, the students will then examine the animal and give 3 details of their physical characteristics that help that animal receive their basic needs. The students will present the information as group.

Independent Practice:

After completing the animals and 3 adaptations I will give each student a certain task, the illustrator, scriber, two researchers who will help identify the physical characteristics and also be the presenters.

Conclusion: Call the students together after the end of the presentations, I will ask the students what they learned about how animals physical characteristics help an animal survival and receive their basic needs. I will give another example of an animal that was not in their research but is similar like a cheetah and ask them to give me an example for a house cat, why do they have padded feet.

While we were doing their research, and the communication that is being spoken with the group, I will determine if they know what adaptations is and if some student do not understand or get the answer wrong I can reiterate what adaptation, physical characteristics is.

To assess students understanding during the course of the lesson, I will ask them question within the team collaboration and observe each student’s understanding of the concept.

I will examine each students ISN and read their ISN and determine or not if each student were able to define adaptation, physical characteristics is with academic language.

PLAN B:

In the case that the lesson is not working as planned, due to students not being able to collaborate, I will then give an animal per person and within the Science ISN they will have to illustrate and give 3 details of their physical characteristics that help that animal receive their basic needs.

**Accommodations/Modifications/Enrichment:**

If the students are becoming a distraction to others, stop the class and say “heroes we are on zero” and hold up a “0” with my hand. Use certain attention grabbers “Hocus Pocus everybody focus”, “1,2 eyes on me” . If the behaviorally issue continuous to be an occurrence, I will stop and began breathing exercise”

-Special Needs Learners

There is no student classified as Special Needs Learners.

-English Language Learners.

There is no student classified ad English Language Leaners

-Gifted and Talented

There is no students classified as gifted and talented.