Interdisciplinary Unit Kindergarten Unit 4 (K4)

Concept: CONNECTIONS

#### **Essential Questions:**

Is it possible to find connections between things that seem very different?

#### **Deepening Questions:**

How are animals alike and different?

What is the connection between people, animals and plants?

How does making connections help us to better understand the book?

How do people get the things they needs and want?

What is the connection between reading and writing?

How does knowing why the author wrote a selection help me?

What is the connection between addition and subtraction?

How can you use real life objects to model and create subtraction problems?

How does making connections help us to better understand the book?

Hook: The Rug Weaver by Diego Rivera



#### Areas to explore:

- 1. How are animals involved in this painting? (wool used to make rugs comes from sheep) Highlight the connection between animals and the products we make use.
- 2. What would be the next step after the woman finishes the rug? Students can begin to discuss how the woman might travel to a market to sell the rug or might trade/barter for other goods.
- 3. What is the story Diego Rivera is trying to tell with the painting? Similar to Author's Purpose, artists try to pass along a message in their work.

Section 1: Animals and Their Homes Deepening Questions:

- Living and Non-living Things
  - http://www.kindergartenkindergarten.com/2012/03/a-science-mini-unit-livingand-non-living.html
  - Is it living? Powerpoint (attachment)
  - Living or Non-living sort (attachment)
- All Kinds of Animals
  - o Animal Groups (mammal, bird, reptile, amphibian, fish, insect)
    - \*\*Cover text and graphic features when reading animal books
    - Characteristics of each group
      - Animal Group cut, sort, paste (attachment)

- Animals Alike and Different
  - Animal Group Venn diagram
- Needs of animals
  - Food, shelter, space, air
    - Animal Homes matching (attachment)
  - How animals meet their needs (body parts)
    - Animal Parts posters (attachment)
    - Animal Movement: Swim, Fly, Walk activity (attachment)
- What Animals Eat
  - Herbivore, carnivore and omnivore
    - What animals eat? Worksheet (attachment)
- Animals Grow and Change
  - Parent/offspring
    - Baby Animals activities (attachment)
    - My Mama (animal narrative story)
- Places Animals Live
- What's My Habitat? Pictures (attachment)
- Animals Build Homes passage (attachment)
- Land Habitats
- Water Habitats
  - Types of Habitats (attachment)-sort animals
- Plants and Animals Live Together
- People and Animals
  - o Products we use
  - o Pets
    - http://www.humanesociety.org/parents\_educators/lesson\_plans\_for\_teachers.html
- My Made-Up Animal (animal creation project-attachment)
- Animal Research (Informative Writing)

#### Section 2: Economics

How do people get the things they needs and want?

Economics Worksheets (attachment)-goods/services, jobs, needs/wants

- Needs and Wants of People
  - Goods/Service and Needs/Wants writing activity (attachment)
  - Satisfying wants and needs
  - o Producers and Consumers
    - What does scarce mean?
  - Goods and Services
    - What is a marketplace?
      - We provide services interactive reader (attachment)
    - Trade/barter
- Jobs People Do
  - Work and Income
  - Making Choices
    - Save or Spend?
  - Career Choice (opinion writing)

- From Factory to You
  - Read the book Extra Cheese Please by Cris Peterson (
- Resources for People

Section 3: Authoring

**Deepening Questions:** 

What is the connection between reading and writing?

How does knowing why the author wrote a selection help me?

- Author's Purpose (Why Authors Write)
  - Persuade
  - o Inform
  - Entertain
    - Suggested Activities:
    - Select several different books and ask students to sort as to the author's purpose
    - Ask students to draw book covers that show Persuade, Inform, Entertain. They can make up their own book titles!
      - http://finallyinfirst.blogspot.com/2013/09/authors-purpose-ideas.html
    - Authors and Illustrators: students pick a "reason" authors write and create their own books
    - Mo Willems books are awesome for persuade (Don't Let the Pigeons Drive the Bus!)
    - Book suggestions here:
       <a href="http://thepicturebookteachersedition.blogspot.com/2012/03/importance-of-authors-purpose.html">http://thepicturebookteachersedition.blogspot.com/2012/03/importance-of-authors-purpose.html</a>

Section 4: Putting Together and Taking Apart

What is the connection between addition and subtraction?

How can you use real life objects to model and create subtraction problems?

- \*Watch examples here: (http://blog.aimsedu.org/2013/03/21/decomposing-numbers-with-kindergarteners/)
- Composing Number: Addition as Putting Together
  - Cube trains <a href="http://mathcoachscorner.blogspot.com/2013/09/composing-and-decomposing-numbers-cube.html">http://mathcoachscorner.blogspot.com/2013/09/composing-and-decomposing-numbers-cube.html</a> (attachment)
- Decomposing Numbers: Subtraction as Taking Apart and:
  - Decomposing with unifix: http://kindercraze.com/2012/03/getting-interactive-with-common-core/
- Relating Addition and Subtraction
  - Online games: <a href="http://nrich.maths.org/8937">http://nrich.maths.org/8937</a>
  - Lesson plans: http://nrich.maths.org/8937
- Visual models
- Story problems with addition and subtraction
  - o http://mathcoachscorner.blogspot.com/2012/03/solving-addition-and-subtraction.html

Section 5: Making Connections with Books

Deepening Questions:

How does making connections help us to better understand the book?

(From Stephanie Harvey's Strategies that Work)

Different Types of Connections students can make to text: (<a href="http://primary123abc.weebly.com/making-connections.html">http://primary123abc.weebly.com/making-connections.html</a>) or (<a href="http://www.pbslearningmedia.org/resource/psu11la.reading.lpbrrconn/blue-ribbon-readers-making-connections/">http://www.pbslearningmedia.org/resource/psu11la.reading.lpbrrconn/blue-ribbon-readers-making-connections/</a>)

- Text to Self
- Text to Text
- Text to World

### **Suggested Activities**

- 1. Teach each connection strategy by selecting a book that particularly matches the strategy Use each graphic organizer to have students practice making their connections.
  - a. Text-to-Self: Read *The Snowy Day* (wegivebooks.org) by Ezra Jack Keats to teach text to self-kids have experience going out on a winter day.
  - b. Text-to-Text: Read See How They Grow: Butterfly (Wegivebooks.org) and The Very Hungry Caterpillar by Eric Carle. Students will see the connection between the caterpillar eating leaves and the transformation into a butterfly.
  - c. Text-to-World: Read Free at Last! The Story of Martin Luther King, Jr. (wegivebooks.org). Students can make the connection between what they have learned about black history month and Dr. King's life. (more suggestions: https://www.goodreads.com/shelf/show/text-to-world-connections)
- 2. Lesson plan from Readwork.org: http://www.readwritethink.org/classroom-resources/lesson-plans/family-ties-making-connections-1070.html

# **Common Core Standards**

### ELA

RL.K.6	With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.
RI.K.3	With prompting and support, describe the connection between two individuals,
	events, ideas, or pieces of information in a text.
RI.K.6	Name the author and illustrator of a text and define the role of each in presenting the
	ideas or information in a text.
W.K.1	Use a combination of drawing, dictating, and writing to compose opinion pieces in
	which they tell a reader the topic or the name of the book they are writing about and
	state an opinion or preference about the topic or book (e.g., My favorite book is).
	Use a combination of drawing, dictating, and writing to compose
W.K.2	informative/explanatory texts in which they name what they are writing about and
	supply some information about the topic.
W.K.3	Use a combination of drawing, dictating, and writing to narrate a single event or
	several loosely linked events, tell about the events in the order in which they
	occurred, and provide a reaction to what happened.

### Math

K.OA.A.1	Represent addition and subtraction with objects, fingers, mental images, drawings1,
	sounds (e.g., claps), acting out situations, verbal explanations, expressions, or
	equations.
K.OA.A.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g.,
	by using objects or drawings to represent the problem.
K.OA.A.3	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by
	using objects or drawings, and record each decomposition by a drawing or equation
	(e.g., 5 = 2 + 3  and  5 = 4 + 1).

# Standards by State

# <u>Ohio</u>

### Science

Science	
LS.K.1	Living things are different from nonliving things.
LS.K.2	Living things have physical traits and behaviors, which influence their survival.
Social Studies	
Eco. K.12	Goods are objects that can satisfy people's wants. Services are actions that can
	satisfy people's wants
Eco. K.11	People have many wants and make decisions to satisfy those wants. These decisions
	impact others.

# **Michigan**

### Science

MI.L.OL.00.11.	Identify that living things have basic needs.
MI.L.OL.00.12.	Identify and compare living and nonliving things.

# **Social Studies**

M.K.e1.0.1	Describe economic wants they have experienced.
M.K.E1.0.2	Distinguish between goods and services.
M.K.E!.0.3	Recognize situations in which people trade.

# <u>Missouri</u>

# Science

MO.K.3.1.D.a	Observe and compare the structures and behaviors of different kinds of plants and
	animals
MO.K.3.3.D.a.	Identify that living things have offspring based on the organisms' physical similarities
	and differences

### **Social Studies**

MO.K.A1	Identify examples of scarcity.
MO.K.A2	Identify examples of opportunity cost.

# Wisconsin

### Science

WI.K.F.4.1.	Discover how each organism meets its basic needs for water, nutrients, protection,
	and energy in order to survive

WI.K.F.4.2.	Investigate how organisms, especially plants, respond to both internal cues (the need
	for water) and external cues (changes in the environment)
WI.K.F.4.3.	Illustrate the different ways that organisms grow through life stages and survive to
	produce new members of their type
WI.K.F.4.4.	Using the science themes, develop explanations* for the connections among living
	and non-living things in various environments

D.4.1	Describe and explain of the role of money, banking, and savings in everyday life
D.4.2	Identify situations requiring an allocation of limited economic resources and appraise
	the opportunity cost (for example, spending one's allowance on a movie will mean
	less money saved for a new video game)
D.4.3	Identify local goods and services that are part of the global economy and explain their
	use in Wisconsin
D.4.4	Give examples to explain how businesses and industry depend upon workers with
	specialized skills to make production more efficient
D.4.5	Distinguish between private goods and services (for example, the family car or a local
	restaurant) and public goods and services (for example, the interstate highway
	system or the United States Postal Service)
D.4.6	Identify the economic roles of various institutions, including households, businesses,
	and government
D.4.7	Describe how personal economic decisions, such as deciding what to buy, what to
	recycle, or how much to contribute to people in need, can affect the lives of people in
	Wisconsin, the United States, and the world

### Minnesota

# Science

MN.0.4.1.1.3	Living things are diverse with many different observable characteristics.
MN.0.4.2.1.1	Natural systems have many components that interact to maintain the system.

### **Social Studies**

MN.0.2.1.1.1	Distinguish between individual needs (conditions necessary to survive) and individual wants (conditions desired to be happy). For example: Needs—to be fed, to be free from thirst, to be sheltered. Wants—to be entertained, to be famous, to be strong, to be helpful to others.
MN.0.2.1.1.2	Identify goods and services that could satisfy a specific need or want.
	For example: The need to be free from thirst could be satisfied by water, milk or
	orange juice. The desire (want) to be entertained could be satisfied by
MN.0.2.4.5.1	Distinguish between goods (objects that can be seen or touched) and services
	(actions or activities).
	For example: Goods—apple, shirt, toy. Services— haircut, bus ride, bicycle repair.

# <u>Illinois</u>

### Science

0.12.4.01	Distinguish between living and non-living things

0.12.4.02.	Identify the basic divisions of animals and their common characteristics (e.g., define mammal, fish, bird, reptile, amphibian, insect, arachnid; give examples of each).
0.12.4.03.	Identify the life cycle of familiar animals and compare their various stages: birth, growth and development, reproduction, and death. Understand that metamorphosis occurs in some animals (e.g., butterflies, frogs).
0.12.4.04	Identify the basic needs of living things: animals need air, water, food, and shelter; plants need air, water, nutrients, and light.
0.12.4.05.	Understand the functions of component parts of living things.
0.12.4.06.	Understand that some characteristics of living things are inherited from parents, such as the color of a flower in a plant, or the number of limbs on an animal. Understand that other features, however, are acquired by an organism through interactions with its environment (or learned) and cannot be passed down to the next generation merely through reproduction.

#### **Social Studies**

Social Statics	
15.A.1a	Identify advantages and disadvantages of different ways to distribute goods and
	services.
15.B.1	Explain why consumers must make choices.
15.D.1a	Demonstrate the benefits of simple voluntary exchanges.
15.D.1b	Know that barter is a type of exchange and that money makes exchange easier.
15.E.1	Identify goods and services provided by government.

# <u>Indiana</u>

### Science

IN.K.3.1	Observe and draw physical features of common plants and animals.
IN.K.3.2	Describe and compare living animals in terms of shape, texture of body covering, size,
	weight, color and the way they move.

### **Social Studies**

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K.4.1	Explain that people work to earn money to buy the things they want and need.
K.4.2	Identify and describe different kinds of jobs that people do and the tools or equipment used in these jobs.
	Example: Use picture books, stories and software programs/games to illustrate and identify different types of jobs, as well as tools and materials used in different jobs.
K.4.3	Explain why people in a community choose different jobs.  Example: People may have different types of jobs because they like doing different
	things or because they are better at doing one particular type of job.
K.4.4	Give examples of work activities that people do at home.